EQUITY FINANCING PATTERNS AMONGST AUSTRALIAN MANUFACTURING SMEs

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Abstract

The principal objectives in this paper are to examine and to explain equity financing patterns amongst a panel of 871 manufacturing SMEs legally organised as proprietary companies, taken from the Australian federal government’s Business Longitudinal Survey conducted over four financial years from 1994-95 to 1997-98.

Introduction

Finance theory is equivocal in its description of the use of equity finance by Small and medium-sized enterprises (SMEs). The pecking order theory suggests a preference for internal equity and an aversion to external equity, but provides no a priori prescription for the overall capital structure. Firm life-cycle theory, together with other non-mutually exclusive theories, further cloud the theoretical prescription.

The principal objectives in this paper are to examine and to explain equity financing patterns amongst a panel of 871 manufacturing SMEs legally organised as proprietary companies. This is made possible by the recent availability of data from the Australian federal government’s Business Longitudinal Survey (BLS). The paper proceeds as follows. After reviewing prior research on equity financing as it applies to SMEs, the research method is outlined. Thereafter, the findings of the research are presented, followed by conclusions arising from this investigation.

Equity Financing In Manufacturing SMEs

Business financing patterns have been the focus of a long line of theory development and empirical research since the Modigliani and Miller seminal articles on the capital structure debate that date back to 1958. Ultimately the prescriptive outcome of that debate has come to depend substantially on the institutional structure in the country concerned. In Australia, the presence of a dividend imputation scheme whereby corporate income is effectively taxed in the hands of the shareholders at their personal marginal rates of tax supports the original Modigliani – Miller conclusion that the capital structure does not matter.

This conclusion does not sit comfortably for many. First, it depends on the restrictive assumptions employed by Modigliani and Miller. Second, that debate has been in the context of corporations where the ultimate objective of the business is to maximise the wealth of the shareholders. Most empirical studies relate to these larger businesses. Small business owners may have quite different objectives (Ang, 1991 and 1992) with many of the elements of their objective function being non-financial in nature (Le Cornu et al, 1996).

Much research has been devoted to describing and explaining actual capital structures of businesses. Tax shields of debt financing were introduced by Modigliani – Miller and bankruptcy costs added to
suggest that there is a limit to the extent to which debt financing is able to be used in practice. Agency theory (Jenson and Meckling, 1976), signaling theory (Ross, 1977) and information asymmetries (Myers and Majluf, 1984) have all been advanced as explanatory factors for capital structure decisions (McMahon et al, 1993).

One of the most popular theories of capital structure is the pecking order theory of Myers (1984). Myers argued that firms prefer internal finance to external finance and, if resort to external finance becomes necessary, debt finance is preferred to equity finance. Information asymmetries suggest that external finance will be more expensive that internal finance as financiers add a risk margin to cover their information disadvantage. Signaling theory supports a preference for debt over equity if external financing is sought. The issue of additional equity is seen to signal the owners are not confident in the firm’s future. Agency problems also increase the cost of external financing as monitoring and bonding costs are necessarily incurred.

The pecking order theory has also been applied to capital structure decisions of SMEs (Scherr et al, 1993; Norton, 1991). Scherr et al (1993) and Hall et al (2000) argue that the closed nature of SMEs makes information asymmetry and agency costs more onerous for SMEs. This accentuates the pecking order theory pattern for SME financing decisions. This suggests that, theoretically, smaller enterprises as a whole would prefer internal financing as external financing is either more costly or more difficult to obtain due to the impact of possible bankruptcy costs, greater monitoring or other agency costs and greater information asymmetries (Pettit and Singer, 1985).

The rationale for SME owners financing decisions may be somewhat different from those of larger enterprises, even if the pattern is consistent with the prescriptions of the pecking order theory. The strong desire for control on the part of most SME owners makes the preference for internal finance and the aversion to external equity finance in particular that much stronger for SME financing decisions than for larger enterprises (Holmes and Kent, 1991). The application of the pecking order theory to SMEs is, therefore, somewhat constrained. Ang (1991) argues that new equity contributions from the owners of the small enterprise rank just behind retained earnings and ahead of debt financing.

SMEs may also prefer debt to equity when seeking external funding because they are much more familiar with banks and other sources of debt finance and a wide variety of debt products are available (KPMG Consulting, 2002).

The application of the pecking order theory to SME financing needs to be qualified by the stage of the firm’s life-cycle (Scholtens, 1999). Younger firms, which are generally smaller firms, are less able to generate sufficient retained earnings for internal sources to adequately finance an expansion of operations. This source of funding is more readily available for more mature firms. Capital structure, therefore, will vary over the life-cycle of the small enterprise (Ang 1991).
An additional factor impacting on the financial structure of SMEs is the limited availability of certain sources of funding to SMEs. External equity finance in the form of venture capital is generally unavailable to SMEs without strong growth prospects. This includes both venture capital funds and wealthy individual investors known as business angels. Widespread access to external equity through public listing on the stock exchange is unavailable until the firm is relatively large and is able to meet the minimum size requirements for listing. For most SMEs, the only feasible source of external equity funding is from relatives and friends. This further constrains the applicability of the pecking order theory to SMEs.

The SME sector, however, is a most heterogeneous sector making it difficult to generalize across all SMEs. Barton and Matthews (1989) emphasise the management aspects of the capital structure decision. Applying their analysis in the SME context suggests that capital structure will depend on the risk-taking propensity and objectives of the owner-managers and on the responses of potential funding providers to the special circumstances and requirements of the owner-managers (McMahon et al., 1993). Mathews et al (1994) argue that small enterprise owners will have a range of different attitudes towards debt financing based on their risk propensity, desire for control, experience and wealth. The additional sources of finance available to growth SMEs, coupled with the different objectives and aspirations of the owners of these enterprises, may lead them to make different financing decisions from the traditional SME which has, at most, capped growth objectives. In particular, growth SMEs may take on more external equity finance and may be less highly levered than many non-growth enterprises.

Only a small proportion of enterprises, possibly less than ten per cent, aspire to strong growth (Hakim, 1989). Many small enterprises eschew growth when this would lead to loss of control (Davidsson, 1989). Cressy and Olofsson (1997b) found that aversion to new owners in incorporated firms in Sweden was stronger in manufacturing firms than in the services sector and was even present amongst growth aspirants. These arguments are demand-side arguments. Cressy and Olofson (1997a) note, however, that firms with limited or no growth aspirations would be unattractive to providers of equity capital as they would not offer the rates of return required by investors.

The foregoing argument suggests that internal equity, through capital contributions and retained earnings, is expected to be a major source of SME funding. Meanwhile, external equity is relegated to a minor role as non-growth SMEs eschew it and growth SMEs, which comprise a small minority, may be unable to attract as much external equity as they might want.

Extensive lists of factors which lead to higher leverage in small enterprises and of factors leading to lower leverage in small enterprises is found in Ang (1992). Moreover, the pecking order theory, modified for small enterprises and life cycle theory, is also unable to give clear direction on the overall
financial structure of SMEs. The actual structure is, therefore, an empirical issue which will depend substantially on the mix of firms with different characteristics and owners/managers.

**Empirical Evidence**

Measurement problems arise in investigating the capital structures of SMEs. Owners are often underpaid for their labour input as they seek to conserve funds of the business. This should find its way into retained profits, however, so that it flows into owners equity (Ang 1991; McMahon *et al* 1993). A further complication is the failure to record some personal assets contributed to the enterprise by the owners or to record some liabilities of the firm to owners, their relatives and friends (Ang,1992). More problematical is the issue of directors’ loans. While legally loans, these frequently carry little or no interest payment requirements and so are more akin to repayable equity. Directors’ loans (or quasi-equity) are a significant form of financing for many smaller enterprises (Ang 1992; Levin and Travis, 1987).

Berger and Udell (1998) argue that much of what is classified as external debt is effectively internal in that it is personally guaranteed by the owners. It is they who are ultimately enabling the enterprise to access these funds by putting their personal assets on the line.

**Capital structure**

There is some evidence that SMEs have target debt-equity ratios (Scott *et al* 1972; Buckland *et al* 1989) although the constraints on the sources of funding available to SMEs or acceptable to their owners restricts the ability of many SMEs to pursue target capital structures. Rather they obtain funding from the restricted sources that are available and that are acceptable to them.

Bates (1971) reported that small enterprises in the UK are more reliant on equity financing and on own funding than large enterprises. Directors’ loans were identified as an important source of funds. Bates noted that 92% of enterprises had not sought external finance other than through bank loans. Wilson (1979) found that 65% of small enterprise funding in the UK was internally sourced.

Cosh and Hughes (1994) found that small enterprises had lower equity financing ratios than large enterprises in both manufacturing (36%) and non-manufacturing (27%) industry from 1987 to 1989. The equity financing ratio initially increased and then declined as firm size increased. Internal equity from partners and working shareholders was the main source of equity finance for the small enterprises. Small enterprises also displayed lower dividend payout ratios enhancing the use of internal funding.

Hall *et al* (2000) found a significant relationship between industry sector and long-term leverage ratios and that long-term leverage was positively related to firm size (as measured by assets).
Cressy and Olofsson (1997b) found that the equity financing ratio for incorporated firms in Sweden employing 5-199 people in 1993 increased with firm size. Retained earnings were the preferred means for financing expansion. Almost half of manufacturing respondents indicated they would sell their enterprise rather than take in an external partner.

Walker (1989, p291) reports, using composite USA data from the second half of the 1980s, that equity financed almost 40% of the assets of firms with assets below $1 million declining to 32-33% for firms with assets between $1-10 million. This compares with an average ratio of 29% for all firms. Retained earnings comprised more than half of the capital of firms with assets of less than $10 million compared with only 37% for all firms. Capital contributions of the owners were the other major source of equity finance for small firms.

Berger and Udell (1998) found that USA firms operating in 1993 were financed in equal measure by debt and equity and that more than three-fifths of the equity was provided by the principal owner.

Cassar and Holmes (2001) found that equity accounted for 43% of the financing of 2030 Australian firms in the Business Longitudinal Study (see below) over the period 1995-98. They found a positive relationship between long-term debt and firm size, but no size-related relationship for other forms of debt financing. Equity financing was positively related to return on assets suggesting a preference for using retained earnings when available.

Use of venture capital and business angel finance

Cosh and Hughes (1994) found that venture capital provided only a small proportion of the equity funding of SMEs. Moreover, they found that business angel finance was concentrated on small enterprises while that from formal venture capital funds went mainly to medium sized enterprises. They show that venture capital funds are not interested in providing the small amounts of funding sought by many small enterprises. Cressy (1993) found that fewer than 1% of UK start-ups had financial input from venture capitalists with larger start-ups being more likely to use venture capital funding.

Cressy and Olofsson (1997b) found that formal venture capital funds were not favoured as equity partners by Swedish manufacturing firms. These firms felt the time horizons of these funds were too short and that their demands were unreasonable. Hence, they preferred business angels or other companies in the same industry as equity partners.

Berger and Udell (1998) found that angel finance (3.6%) and venture capital (1.85%) were minor providers of funding to USA enterprises in 1993.
Financing growth enterprises

The implications for capital structure of growth enterprises are unclear. Enterprises with growth prospects could increase their use of both debt and equity. Funding their expansion is likely to require resort to external financing and the pecking order theory indicates that their preference will be for debt rather than equity capital. However, growth firms will be more attractive to investors such as business angels and venture capital funds. Moreover, banks will require sufficient equity to be in place if they are to increase their funding of the enterprise.

Not surprisingly, the empirical evidence on the relationship between growth and capital structure is mixed. Michaelas et al (1999) found a positive association between growth and debt financing, but Jordan et al (1998) found no such association. Bates (1971) found that growth enterprises had a higher use of internal financing than other enterprises.

Research Method

The panel data employed in this research are drawn from the Business Longitudinal Survey (BLS) conducted by the Australian Bureau of Statistics (ABS) on behalf of the federal government over the four financial years 1994-95 to 1997-98. Costing in excess of $4 million, the BLS was designed to provide information on the growth and performance of Australian employing businesses, and to identify selected economic and structural characteristics of these businesses.

The ABS Business Register was used as the population frame for the survey, with approximately 13,000 business units being selected for inclusion in the 1994-95 mailing of questionnaires. For the 1995-96 survey, a sub-sample of the original selections for 1994-95 was chosen, and this was supplemented with a sample of new business units added to the Business Register during 1995-96. The sample for the 1996-97 survey was again in two parts. The first formed the longitudinal or continuing part of the sample, comprising all those remaining live businesses from the 1995-96 survey. The second part comprised a sample of new business units added to the Business Register during 1996-97. A similar procedure was followed for the 1997-98 survey. Approximately 6,400 business units were surveyed in each of 1995-96, 1996-97 and 1997-98. The BLS did not employ completely random samples. The original population (for 1994-95) was stratified by industry and business size, with equal probability sampling methods being employed within strata. Further stratification by innovation status, exporting status and growth status took place for the 1995-96 survey.

Data collection in the BLS was achieved through self-administered, structured questionnaires containing essentially closed questions. Copies of the questionnaires used in each of the four annual collections can be obtained from the ABS. The questionnaires were piloted prior to their first use, and were then progressively refined after each collection in the light of experience. Various imputation techniques, including matching with other data files available to the ABS, were employed to deal with any missing data. Because information collected in the BLS was sought under the authority of the
Census and Statistics Act 1905, and thus provision of appropriate responses to the mailed questionnaires could be legally enforced by the Australian Statistician, response rates were very high by conventional research standards – typically exceeding 90 per cent.

The specific BLS data used in this study are included in a Confidentialised Unit Record File (CURF) released by the ABS on CD-ROM in December, 1999. This CURF contains data on 9,731 business units employing fewer than 200 persons – broadly representing SMEs in the Australian context. Restricted industrial classification detail, no geographical indicators, presentation of enterprise age in ranges, and omission of certain data items obtained in the BLS all help to maintain the confidentiality of unit records. Furthermore, all financial variables have been subject to perturbation – a process in which values are slightly varied to provide further confidentiality protection.

This research is concerned only with the manufacturing sector of the BLS CURF. The main reason for this is that it is highly probable that cross-industry differences in the nature of business activities, typical employment per business, capital intensity, etc. could confound findings. Over 99 per cent of all businesses in the Australian manufacturing sector are SMEs according to generally accepted definitions (Australian Bureau of Statistics, 2000). There are 3,411 manufacturing SMEs in the BLS CURF, representing approximately 35 per cent of businesses in the file.

Additional focus is provided to this research by considering only manufacturing SMEs legally organised as proprietary companies. The main reason for this further narrowing of the unit of analysis is to avoid difficulties that would arise if the study sample contains both incorporated and unincorporated businesses. These occur because of the customary procedural difference in accounting for owners’ wages, which are not separately reported in the BLS data. There are 2,413 manufacturing SMEs legally organised as proprietary companies in the BLS CURF, representing approximately 71 per cent of manufacturing SMEs in the file.

Variables used in this research are either categorical in nature or, if metric, have irregular distributional properties (that is, they are non-normally distributed). Transformation of metric variables to produce normal distributions is avoided because of difficulties of interpretation often created by such procedures. Thus, non-parametric/distribution free measures and techniques of statistical analysis are employed predominantly.

Research Findings

Cumulative Equity Financing

The cumulative reliance upon and sources of equity financing amongst manufacturing SMEs in the BLS panel is revealed in their annual year-end balance sheets over the period of the study. These data are presented in Table 1.
Examination of Table 1 suggests that equity financing typically represents around one-third of total funding. Working owners appear to provide just over 60 per cent of the equity capital, with the next most important source being parent companies supplying a little under 20 per cent. There is then a large fall to non-working owners who are family members and ‘other’, each accounting for approximately 7 per cent. Noticeably, the amount of equity from venture or development capitalists is negligible. In terms of their ownership structure, the overall impression is that the SMEs studied in the research are predominantly closely-held concerns with controlling interests in the hands of working owners. Substantial supplementation of equity financing with debt is evident – certainly well beyond the one-for-one benchmark that, historically, has been used frequently in lending decision-making. The use of financial leverage in manufacturing SMEs appears to be greater than in SMEs from all industries reported in Cassar and Holmes (2001).

**New Equity Financing Intentions**

In each year of the survey, respondents were asked whether they intended to sell equity in their SMEs during the ensuing three year period. The expressed intentions for new equity financing were as follows:

- In 1994-95, the intention to sell equity was indicated by 43 of the 871 SMEs in the panel, amounting to just 4.9 per cent of respondents. In the event, only 7 of the 43, or 16.3 per cent, actually raised new equity by the end of 1997-98 (that is, within three years).
- In 1995-96, the intention to sell equity was indicated by 39 of the 871 SMEs in the panel, amounting to just 4.5 per cent of respondents. In the event, only 6 of the 39, or 15.4 per cent, actually raised new equity by the end of 1997-98 (that is, within two years).
- In 1996-97, the intention to sell equity was indicated by 31 of the 871 SMEs in the panel, amounting to just 3.6 per cent of respondents. In the event, only 4 of the 31, or 12.9 per cent, actually raised new equity by the end of 1997-98 (that is, within one year).
- In 1997-98, the intention to sell equity was indicated by 28 of the 871 SMEs in the panel, amounting to just 3.2 per cent of respondents. Because the survey finished in 1997-98, no data are available on whether new equity was subsequently raised.

Noticeable here is the small proportion (3 to 5 per cent) of manufacturing SMEs contemplating selling new equity, suggesting that this is not a popular financing alternative amongst the concerns surveyed. Perhaps more telling is the limited number of businesses that actually raised new equity as far as the survey could ascertain. Unrealistic expectations and/or changed circumstances and/or supply-side problems could all explain this mismatch. Or, as data presented in the following sub-section of the paper appear to reinforce, it may be that information on business intentions sought in surveys of this type is somewhat unreliable. This has methodological implications for all such surveys.
New Equity Financing Achievements

In the last three years of the survey, respondents were asked whether they had actually obtained new equity finance. For 1995-96, this question related to that year and the preceding two years. For 1996-97 and 1997-98, the question related to only those years. The indicated experiences of new equity financing were as follows:

- In 1995-96, raising of new equity over three years to the end of 1995-96 was indicated by 80 of the 871 SMEs in the panel, amounting to just 9.2 per cent of respondents.
- In 1996-97, raising of new equity during that year was indicated by 48 of the 871 SMEs in the panel, amounting to just 5.5 per cent of respondents.
- In 1997-98, raising of new equity during that year was indicated by 36 of the 871 SMEs in the panel, amounting to just 4.1 per cent of respondents.

Note that many of the manufacturing SMEs that reported actually undertaking new equity financing had not expressed the intention of doing so in earlier questions in the survey. Notwithstanding this problem, the overall proportion of SMEs reporting raising of new equity capital (4 to 9 per cent) overlaps to some degree with the overall proportion of SMEs reporting the intention of doing so (3 to 5 per cent). Whichever measure is used, the impression is much the same – issuing of new equity is not a popular financing alternative amongst the concerns surveyed. Caution is, of course, required in comparing intentions with achievements in raising equity because of varying time periods associated with the overall findings presented.

Significance of New Equity Financing

In the last three years of the survey, respondents that had undertaken new equity financing were asked to indicate the approximate value of new equity raised (up to $20,000, $20,001 to $50,000, $50,001 to $100,000, $100,001 to $500,000, $500,001 to $1,000,000, over $1,000,000). For 1995-96, this question related to that year and the preceding two years. For 1996-97 and 1997-98, the question related to only those years. The indicated values of new equity financing were as follows:

- In 1995-96, the modal range for the value of new equity raised over three years to the end of 1995-96 was $100,001 to $500,000. To put this in perspective, the median value of cumulative equity as at the end of 1995-96 for the concerns that had raised new equity was $248,500 and the mean was $1,255,400.
- In 1996-97, the modal ranges for the value of new equity raised in that year were $100,001 to $500,000 and over $1,000,000 (that is, the relevant variable is bi-modal). To put this in perspective, the median value of cumulative equity as at the end of 1996-97 for the concerns that had raised new equity was $545,000 and the mean was $2,220,021.
- In 1997-98, the modal range for the value of new equity raised in that year was $100,001 to $500,000. To put this in perspective, the median value of cumulative equity as at the end of
1997-98 for the concerns that had raised new equity was $1,232,500 and the mean was $2,714,944.
The impression gained here is that, amongst those manufacturing SMEs that did raise new equity finance, the amounts raised were not inconsiderable relative to their existing equity base. In other words, when undertaken, equity capital raisings amongst respondents to the survey were important financing initiatives for them.

Sources of New Equity Financing

In the last three years of the survey, respondents that had undertaken new equity financing were asked to indicate from whom the capital had been raised. These data are presented in Table 2. 

Examination of Table 2 suggests that family, parent companies and existing shareholders are far and away the most important sources of new equity financing amongst the manufacturing SMEs surveyed. There is some evidence that individuals and businesses with no present association with the respondent businesses cannot be ignored as equity providers. These providers of equity could include business angels. Employee shareholding also emerges as a not insubstantial source of equity capital. However, financial institutions of various types, including venture or development capitalists, are clearly negligible as sources of equity. Thus, the earlier impression that the businesses studied are maintained as predominantly closely-held concerns is strongly reinforced.

Enterprise Size and Equity Financing

After conducting a research study using BLS data, the Australian Bureau of Statistics (2000) proposed the following enterprise size definitions for future use, regardless of industry:

- Small enterprise – consists of those businesses that are not subsidiaries of another company and are neither public companies, unincorporated cooperatives or incorporated associations, and that employ fewer than 20 persons.
- Medium-sized enterprise – consists of those businesses that are not small businesses, but employ fewer than 200 persons.
- Large enterprise – consists of those businesses employing 200 or more persons.

In addition, the ABS gave recognition to micro enterprises as consisting of those small concerns (as defined above) employing fewer than 5 persons. Using data provided in the BLS CURF, it is possible to establish whether respondents are small or medium-sized enterprises, and also whether or not respondents are micro enterprises. Of the 871 manufacturing SMEs in the BLS panel, 362 (that is, 41.6 per cent) are small enterprises as defined. There are only 87 (that is, 10.0 per cent) micro enterprises in the panel.
The various equity financing variables so far presented have been examined for variability between these enterprise size categories. The variations of note that were found are as follows:

- For all four years of the study, Mann Whitney tests reveal statistically significant differences at the p=0.01 level or better between small and medium-sized enterprises in terms of their relative cumulative reliance upon equity financing. In small enterprises equity financing typically represents about 30 per cent of total funding; whereas in medium-sized enterprises equity amounts to around 40 per cent of the total.

- For all four years of the study, Mann Whitney tests reveal statistically significant differences at the p=0.05 level or better between micro and other enterprises in terms of their relative cumulative reliance upon equity financing. In micro enterprises equity financing typically represents about 20 per cent of total funding; whereas in other enterprises equity amounts to around 35 per cent of the total.

- For all four years of the study, Mann Whitney tests reveal statistically significant differences at the p=0.01 level or better between small and medium-sized enterprises in terms of their dependence upon working owners for equity financing. In small enterprises working owners appear to provide about 80 per cent of the equity capital; whereas in medium-sized enterprises working owners provide around 50 per cent of the equity.

- For all four years of the study, Mann Whitney tests reveal statistically significant differences at the p=0.01 level or better between micro and other enterprises in terms of their dependence upon working owners for equity financing. In micro enterprises working owners appear to provide about 85 per cent of the equity capital; whereas in other enterprises working owners provide around 60 per cent of the equity.

Together, these findings suggest that smaller enterprises tend to have a more limited equity financing base; and that smaller enterprises appear to rely more heavily on working owners for any equity financing they do have. These findings are broadly consistent with those of Cosh and Hughes (1994) for the UK and Cressy and Olofsson (1997b) for Sweden.

**Enterprise Growth and New Equity Financing**

In a previous research study, one of the present authors used exploratory cluster analysis with key enterprise age, size and growth variables to discover if there appear to be any stable development pathways evident in the BLS panel data (McMahon, forthcoming). Each of four annual data collections for the on-going longitudinal panel of 871 manufacturing SMEs was separately examined using cluster analysis. Comparisons were then made of the cluster analysis outcomes over time. Descriptive statistics for various enterprise characteristics facilitated interpretation of the cluster analysis solutions. Using the clusters as markers or signposts, three relatively stable SME development pathways were discernible in the longitudinal panel results – low, moderate and high growth. The low growth development pathway appears to account for around 70 per cent of SMEs in the panel. The moderate growth pathway seems to be followed by around 25 per cent of the panel. And around 5 per cent of the
panel looks to lie on the high growth pathway, which is in accord with the observed rarity of substantial growth amongst SMEs world-wide (McMahon et al., 1993; Storey, 1994).

Differences between the identified SME development pathways in terms of enterprise age, size and growth variables are, as expected, highly significant in a statistical sense. It should be noted, in particular, that the compound employment growth rates (per cent per annum) over the period 1994-95 to 1997-98 for the low, moderate and high growth SMEs were -0.2, 2.4 and 6.6 respectively. A Kruskal Wallis one-way analysis of variance test reveals that the differences are statistically significant at the 1 per cent level. Furthermore, the compound sales growth rates (per cent per annum) over the period 1994-95 to 1997-98 for the low, moderate and high growth SMEs were 5.3, 9.3 and 10.4 respectively. A Kruskal Wallis one-way analysis of variance test reveals that the differences are statistically significant at the 1 per cent level.

It would appear that the development pathways and the pace of SME development (over 20 years or so) in the author’s previous study match reasonably well with those in earlier research of a similar nature undertaken by Hanks et al. (1993). Both development models seem to lead towards the same range of SME configurations that are widely recognised in the relevant research literature (McMahon et al., 1993):

- **Traditional or life-style SMEs** – following the low growth development pathway, these concerns generally have few, if any, growth aspirations. They principally exist to provide their owner-managers with a source of employment and income. Furthermore, they are frequently operated in a manner consistent with the life-style aspirations of their owner-managers. The author’s previous study suggests that after approximately 15 years such SMEs would have fewer than 20 employees, sales less than $3 million per annum, total assets below $2 million, little or no employment growth, and sales growth up to 5 per cent per annum.

- **Capped growth SMEs** – following the moderate growth development pathway, these concerns generally have modest growth aspirations. Bounds to growth could be externally imposed by the nature of their competitive environment; or may be intrinsic given the nature of their operations. Frequently though, growth is deliberately capped by owner-managers to a rate that limits dependence upon external financing – thus minimising surrender of control and accountability obligations this support would normally bring. The author’s previous study suggests that after approximately 15 years such SMEs would have fewer than 100 employees, sales around $10 million per annum, total assets less than $10 million, employment growth up to 3 per cent per annum, and sales growth as much as 10 per cent per annum.

- **Entrepreneurial SMEs** – following the high growth development pathway, these concerns generally have ambitious growth aspirations. They are most often associated with entrepreneurial aptitude, technical and commercial innovation, international outlook, and other business qualities that could see them eventually become large enterprises. The author’s previous study suggests that after approximately 15 years such SMEs would have over 100
employees, sales around $30 million per annum, total assets more than $20 million, employment
growth exceeding 5 per cent per annum, and sales growth greater than 10 per cent per annum.
Clearly, the fact that these common SME configurations are recognised in the research lends
plausibility to the empirically-based development taxonomy derived.

On the premise that a strong equity base, built through reinvested profits and/or new equity raisings, is
an essential concomitant with enterprise growth (McMahon et al., 1993), the new equity financing
variables identified earlier have been examined for variability between predominant pathways in the
development taxonomy that has been described. The variations of note that were found are as follows:
• For 1996-97 and 1997-98, Chi-square tests reveal statistically significant differences at the
  p=0.05 level or better across development pathways in whether or not new equity financing had
  been undertaken. High growth SMEs are found to be most likely to have raised new equity,
  followed by moderate growth concerns.
• For 1995-96 and 1997-98, Kruskal Wallis one-way analysis of variance tests reveal statistically
  significant differences at the p=0.05 level or better across development pathways in the
  approximate amount of new equity finance raised. Generally speaking, higher growth SMEs are
  found to have raised more new equity.
Together, these findings uphold the expectation that greater enterprise growth amongst the
manufacturing SMEs surveyed is associated with a greater willingness and ability to build a stronger
equity base.

Summary and Conclusions

The key findings from this research into equity financing patterns amongst Australian manufacturing
SMEs included in the BLS CURF panel can be summarised as follows:
• Only a small proportion of SMEs ever undertake new equity financing, suggesting that this is
  not a popular financing alternative. Debt financing appears to dominate the balance sheets of
  such concerns.
• Most SMEs are predominantly closely-held concerns with controlling interests in the hands of
  working owners. Any new equity financing is likely to be undertaken in manner that maintains
  this situation.
• When new equity financing is undertaken by SMEs, the amounts raised seem to be significant
  relative to their existing equity base. Thus, when undertaken, such equity capital raisings appear
  to be important financing initiatives.
• Smaller enterprises tend to have a more limited equity financing base, they appear to rely more
  heavily on working owners for any equity financing they do have.
• Greater enterprise growth tends to be more evident amongst SMEs that are more willing and
  more able to employ new equity financing.
In addition, there is the methodological finding that information on business intentions sometimes
sought in SME research surveys may be somewhat unreliable.
REFERENCES


Myers, S. C. and Majluf, N.S. 1984, ‘Corporate financing and investment decisions when firms have information that investors don’t have’, *Journal of Financial Economics*, 13, 187-221.


Table 1: Cumulative Use and Sources of Equity Financing (n=871)

<table>
<thead>
<tr>
<th>Year</th>
<th>Median Per Cent of Equity in Total Financing</th>
<th>Equity Sources</th>
<th>Mean Per Cent of Total Equity Financing</th>
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</thead>
<tbody>
<tr>
<td>1994-95</td>
<td>34.6</td>
<td>Owners and owners’ family</td>
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<td>Directors and directors’ family</td>
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<td>Unrelated persons</td>
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<td></td>
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<td></td>
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<td>Other</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
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</tr>
<tr>
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<td></td>
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<td>Other (including shareholders)</td>
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<td>Working owners</td>
<td>62.0</td>
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<td>Employees (excluding directors)</td>
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<td></td>
<td>Other (including shareholders)</td>
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<tr>
<td></td>
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</tr>
<tr>
<td>Year</td>
<td>Median Per Cent of Equity in Total Financing</td>
<td>Equity Sources</td>
<td>Mean Per Cent of Total Equity Financing</td>
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<td>New Equity Sources</td>
<td>Per Cent Using New Equity Source*</td>
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</tr>
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* Multiple sources of new equity financing are sometimes used.