

CHAPTER 6: DESCRIPTIVE FINDINGS OF THE RESEARCH STUDY

6.1 Introduction

This sixth chapter of the thesis is primarily concerned with detailed description of the research sample of smaller manufacturing enterprises legally organised as proprietary companies. This is done through textual, tabular and graphical presentations of values for the various study variables. Of particular interest are, of course, the actual enterprise characteristics, financial management characteristics, financial reporting practices and growth and performance outcomes of enterprises responding to the *Best Financial Practice* survey. Also of interest are how representative of the relevant population the study sample appears to be; and how well the sample suits the stated purposes of the research described in this thesis.

The chapter first examines various sub-groups of variables that together make up the enterprise characteristics grouping. These sub-groups are enterprise size, enterprise age, manufacturing sub-sector geographical location, manufacturing complexity, export commitment, owner-management, strategic planning, strategic management, growth commitment and growth constraints. The chapter then goes on to describe various sub-groups of variables which constitute the financial management characteristics grouping. These sub-groups are financial systems: financial audit, business financing, financial reporting to financiers, financier relationships, internal financial advice, external financial advice, financial decision-making and financial systems review. There follows a presentation of findings on financial reporting practices in the study sample as reflected in variables capturing historical financial reporting, future-oriented financial reporting and historical financial statement analysis. Finally, the chapter details the business growth and performance outcomes achieved by enterprises in the study sample.

While the principal purpose of this chapter is description of the research sample, associations between the study variables and enterprise size in employment terms are nevertheless explored. This treatment reflects particular interest in enterprise size, so measured, in this research. Associations between logically related variables within sub-groups (for example, export involvement and export development planning) are also examined to some extent in this chapter. In the main, other associations between study variables are considered in a multivariate context in the next chapter of the thesis. Note that only statistics considered essential for adequate description of the research study findings are actually presented in this chapter. Some useful additional descriptive statistics are included in Appendix C to the thesis.

6.2 Enterprise Characteristics:

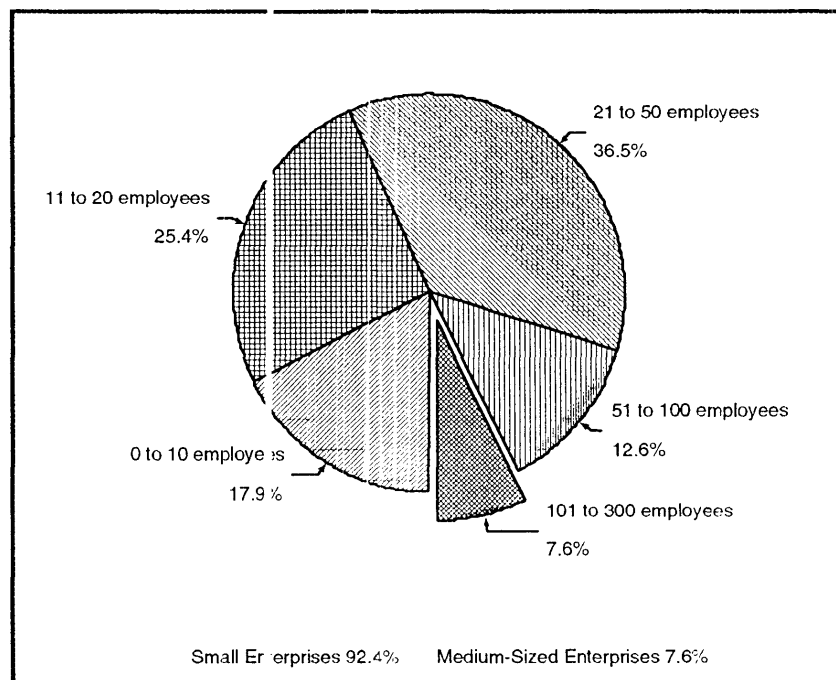
6.2.1 Enterprise Size

The enterprise size groupings represented in the study sample are shown in the table below and in Figure 6.1 (data for an ordinal study variable EMPLOY5 indicating number of full-time employee equivalents based on responses to Question 1 in the survey instrument):

Table 6.1: Enterprise Size Distribution for Study Sample

Full-Time Employees	Frequency	Per Cent	Cumulative Per Cent
0 to 10	188	17.9	17.9
11 to 20	267	25.4	43.3
21 to 50	383	36.5	79.8
51 to 100	132	12.6	92.4
101 to 300	80	7.6	100.0
Total	1050	100.0	

Figure 6.1: Enterprise Size in Study Sample



The modal and median enterprise size grouping is 21-50 full-time employees. A nominal study variable SME, based on responses to Question 1 in the survey instrument, indicates that both small enterprises with up to 100 full-time employees and medium-sized enterprises with 101-300 full-time employees are represented in the study sample.

No attempt is made to compare the size distribution of enterprises in the study sample with that in the manufacturing population at the time of the survey because, as indicated in Chapter 5 of the thesis, the sampling procedure was deliberately designed to skew the distribution away from the very smallest concerns. The *Best Financial Practice* study report (Australian Manufacturing Council, 1996, p. 78) indicates that the grouping of enterprises with fewer than 20 employees was 'reduced to 40 per cent of the sample (partly by removing firms with fewer than six employees), with the remaining size groups adjusted upwards commensurately'. A further impediment to comparison of the study sample with the relevant population is the fact that official statistics on the manufacturing sector provided by the Australian Bureau of Statistics, and by other federal government agencies, do not include enterprise size ranges corresponding to those used in the *Best Financial Practice* survey.

Note that, since it is essentially a reflection of output, annual sales turnover (obtained in response to Quest on 4 in the survey instrument) is treated in this research as an indicator of enterprise performance, rather than as an enterprise size measure. Data for this study variable are presented later in the chapter when considering performance amongst respondents to the survey.

6.2.2 Enterprise Age

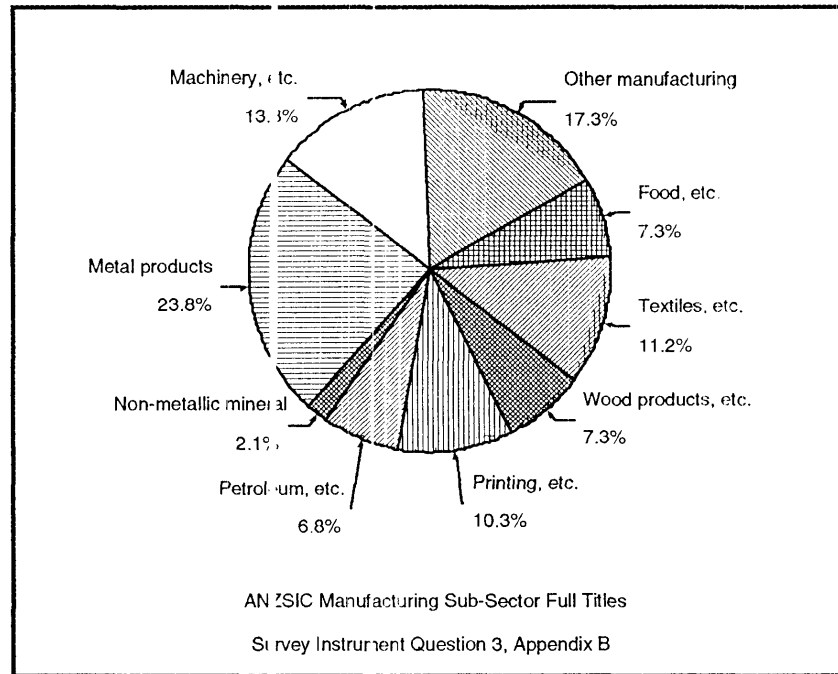
Having established, especially in Chapter 2 of the thesis, the potential explanatory importance of enterprise age in research such as the present study, this key variable is unfortunately not included in the descriptive evidence and analysis presented in this chapter and the next. The question intended to establish enterprise age in the instrument used in the *Best Financial Practices* survey (see Question 14 in the questionnaire reproduced in Appendix B to the thesis) is sufficiently flawed that responses to it cannot be relied upon.

The enterprise age question asks 'For how long has the current proprietor owned the business?'. A single response is sought from amongst the following alternatives: 0-2 years, 3-5 years, 5-10 years, more than 10 years, since formation, and not applicable (for example, in the case of a cooperative). The response 'since formation' is clearly not mutually exclusive of the earlier alternatives. No defensible assumption(s) can be made that will make responses to Question 14 useable. And, since it is given 357 times amongst the 1,050 cases ultimately used in this research, the 'since formation' response cannot simply be either ignored or used exclusively. No other indication of enterprise age for respondents is available from the *Best Financial Practices* survey findings. This, of course, becomes a significant limitation of the present research. Most particularly, it is not possible to reliably classify respondent businesses into stages of the Hanks *et al.* (1993) enterprise life-cycle model examined in Chapter 2 of the thesis. Recall that both enterprise size and enterprise age must be known for this purpose.

6.2.3 Manufacturing Sub-Sector

The manufacturing sub-sectors (that is, sub-divisions according to ANZSIC terminology) represented in the study sample are shown in the figure below (data for a nominal study variable ANZSIC indicating 2-digit ANZSIC code based on responses to Question 3 in the survey instrument):

Figure 6.2 Manufacturing Sub-Sectors in Study Sample



It can be seen that all ANZSIC manufacturing sub-sectors are represented in the study sample. However, a Chi-Square test comparing the distribution of enterprises in the study sample over manufacturing sub-sectors with the corresponding distribution of establishments in Australia's annual manufacturing survey for 1993-94 – the last such survey for which numbers of establishments are reported (Australian Bureau of Statistics, 1996g) – leads to rejection of the hypothesis that the distributions are similar ($n=1,050$, $\chi^2=82.290$, $df=8$, $p<0.000$).

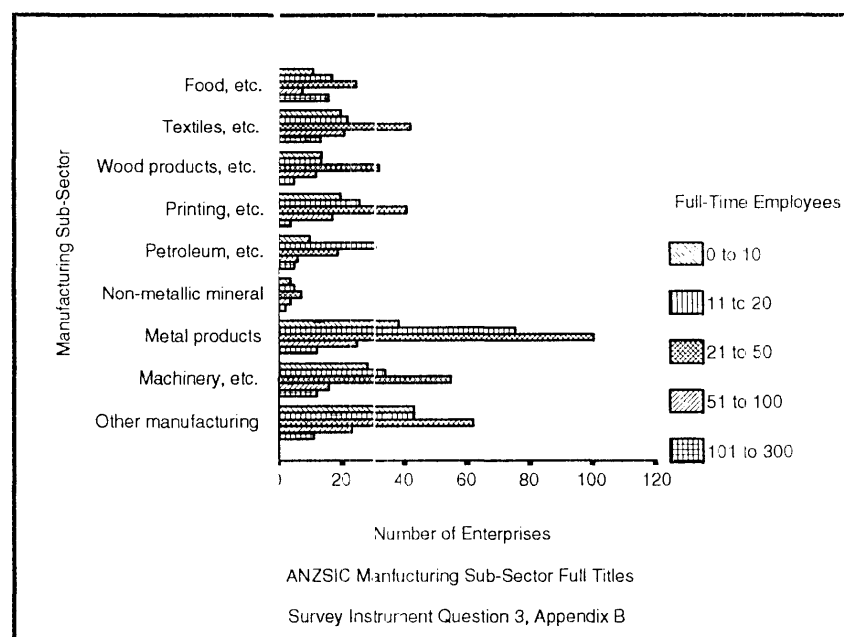
A more detailed breakdown of the study sample into ANZSIC groups is presented in Appendix C to the thesis (see *C1 Manufacturing Group*; data for nominal study variable ANZSICGP indicating 3-digit ANZSIC code based on responses to Question 3 in the survey instrument). Only ANZSIC groups 214 Oils & Fats and 219 Tobacco Products are not represented at all in the study sample. Sparse cells prohibit a further Chi-Square test of distribution at the 3-digit ANZSIC code level. Beyond this point in the thesis, all analysis is at the 2-digit ANZSIC code level.

A full dissection of the study sample by manufacturing sub-sector and enterprise size groupings is presented in Appendix C to the thesis (see *C2 Enterprise Size and Manufacturing Sub-Sector*). The minimum number of enterprises in any one enterprise size by manufacturing sub-sector cell is two, and enterprise numbers are five or more in

all but four cells. Recall from Chapter 5 that the *Best Financial Practice* study report (Australian Manufacturing Council, 1996, p. 78) claims, for the 12 industry categories and 4 size categories used in initial sampling, that 'Responses were sufficient in each of the 48 cells (industry by size) to be taken as reflecting the full population'. The data required to confirm the validity of this conclusion are not available to the present study. However, the findings already presented above must create some misgivings about the full representivity of the study sample for Australian manufacturing SMEs.

A clearer view of the relationship in the study sample between enterprise size and manufacturing sub-sector is provided in the figure below (data for study variables EMPLOYYS and ANZSIC):

Figure 6.3 Enterprise Size and Manufacturing Sub-Sector

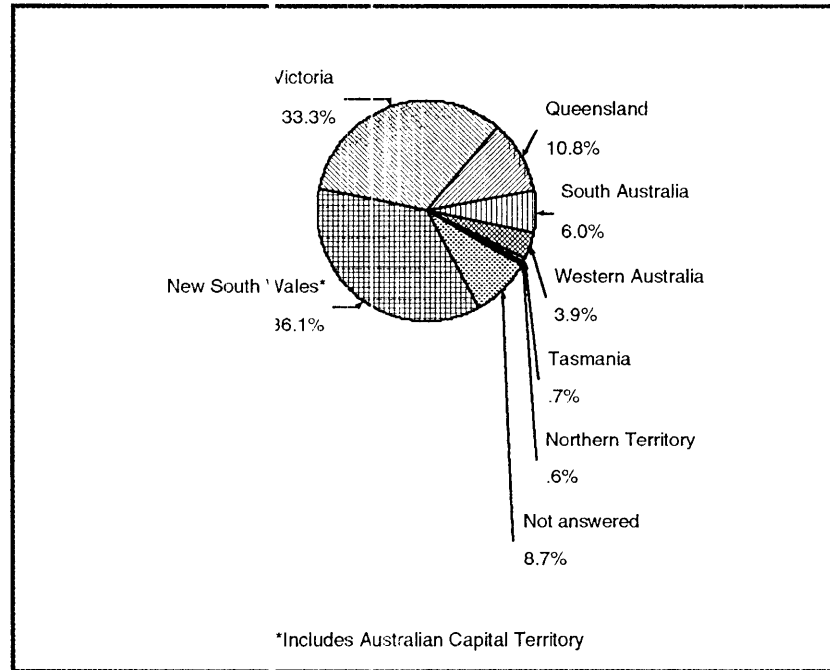


In all but one manufacturing sub-sector, the modal/median enterprise size grouping is 21-50 full-time employees – which is the modal/median grouping for the whole study sample. A Kruskal-Wallis one-way analysis of variance suggests that median enterprise size does not vary with statistical significance between manufacturing sub-sectors ($n=1,050$, $H=14.642$, $df=8$, $p=0.066$). However, a Chi-Square test indicates that enterprise size distributions do vary with statistical significance between manufacturing sub-sectors ($n=1,050$, $\chi^2=58.246$, $df=32$, $p=0.003$). Medium-sized enterprises are represented in all manufacturing sub-sectors, with the minimum number being two and the minimum proportion being 3.7 per cent (compared with 7.6 per cent for the whole study sample). A Chi-Square test reveals that the proportions of small enterprises and medium-sized enterprises vary with statistical significance between manufacturing sub-sectors ($n=1,050$, $\chi^2=27.027$, $df=8$, $p=0.001$).

6.2.4 Geographical Location

The Australian geographical locations represented in the study sample are indicated in the figure below (data for a nominal study variable STATE indicating postcode included in their mailing address by respondents expressing, at the close of the survey instrument, a wish to eventually receive a copy of the *Best Financial Practice* study report):

Figure 6.4 States/Territories in Study Sample



It can be seen that all of Australia's States and Territories are represented in the study sample. Given their size and ownership/control structure, it is likely that most, if not all, of the respondent enterprises are single location operations.

Omitting 91 cases (8.7 per cent of the study sample) for which a postcode is not available, a Chi-Square test comparing the distribution of remaining enterprises in the study sample over States and Territories with the corresponding distribution of establishments in Australia's annual manufacturing survey for 1993-94 – the last such survey for which numbers of establishments are reported (Australian Bureau of Statistics, 1996g) – leads to rejection of the hypothesis that the distributions are similar ($n=959$, $\chi^2=73.153$, $df=6$, $p<0.000$). It would appear that Queensland, South Australia, Western Australia and Tasmania are under represented in the study sample, and New South Wales (including Australian Capital Territory) and Victoria are over represented. Obviously, caution must be exercised in relation to these findings because of the high proportion of cases for which geographical location data is unavailable.

A Kruskal-Wallis one-way analysis of variance suggests that median enterprise size in the study sample varies with statistical significance between the States and Territories in Australia ($n=959$, $H=14.098$, $df=6$, $p=0.029$). Respondents from Tasmania

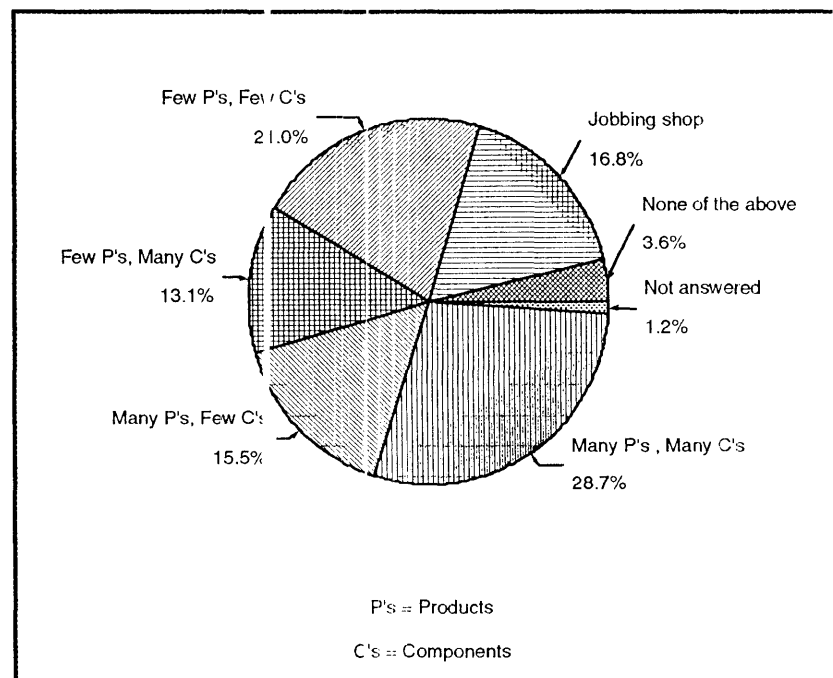
have the highest mean rank in employment terms. Tasmania is followed by Queensland, Victoria, New South Wales (including Australian Capital Territory), Western Australia, South Australia and Northern Territory in this order. Medium-sized enterprises are represented in all geographical locations except the Northern Territory. There is only one medium-sized respondent from Tasmania. Sparse cells prohibit a statistical comparison using a Chi-Square test of proportions of small enterprises and medium-sized enterprises in the various geographical locations.

It should be noted that only New South Wales (including Australian Capital Territory) and Victoria have substantial numbers of enterprises in all manufacturing sub-sectors. South Australia, Tasmania and the Northern Territory have no representation in some manufacturing sub-sectors.

6.2.5 Manufacturing Complexity

The level of complexity of manufacturing operations for enterprises in the study sample is shown in the figure below (data for a nominal study variable COMPLEX based on responses to Question 5 in the survey instrument):

Figure 6.5 Manufacturing Complexity in Study Sample

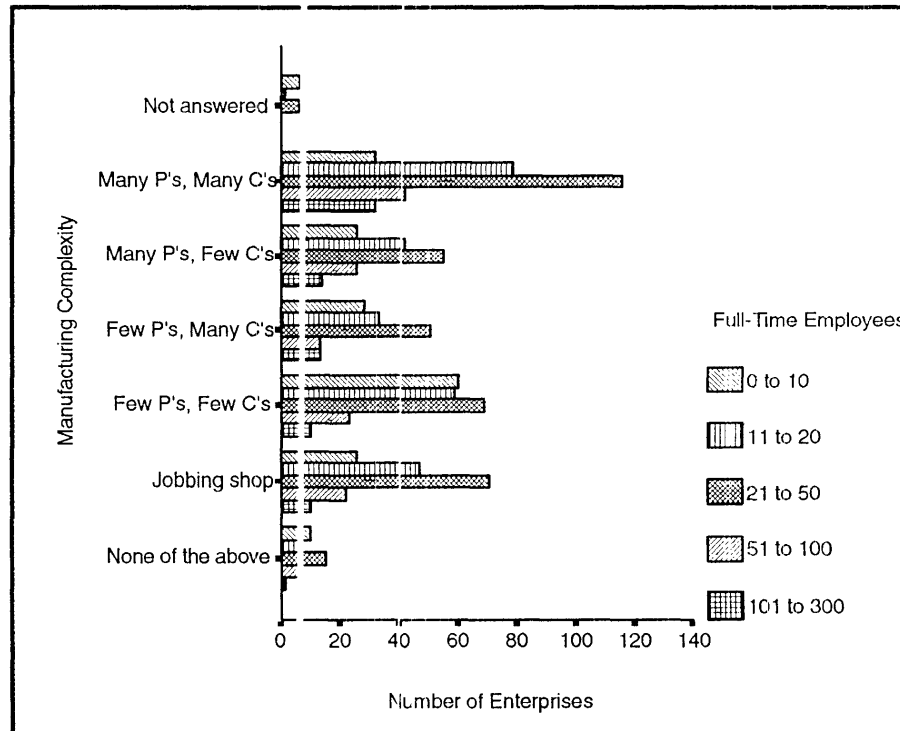


The study sample clearly spans the range of identified circumstances regarding manufacturing complexity.

A Kruskal-Wallis one-way analysis of variance indicates that median enterprise size in the study sample varies with statistical significance between the categories of manufacturing complexity ($n=1,037$, $H=24.408$, $df=5$, $p<0.000$). Respondents producing many products comprising many components have the highest mean rank in employment terms; and they are followed by many products comprising few

components, jobbing shop, and few products comprising many components in this order. A clearer view of the relationship in the study sample between enterprise size and manufacturing complexity is provided in the figure below (data for study variables EMPLOYES and COMPLEX):

Figure 6.6 Enterprise Size and Manufacturing Complexity



Medium-sized enterprises are represented in all categories of manufacturing complexity. Omitting 13 cases which do not indicate manufacturing complexity, a Chi-Square test comparing the remaining proportions of small enterprises and medium-sized enterprises in the various categories of manufacturing complexity reveals that the proportions are not dissimilar ($n=1,037$, $\chi^2=9.894$, $df=5$, $p=0.078$).

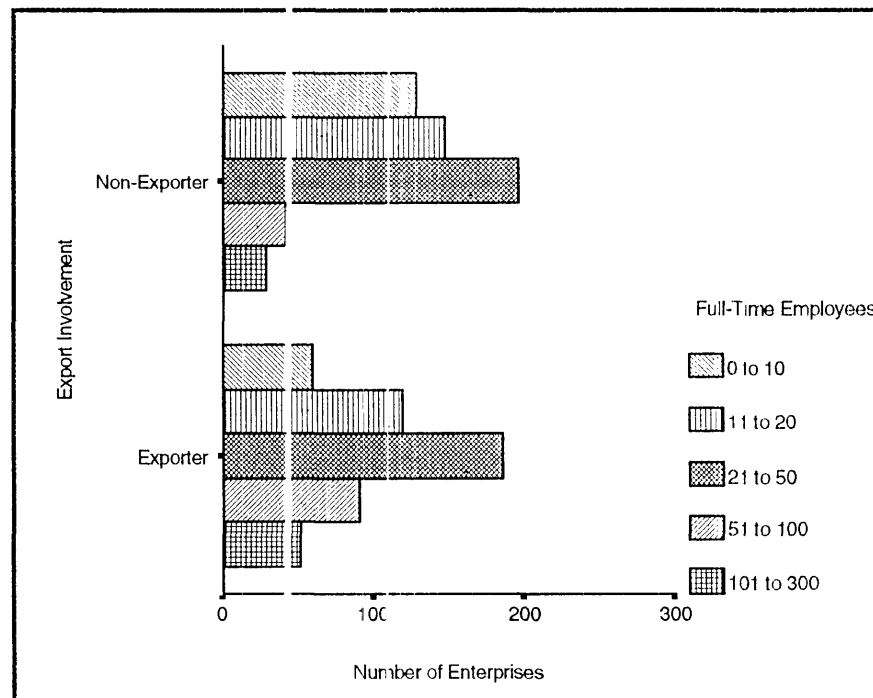
6.2.6 Export Commitment

Whether or not enterprises in the study sample are involved in exporting from Australia is indicated by data for a nominal study variable EXPORT based on responses to Question 7 in the survey instrument. Exporters comprise 48.1 per cent of respondents to the *Best Financial Practice* survey. This proportion initially appears to be quite high when compared to available official statistics on the SME sector. For example, in the Australian federal government's 1995 Business Longitudinal Study of employing businesses of various sizes, the overall proportion of exporters is 3.9 per cent for all businesses and 14.2 per cent for all manufacturing concerns (Industry Commission & Department of Industry, Science and Tourism, 1997). However, in the Business Longitudinal Study the proportion of manufacturers with 20 to 99 employees that export is 34.0 per cent; and this proportion is even higher at 66.2 per cent for manufacturers

with 100 employees or more. Thus, it would seem that, at just less than half of the study sample, the apparently high proportion of respondents that export may be substantially due to the enterprise size distribution being deliberately skewed away from the very smallest manufacturers during sampling for the *Best Financial Practice* survey.

The enterprise size distributions for non-exporters and exporters in the present study sample are shown in the figure below (data for study variables EMPLOYYS and EXPORT):

Figure 6.7: Export Involvement and Enterprise Size



For non-exporters, the modal enterprise size grouping is 21-50 full-time employees and the median grouping is 11-20 full-time employees. For exporters, the modal and median enterprise size grouping is 21-50 full-time employees. It is not possible to validly compare these findings with those of the Australian federal government's 1995 Business Longitudinal Study (or data from other official sources) because of the deliberately skewed nature of the present data as far as enterprise size is concerned, and due to differences in enterprise size ranges used.

A Mann-Whitney test suggests that median enterprise size in the study sample varies with statistical significance between non-exporters and exporters, with the latter typically being larger ($n=1,050$, $U=105,814.000$, $p<0.000$). Amongst small enterprises in the study sample, 46.8 per cent are exporters; whereas, amongst medium-sized enterprises, 63.8 per cent are exporters. A Chi-Square test comparing the proportions of exporters and non-exporters amongst small enterprises and medium-sized enterprises in the study sample indicates that the proportions are not similar ($n=1,050$, $\chi^2=8.501$, $df=1$, $p=0.004$).

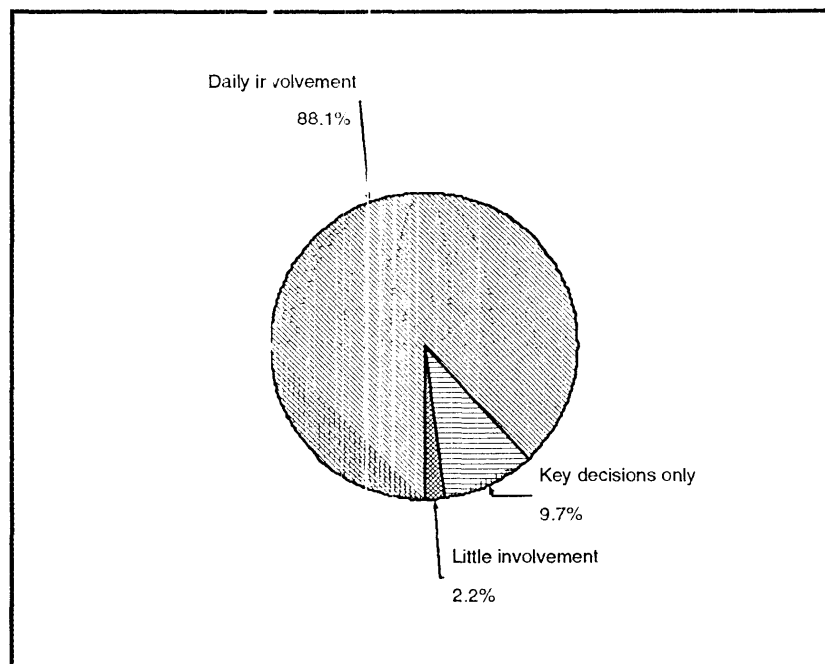
A Chi-Square test reveals that the proportion of exporters varies with statistical significance between manufacturing sub-sectors ($n=1,050$, $\chi^2=68.502$, $df=8$, $p<0.000$). A further Chi-Square test comparing the proportions of exporters in the various manufacturing sub-sectors in the study sample with the corresponding proportions in the Australian federal government's 1995 Business Longitudinal Study leads to rejection of the hypothesis that the proportions are similar ($n=505$, $\chi^2=113.253$, $df=8$, $p<0.000$). This finding is not surprising given earlier comments on the skewed nature of the study sample as regards enterprise size, and on apparent linkages between enterprise size and both manufacturing sub-sector and export involvement.

Whether or not enterprises in the study sample have plans for development of export markets in the ensuing two to three years is indicated by data for a nominal study variable EXPDEV based on responses to part of Question 22 in the survey instrument. Overall, those with export market development plans comprise 38.9 per cent of respondents to the *Best Financial Practice* survey. Amongst those already exporting, 62.0 per cent have plans for further export market development; whereas amongst non-exporters only 17.4 per cent have export market development plans. A Chi-Square test comparing the proportions with or without export development plans amongst exporters and non-exporters in the study sample suggests that the proportions are not similar ($n=1,050$, $\chi^2=218.957$, $df=1$, $p<0.000$).

A Mann-Whitney test indicates that median enterprise size in the study sample varies with statistical significance between those with export market development plans and those without, the former typically being larger ($n=1,050$, $U=102,453.000$, $p<0.000$). Amongst small enterprises in the study sample, 37.6 per cent have export market development plans; whereas, amongst medium-sized enterprises, 53.8 per cent have export market development plans. A Chi-Square test comparing the proportions with or without export market development plans amongst small enterprises and medium-sized enterprises in the study sample reveals that the proportions are not similar ($n=1,050$, $\chi^2=8.084$, $df=1$, $p=0.004$).

6.2.7 Owner-Management

The extent of participation of owners in management of enterprises in the study sample is shown in Figure 6.8 on the next page (data for an ordinal study variable OWNMANAG based on responses to Question 15 in the survey instrument).

Figure 6.8: Owner-Management in Study Sample

This study is primarily concerned with financial reporting for the benefit of those parties making financial management decisions about a business from within. These most obviously include owner-managers, non-managing owners and managers who are not owners. The diagram above indicates that enterprises responding to the *Best Financial Practices* survey are overwhelmingly owner-managed concerns. Owners of just over 88 per cent of businesses are reported to be involved in day-to-day operations; and owners of nearly 98 per cent of businesses are apparently involved in at least key decisions.

A Kruskal-Wallis one-way analysis of variance suggests that owner participation in management decreases with statistical significance as enterprise size increases ($n=1,050$, $H=17.484$, $df=2$, $p<0.000$). In other words, owners appear to gradually withdraw from day-to-day management activities as their enterprises grow. Not surprisingly, a Mann-Whitney test comparing owner participation in management between small enterprises and medium-sized enterprises in the study sample indicates that it statistically varies, with lower levels of participation being more common amongst medium-sized enterprises ($n=1,050$, $U=35,785.000$, $p=0.039$).

Decision-making undertaken by owners of SMEs legally organised as proprietary companies could be influenced by the presence of an external member on the Board of Directors who may have been put in place to protect the interests of mainly debt providers. This presence can be an effective constraint on the independence of smaller enterprise owner-managers, especially as regards strategic decisions. Whether or not enterprises in the study sample have external directors on their Boards is indicated by data for a nominal study variable EXD RECT based on responses to Question 16 in the survey instrument. Omitting 92 cases which did not answer Question 16, those with an external director comprise 26.3 per cent of remaining respondents. Where owners are

involved in day-to-day operations, only 22.9 per cent of respondents have an external director. This proportion rises to 52.7 per cent where owners are simply involved in making key decisions, and to 60.9 per cent when owners have little or no involvement in their businesses. A Mann-Whitney test reveals that the presence of an external director becomes more likely in the study sample as owners become less involved in management ($n=958$, $U=74,384.500$, $p<0.000$).

A Mann-Whitney test suggests that the presence of an external director varies with statistical significance between enterprise size groupings in the study sample, with larger concerns being more likely to have an external director ($n=958$, $U=77,136.500$, $p=0.001$). Amongst small enterprises in the study sample, 24.9 per cent have external directors; whereas, amongst medium-sized enterprises, 47.3 per cent have external directors. A Chi-Square test comparing the proportions of those with an external director and those without amongst small enterprises and medium-sized enterprises in the study sample leads to rejection of the hypothesis that the proportions are similar ($n=958$, $\chi^2=17.557$, $df=1$, $p<0.000$).

Later in this chapter, when examining financial management characteristics amongst respondents to the survey, consideration is given to whether owners of enterprises in the study sample appear to make key financial decisions themselves. Attention is also paid to the extent to which owners are evidently influenced in their financial decision-making by internal and external financial advisers.

6.2.8 Strategic Planning

One available indication of strategic planning orientation amongst respondents to the *Best Financial Practice* survey is whether or not enterprises in the study sample have written organisational goals. According to data for a nominal study variable WRITGOAL based on responses to part of Question 21 in the survey instrument, 42.8 per cent of those enterprises responding to the question have written organisational goals. Data for a nominal study variable BUSPLAN, based on responses to part of Question 21 in the survey instrument, indicate that 34.8 per cent of those responding to the question have a written business plan extending beyond 12 months into the future. Finally, data for a nominal study variable FINPLAN, based on responses to part of Question 21 in the survey instrument, reveal that 72.5 per cent of those responding to the question have a formal financial plan or budget.

There appears to be a moderate to strong, statistically significant association between having written organisational goals and having a written business plan ($n=966$, Cramér's $V=0.553$, $p<0.000$). The association between having written organisational goals and having a financial plan is weak but statistically significant ($n=964$, Cramér's $V=0.311$, $p<0.000$); and that between having a written business plan and having a financial plan is similarly weak but statistically significant ($n=975$, Cramér's $V=0.305$, $p<0.000$). Of over 900 enterprises responding to all three parts of Question 21, around

one-quarter have written organisational goals and a written business plan and a financial plan. A series of Mann-Whitney tests indicates that larger enterprises in the study sample are more likely to have written organisational goals ($n=971$, $U=83,650.000$, $p<0.000$) or a written business plan ($n=986$, $U=85,755.000$, $p<0.000$) or a financial plan ($n=1,031$, $U=78,856.000$, $p<0.000$).

The proportion with written organisational goals is 40.2 per cent for small enterprises in the study sample, and 74.7 per cent for medium-sized enterprises. A Chi-Square test reveals that having written organisational goals varies with statistical significance between small enterprises and medium-sized enterprises ($n=971$, $\chi^2=33.616$, $df=1$, $p<0.000$). For having a written business plan, the proportions for small enterprises and medium-sized enterprises are 32.9 per cent and 57.1 per cent respectively; and a Chi-Square test suggests a statistically significant difference between small enterprises and medium-sized enterprises ($n=986$, $\chi^2=18.401$, $df=1$, $p<0.000$). Finally, for having a financial plan, the proportions for small enterprises and medium-sized enterprises are 70.9 per cent and 91.0 per cent respectively; and a Chi-Square test indicates that a statistically significant difference exists between small enterprises and medium-sized enterprises ($n=1,031$, $\chi^2=14.583$, $df=1$, $p<0.000$).

A limited comparison of the findings above on incidence of written business plans can be made with what was discovered in the Australian federal government's 1995 Business Longitudinal Study (Industry Commission & Department of Industry, Science and Tourism, 1997). In the latter investigation, the overall proportion with a documented business plan is 15.6 per cent for all businesses and 17.2 per cent for all manufacturing concerns. For manufacturing enterprises, the proportions with a documented business plan for various enterprise size ranges were as follows: 8.8 per cent for 1-4 employees, 15.3 per cent for 5-19 employees, 39.7 per cent for 20-99 employees, and 67.1 per cent for 100 or more employees. Clearly, the likelihood of having a business plan increases substantially with enterprise size as in the present study. Given that the present data are deliberately skewed towards larger enterprises, the proportions with a business plan are roughly similar between the two studies. A more formal comparison cannot be made because of the skewed nature of the present data as regards enterprise size, and due to differences in enterprise size ranges used.

6.2.9 Strategic Management

An indication of strategic management amongst respondents to the *Best Financial Practice* survey is provided by answers to a question in the research instrument asking whether the financial impact of certain risks associated with changes in the business environment, as detailed below, have been identified and quantified:

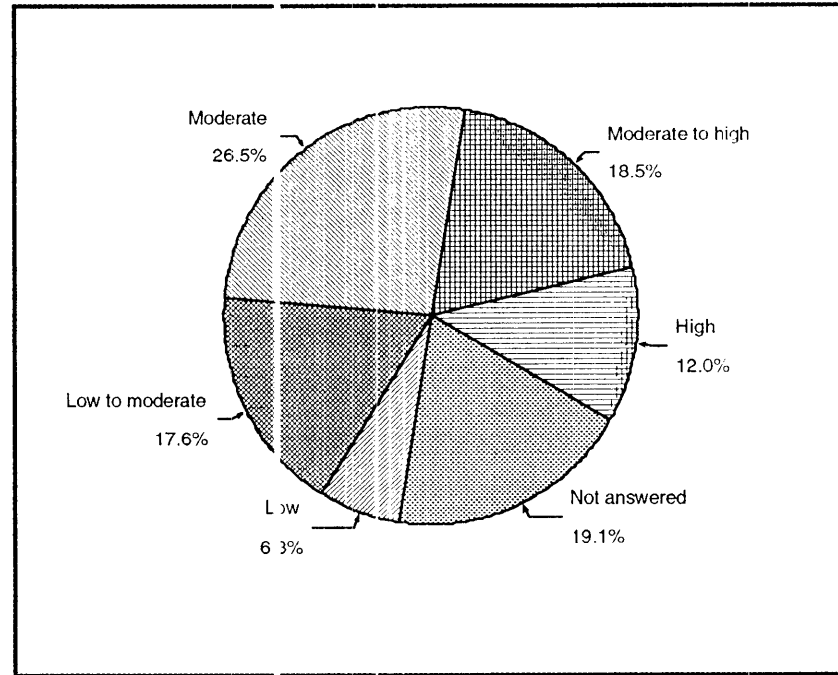
- Changes to environmental legislation.
- Changes to tariffs.
- Changes to taxation legislation.

- Failure of a major customer.
- Increase in interest rates
- Foreign exchange rate fluctuations.
- Technological obsolescence.
- Product obsolescence.
- Industrial disputes.
- Occupational health and safety issues.
- Increasing raw materials costs.
- Interruption to supply of raw materials.
- Lack of finance.

It could be argued that, in general, the greater the internal awareness of such risks in a business's environment, the more strategic the approach to management can possibly be. Of course, there must also be some form of responsiveness to these environmental challenges where they are material.

The ordinal study variable ENVIRAWR, imperfectly reflecting awareness of the business environment amongst respondents to the *Best Financial Practice* survey, is based on responses to Question 23 in the survey instrument as follows. Where an environmental risk is considered relevant by a respondent, but the financial impact is not identified or quantified, the enterprise has been scored 0 for the risk in question. If the financial impact is identified but not quantified, the enterprise has been scored 1. If the financial impact is identified and quantified, the enterprise has been scored 2. If, after due reflection, the environmental risk is not considered relevant by a respondent, the enterprise has been scored 2 on the grounds that it has done as much as is necessary. The scores for all 13 environmental risks presented have been summed for each enterprise, yielding an overall score with minimum 0 and maximum 26. Finally, the interval scores have been grouped as follows: 0 to 5 classed as low awareness, 6-10 classed as low to moderate awareness, 11 to 15 classed as moderate awareness, 16-20 classed as moderate to high awareness, and 20 to 26 classed as high awareness. Thus measured, awareness of the business environment on the part of enterprises in the study sample is shown in Figure 6.9 on the next page (data for study variable ENVIRAWR). Notice that 'moderate' is the modal and median category of business environment awareness amongst respondents. Note also the relatively high proportion of missing cases.

A Kruskal-Wallis one-way analysis of variance reveals that awareness of the business environment does not vary with statistical significance between enterprise size groupings ($n=849$, $H=2.262$, $df=4$, $p=0.688$). Furthermore, a Mann-Whitney test suggests that awareness of the business environment does not seem to differ statistically between small enterprises and medium-sized enterprises ($n=849$, $U=25,249.000$, $p=0.612$).

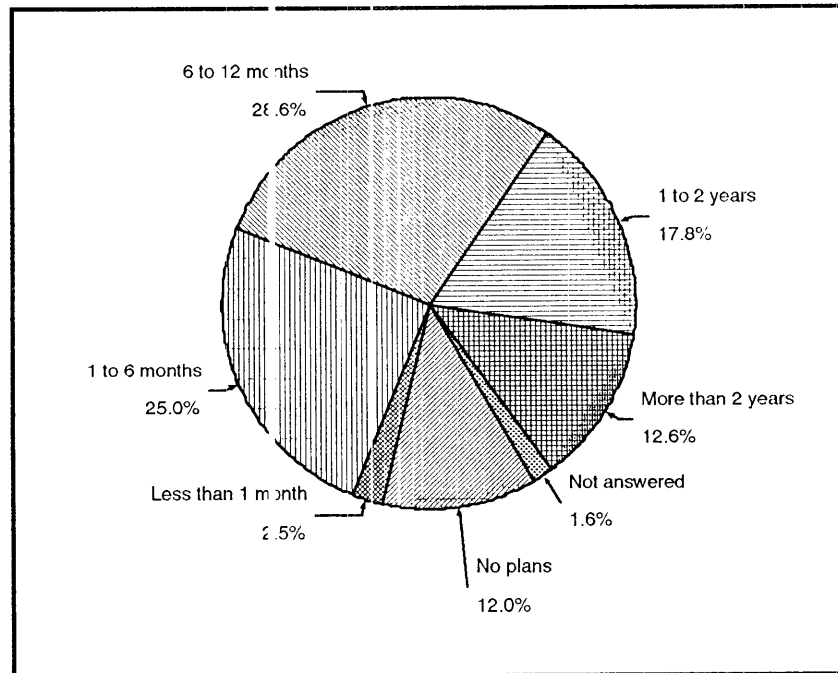
Figure 6.9: Business Environment Awareness in Study Sample

Another indication of strategic management amongst respondents to the *Best Financial Practice* survey is provided by answers to a question in the research instrument asking how far ahead planning is undertaken for significant investments in fixed assets such as plant, equipment, land, buildings, etc. By definition, such outlays are strategic in their intent as they determine the future production capability of the business, and thus its ability to respond to emerging market opportunities. It could be argued that, in general, the further ahead such opportunities are anticipated and prepared for, the more strategic the approach to management being employed. It is necessary, of course, to bear in mind differences in rates of technological and commercial change between industries/products/markets. Planning horizons for fixed asset investments of enterprises in the study sample are shown in Figure 6.10 on the next page (data for an ordinal study variable INVHORIZ based on responses to Question 25 in the survey instrument). The modal and median planning horizon for fixed asset investments is 6 to 12 months, suggesting some short-sightedness as far as strategic vision is concerned. It has already been observed in earlier chapters of the thesis that this short-term orientation is far from uncommon amongst small and medium-sized enterprises around the world.

A Kruskal-Wallis one-way analysis of variance indicates that the investment planning horizon for fixed assets is statistically longest amongst respondents with moderate or moderate to high awareness of the business environment ($n=842$, $H=9.785$, $df=4$, $p=0.044$). A further Kruskal-Wallis one-way analysis of variance reveals that median enterprise size in the study sample varies with statistical significance between different planning horizons, with larger enterprises generally appearing to plan further

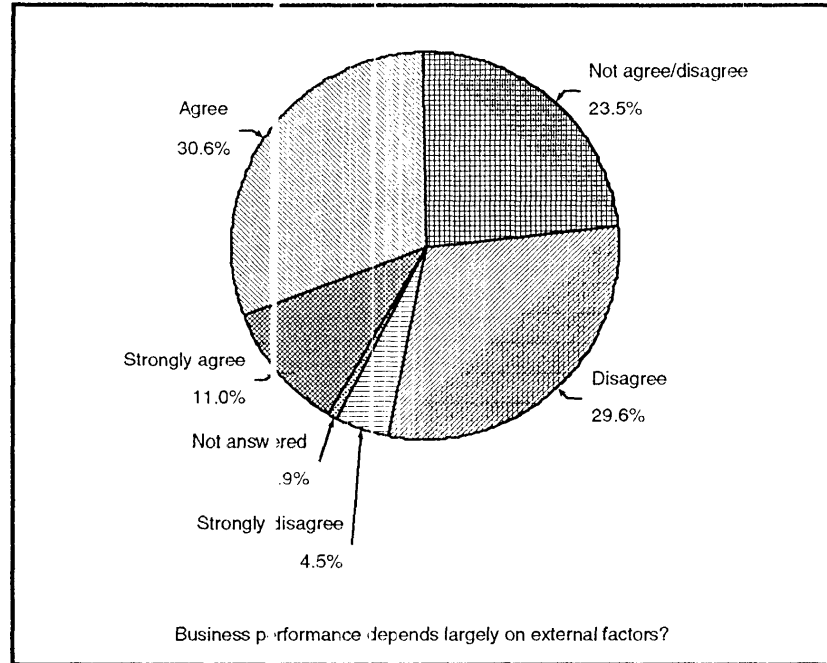
ahead ($n=1,033$, $H=54.484$, $df=5$, $p<0.000$). A Mann-Whitney test suggests that the fixed asset planning horizon for medium-sized enterprises is statistically longer than that for small enterprises ($n=1,050$, $U=32,245.500$, $p=0.010$).

Figure 6.10: Investment Planning Horizon in Study Sample



A further indication of strategic management amongst respondents to the *Best Financial Practice* survey is provided by answers to a question in the research instrument asking for an opinion on whether performance for the particular business being considered depends largely on external factors. On the basis of the relevant strategic management literature reviewed earlier in the thesis, it might be expected that respondents in some agreement with the proposition could be less proactive and more reactive in management style as significant circumstances in their businesses' environment change for the better or worse. On the other hand, where internal factors are considered to be most influential on business performance, a more proactive and less reactive management style could be in evidence. In short, management could be loosely described as more or less 'strategic' depending on the perceived relative importance of internal and external influences on business performance.

The ordinal study variable EXTERNAL, reflecting beliefs about the relative importance of external and internal influences on business performance amongst respondents to the *Best Financial Practice* survey, is based on responses to part of Question 53 in the survey instrument. These beliefs in the study sample are revealed in Figure 6.11 on the next page. The modal response category is 'agree', although the median category is 'neither agree, nor disagree'. Thus, on balance, the survey response is skewed towards agreement with the proposition that business performance depends largely on external factors.

Figure 6.11: Influences on Business Performance in Study Sample

Mann-Whitney tests indicate that beliefs about the relative importance of external and internal influences on business performance vary with statistical significance between respondents that have a written business plan and those which do not ($n=979$, $U=96,677.000$, $p=0.003$) or between respondents that have a financial plan and those which do not ($n=1,022$, $U=93,218.000$, $p=0.010$). In each case, undertaking planning seems associated with greater emphasis on internal factors – thus supporting the earlier contention that, where internal factors are considered to be most influential on business performance, a more proactive and less reactive management style could be in evidence.

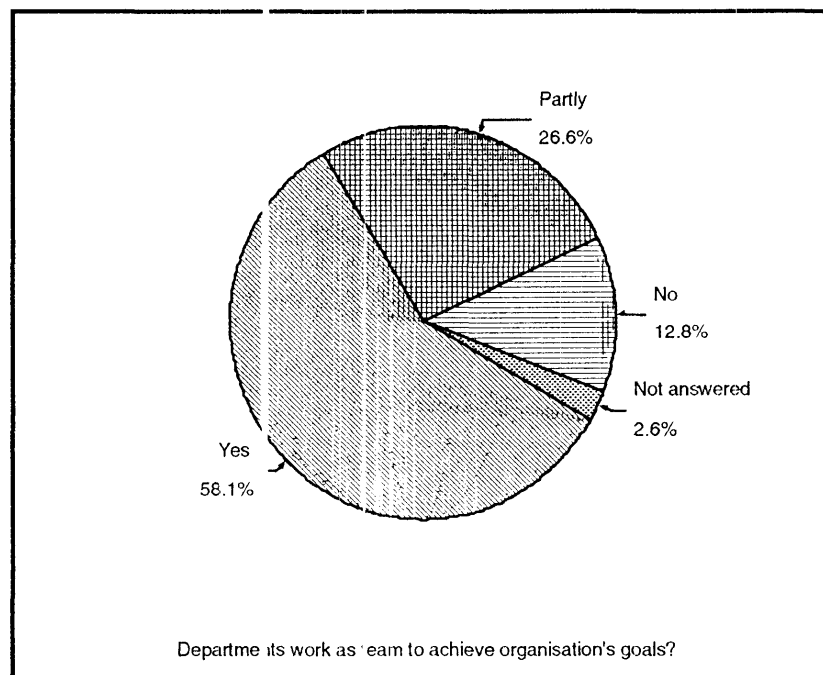
Curiously, a Kruskal-Wallis one-way analysis of variance reveals that beliefs about the relative importance of external and internal influences on business performance are not related in a statistically significant manner to awareness of the business environment ($n=843$, $H=4.418$, $df=4$, $p=0.352$). However, a further Kruskal-Wallis one-way analysis of variance suggests that beliefs about the relative importance of external and internal influences on business performance are related in a somewhat complex manner to investment planning horizon ($n=1,024$, $H=33.238$, $df=5$, $p<0.000$).

A Kruskal-Wallis one-way analysis of variance indicates that beliefs about the relative importance of external and internal influences on business performance vary with statistical significance between enterprise size groupings, with larger enterprises generally appearing to place more emphasis on internal factors ($n=1,041$, $H=13.852$, $df=4$, $p=0.008$). However, a Mann-Whitney test reveals that beliefs about the relative importance of external and internal influences on business performance do not vary with

statistical significance between small enterprises and medium-sized enterprises in the study sample ($n=1,041$, $U=34,799.000$, $p=0.089$).

A final indication of strategic management amongst respondents to the *Best Financial Practice* survey is provided by answers to a question in the research instrument asking whether all sections of the business work as a team to achieve the organisation's goals. The relevant strategic management literature suggests that management can only be considered truly 'strategic' if it is effective in engendering a strong goal orientation and teamwork within the organisation. The ordinal study variable STRATEAM, reflecting beliefs about goal orientation and teamwork within collaborating SMEs, is based on responses to part of Question 27 in the survey instrument. These beliefs are revealed in the figure below:

Figure 6.12: Organisational Teamwork in Study Sample



The modal and median response category is 'yes' – suggesting considerable confidence in the goal orientation and teamwork achieved in respondent businesses.

Kruskal-Wallis one-way analyses of variance suggest that beliefs about goal orientation and teamwork in the study sample are related in a statistically significant manner to awareness of the business environment ($n=838$, $H=15.936$, $df=2$, $p<0.000$) or investment planning horizon ($n=1,011$, $H=11.251$, $df=2$, $p=0.004$). Respondents with greater perceived goal orientation and teamwork appear more sensitive to the business environment, and they seem to have longer fixed asset planning horizons. A Kruskal-Wallis one-way analysis of variance indicates that beliefs about goal orientation and teamwork are not statistically related to beliefs about the relative importance of external and internal influences on business performance ($n=1,015$, $H=1.025$, $df=2$, $p=0.599$).

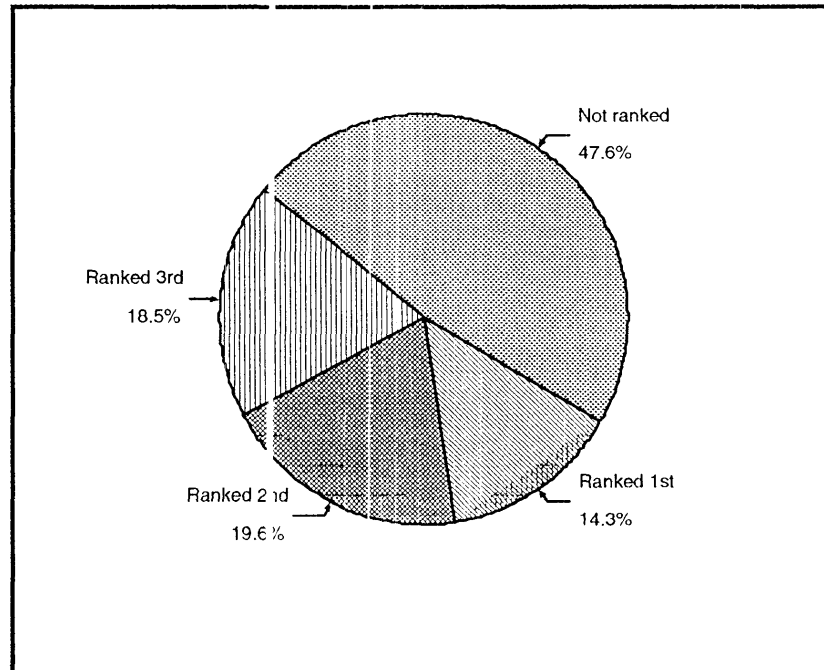
A Kruskal-Wallis one-way analysis of variance reveals that beliefs about goal orientation and teamwork vary with statistical significance between enterprise size groupings, with larger enterprises generally appearing to have less confidence about goal orientation and teamwork in their organisations ($n=1,023$, $H=23.901$, $df=4$, $p<0.000$). Furthermore, a Mann-Whitney test suggests that beliefs about goal orientation and teamwork vary with statistical significance between small enterprises and medium-sized enterprises in the study sample, with medium-sized enterprises seeming to have less confidence in goal orientation and teamwork in their organisations ($n=1,023$, $U=31,584.500$, $p=0.006$).

6.2.10 Growth Commitment

The ultimate dependent variables in this research are business growth and performance outcomes achieved by enterprises in the study sample. Amongst other benchmarks, these outcomes need to be judged against the underlying growth orientation of the business concerns investigated. The literature on business growth reviewed in Chapter 2 of the thesis suggests that growth orientation arises from (*inter alia*) interaction of the growth aspirations and commitment of business owners with any internal or external constraints on growth which may exist. Internal constraints on business growth can include the lifestyle preferences of owner-managers, and also their possible reluctance to use particular forms of debt and/or equity financing. External constraints on business growth include any limitations to the extent of support provided by external financiers after reviewing an enterprise's financial position, performance and prospects. This subsection of the chapter, and the next, describe a number of study variables that attempt to capture, albeit imperfectly, these various elements of growth orientation.

The growth aspirations and commitment of respondent business owners and/or owner-managers in the *Best Financial Practice* survey are reflected in three study variables detailed as follows:

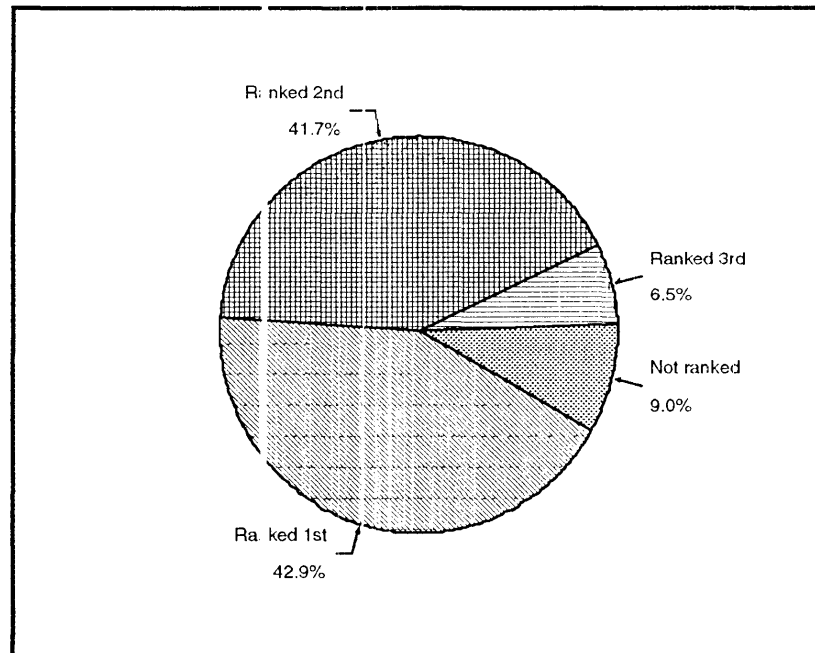
- The extent to which business growth is an explicit and important organisational objective is indicated by a nominal study variable GROWOBJ based on responses to part of Question 11 in the survey instrument. This question asks respondents to rank various objectives in order of their importance to owners. One of the objectives identified is 'company growth' and its rankings amongst enterprises in the study sample are shown in Figure 6.13 on the next page. Overall, just over one-half of respondents to the *Best Financial Practice* survey rank business growth amongst their three most important organisational objectives.
- The extent to which growth is a deliberative business outcome is indicated by a nominal study variable GROWPLAN based on responses to part of Question 22 in the survey instrument. This question asks respondents to say whether they have plans for various strategic developments (consolidation, contraction, expansion,

Figure 6.13: Importance of Growth Objective in Study Sample

etc.) in the ensuing two to three years. One of the planned alternatives identified is 'business growth' and this is selected by 72.1 per cent of enterprises in the study sample. Where business growth is ranked first as an organisational objective, 87.3 per cent of enterprises have growth plans. This proportion falls to 79.6 per cent and 79.9 per cent when business growth is respectively ranked second or third as an objective. Even when business growth is not ranked amongst the most important three objectives, 61.4 per cent of enterprises still plan to grow. A Chi-Square test indicates that the likelihood of growth plans increases with statistical significance as business growth ranks more highly as an organisational objective ($n=1,050$, $\chi^2=57.396$, $df=3$, $p<0.000$).

- The extent to which growth is being actively pursued is indicated by a nominal study variable GROWCASH based on responses to part of Question 12 in the survey instrument. This question asks respondents to rank various uses for surplus cash in order of their importance. One of the uses identified is 'retain in company for growth' and its rankings amongst enterprises in the study sample are shown in Figure 6.14 on the next page. Overall, just over 90 per cent of respondents to the *Best Financial Practice* survey rank business growth amongst their three most important uses of surplus cash. A Chi-Square test reveals that the ranking of business growth as a use of surplus cash increases with statistical significance as business growth ranks more highly as an organisational objective ($n=1,050$, $\chi^2=53.825$, $df=9$, $p<0.000$). A further Chi-Square test suggests that the ranking of business growth as a use of surplus cash increases with statistical significance when growth plans exist ($n=1,050$, $\chi^2=25.961$, $df=3$, $p<0.000$).

Figure 6.14: Importance of Cash for Growth in Study Sample



A Kruskal-Wallis one-way analysis of variance indicates that larger enterprises in the study sample have a statistically greater likelihood of ranking growth more highly as an organisational objective ($n=1,050$, $H=10.404$, $df=3$, $p=0.015$). A Mann-Whitney test reveals that larger enterprises in the study sample also have a statistically greater likelihood of having growth plans ($n=1,050$, $U=89,801.500$, $p<0.000$). However, a Kruskal-Wallis one-way analysis of variance suggests that enterprise size has no bearing on ranking of business growth as a use of surplus cash ($n=1,050$, $H=6.683$, $df=3$, $p=0.083$).

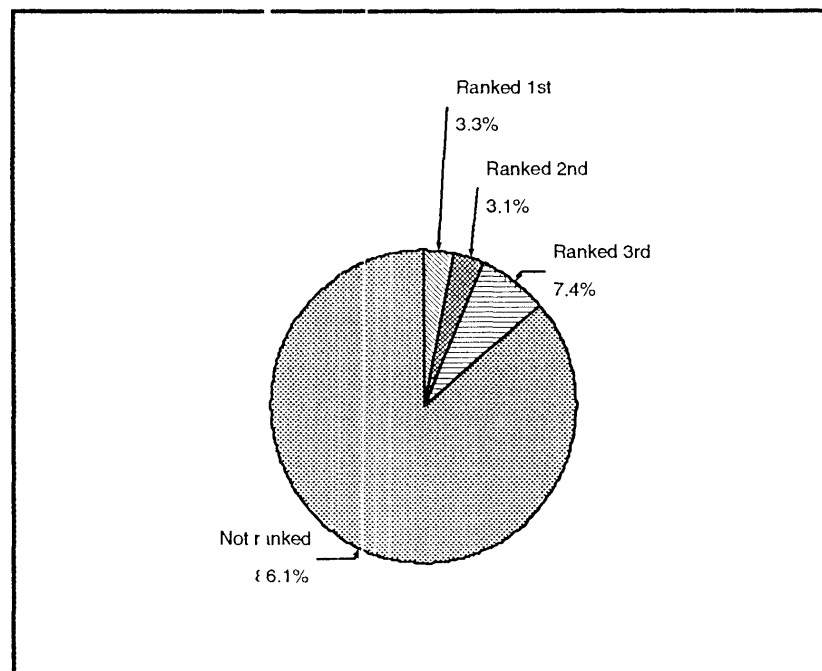
The proportion ranking business growth amongst their three most important organisational objectives is 52.4 per cent for small enterprises in the study sample, and 52.5 per cent for medium-sized enterprises. Not surprisingly, a Chi-Square test indicates no statistically significant difference between small enterprises and medium-sized enterprises ($n=1,050$, $\chi^2=1.998$, $df=3$, $p=0.573$). For having growth plans, the proportions for small enterprises and medium-sized enterprises are 71.2 per cent and 82.5 per cent respectively; and a Chi-Square test reveals a statistically significant difference between small enterprises and medium-sized enterprises ($n=1,050$, $\chi^2=4.660$, $df=1$, $p=0.031$). Finally, for ranking business growth amongst the three most important uses of surplus cash, the proportions for small enterprises and medium-sized enterprises are 90.7 per cent and 95.0 per cent respectively; and a Chi-Square test suggests no statistically significant difference between small enterprises and medium-sized enterprises ($n=1,050$, $\chi^2=2.121$, $df=3$, $p=0.548$).

6.2.11 Growth Constraints

The internal and external constraints on business growth that may exist for enterprises responding to the *Best Financial Practice* survey are reflected in six study variables detailed as follows:

- The extent to which lifestyle is an explicit and important organisational objective is indicated by a nominal study variable LIFESTYL based on responses to part of Question 11 in the survey instrument. This question asks respondents to rank various objectives in order of their importance to owners. One of the objectives identified is 'lifestyle' and its rankings amongst enterprises in the study sample are shown in the figure below:

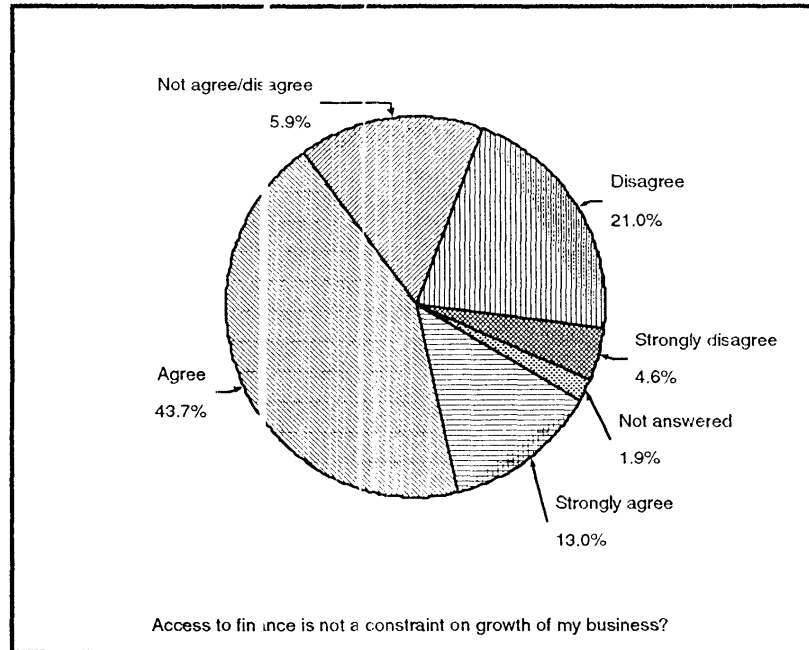
Figure 6.15: Importance of Lifestyle Objective in Study Sample



Overall, life-style is an important concern for just less than 15 per cent of respondents to the survey – indicating this is not a widespread constraint on business growth amongst those SMEs canvassed. Thus, there may be relatively few concerns in the study sample that are notionally in the life-style disengagement stage of the Harks *et al.* (1993) enterprise life-cycle model examined in Chapter 2 of the thesis.

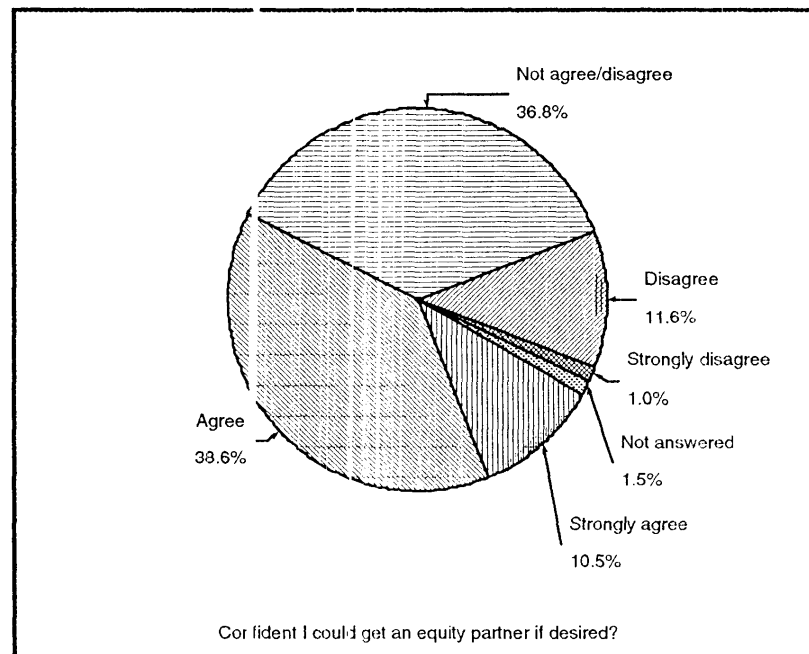
- The ordinal study variable FINACCES, reflecting beliefs about whether access to finance is an important constraint on business growth amongst respondents to the *Best Financial Practice* survey, is based on responses to part of Question 53 in the survey instrument. These beliefs in the study sample are revealed in Figure 6.16 on the next page. The modal and median response category is 'agree'. Thus, on balance, the survey response is skewed towards agreement with the proposition that business growth is not constrained by limited access to finance.

Figure 6.16: Access to Growth Finance in Study Sample



- The ordinal study variable EQTACCES, reflecting beliefs about whether access to equity finance is an important constraint on business growth amongst respondents to the *Best Financial Practice* survey, is based on responses to part of Question 53 in the survey instrument. These beliefs in the study sample are revealed in the figure below:

Figure 6.17: Access to Equity Finance in Study Sample

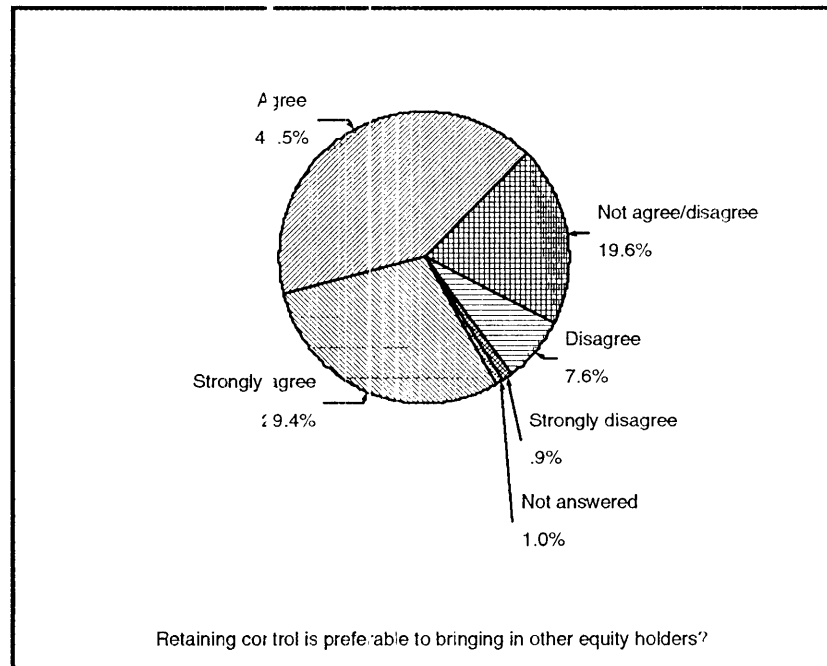


The modal response category is 'agree', although the median category is 'neither agree, nor disagree'. Thus, on balance, the survey response is skewed towards

agreement with the proposition that business growth is not constrained by limited access to equity finance.

- The ordinal study variable CONTROL, reflecting beliefs amongst respondents to the *Best Financial Practice* survey about whether retaining control of an enterprise is preferable to bringing in other equity holders, is based on responses to part of Question 53 in the survey instrument. These beliefs in the study sample are revealed in the figure below:

Figure 6.18: Importance of Retaining Control in Study Sample

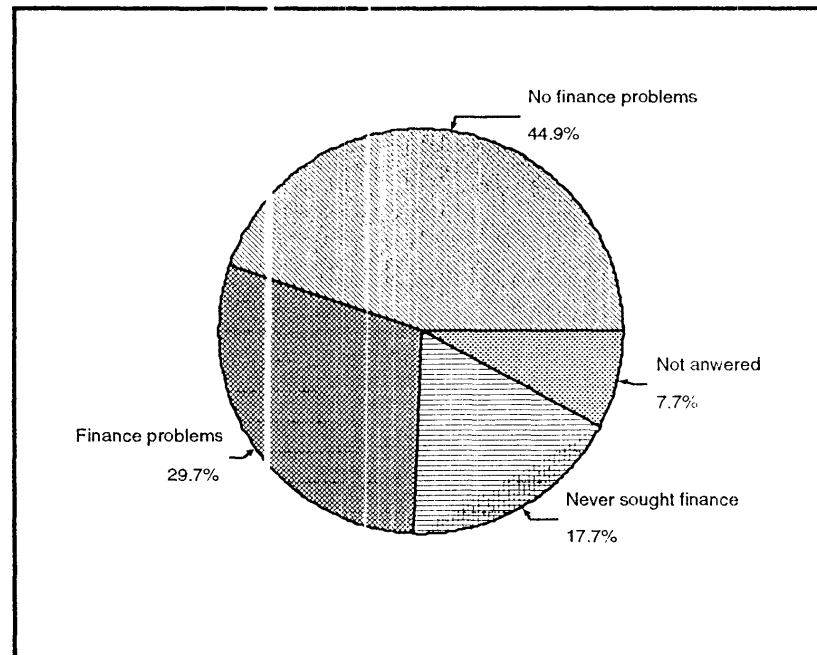


The modal and median response category is 'agree'. Thus, on balance, the survey response is skewed towards agreement with the proposition that retaining control of an enterprise is preferable to bringing in other equity holders – indicating this could be a widespread constraint on business growth amongst those SMEs canvassed. Hence, there may be a relatively large number of concerns in the study sample that are notionally in the capped growth disengagement stage of the Hanks *et al.* (1993) enterprise life-cycle model examined in Chapter 2 of the thesis.

- The extent to which respondents have actually experienced difficulties when attempting to raise external finance (debt or equity) is signalled by a nominal study variable FINPROES based on responses to Question 28(a) in the survey instrument which indicates whether external financing has been sought, and also responses to Questions 28(b), 30 and 33 that detail difficulties experienced such as complete or partial refusal, excess interest rates and/or charges, unreasonable demands for information and/or personal guarantees, etc., etc. The experience of

external financing problems amongst enterprises in the study sample is shown in the figure below:

Figure 6.19: External Financing Problems in Study Sample



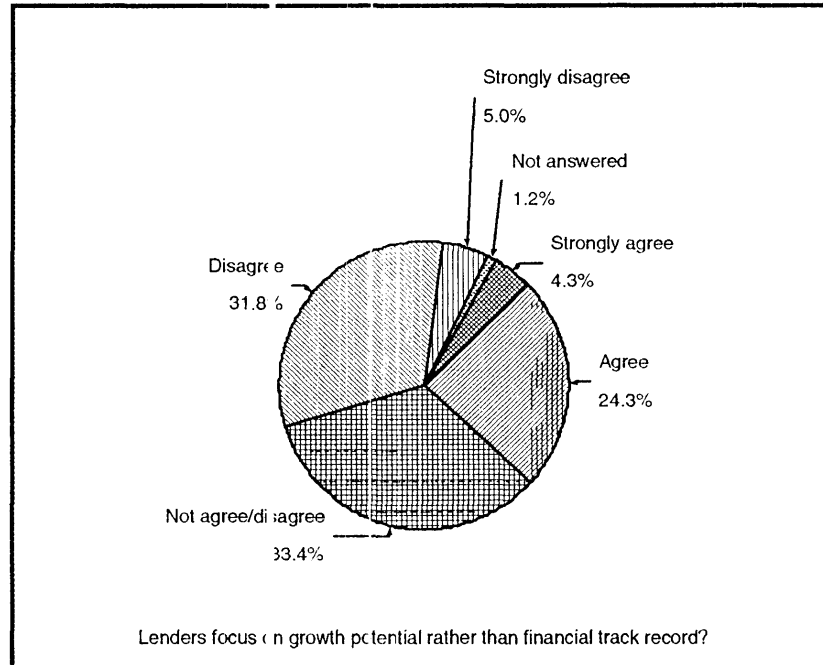
Of those enterprises that report having sought debt and/or equity financing from outside sources, approximately 40 per cent have experienced some type of difficulty that could be perceived as a constraint on use of external funds.

- The ordinal study variable GROWPOTL, reflecting beliefs amongst respondents to the *Best Financial Practice* survey about whether lenders tend to be forward looking in focusing on enterprise growth potential rather than upon financial track record, is based on responses to part of Question 53 in the survey instrument. These beliefs in the study sample are revealed in Figure 6.20 on the next page. The modal and median response category is 'neither agree, nor disagree'. However, on balance, the survey response is skewed slightly towards disagreement with the proposition that lenders focus on growth potential rather than upon financial track record – indicating that short-sightedness on the part of lenders could be a constraint on business growth for some of the SMEs canvassed.

A series of Kruskal-Wallis one-way analyses of variance indicates that no statistically significant relationships exist in the study sample between ranking of lifestyle as an organisational objective and beliefs about access to growth finance ($n=1,030$, $H=4.479$, $df=3$, $p=0.214$) or access to equity finance ($n=1,034$, $H=6.114$, $df=3$, $p=0.106$) or importance of retaining control ($n=1,040$, $H=6.256$, $df=3$, $p=0.100$) or lenders regard for growth potential ($n=1,037$, $H=7.154$, $df=3$, $p=0.067$). Sparse cells prohibit statistical evaluation using a Chi-Square test of any possible relationship between ranking of

lifestyle as an organisational objective and incidence of financing problems. There does not appear to be a statistically significant association between ranking of lifestyle as an organisational objective and incidence of financing problems ($n=1,030$, Cramér's $V=0.068$, $p=0.291$).

Figure 6.20: Importance of Growth Potential in Study Sample



A series of Kruskal-Wallis one-way analyses of variance reveals that statistically significant relationships do exist in the study sample between incidence of financing problems and beliefs about access to growth finance ($n=949$, $H=87.515$, $df=2$, $p<0.000$) or access to equity finance ($n=954$, $H=16.201$, $df=2$, $p<0.000$) or importance of retaining control ($n=959$, $H=10.553$, $df=2$, $p=0.005$) or lenders' regard for growth potential ($n=956$, $H=10.155$, $df=2$, $p=0.006$). Broadly speaking, respondents that report having had financing problems are more likely to believe access to finance generally is a constraint upon business growth, and that so too is access to equity finance. They are less likely to believe that retaining control is preferable to bringing in other equity holders, and that lenders focus on growth potential rather than upon financial track record.

Associations in the study sample between beliefs about access to growth finance generally (FINACCES), access to equity finance (EQTACCES), importance of retaining control (CONTROL) and lenders regard for growth potential (GROWPOTL) are shown in Table 6.2 on the next page. Interpreting statistically significant relationships revealed in the table, respondents who believe access to finance generally is a constraint on business growth are more likely to consider access to equity finance to also be limiting. Both these types of respondents are less likely than others to believe that retaining control is preferable to bringing in other equity holders. Finally, respondents who believe

that access to finance generally is a constraint on business growth are less likely to believe that lenders focus on growth potential rather than upon financial track record.

Table 6.2: Financing Beliefs in Study Sample

		FINACCES	EQTACCES	CONTROL	GROWPOTL
Kendall's tau b	FINACCES	1.000			
	EQTACCES	.285	1.000		
	CONTROL	.212	.190	1.000	
	GROWPOTL	.093	.025	.032	1.000
Statistical significance (p)	FINACCES	.			
	EQTACCES	.000	.		
	CONTROL	.000	.000	.	
	GROWPOTL	.000	.341	.228	.
Number of enterprises	FINACCES	1030			
	EQTACCES	1022	1034		
	CONTROL	1027	1033	1040	
	GROWPOTL	1024	1030	1036	1037

Associations in the study sample between variables reflecting internal and external constraints on business growth and enterprise size measured in employment terms can be summarised as follows:

- A Kruskal-Wallis one-way analysis of variance suggests that larger enterprises responding to the survey have a statistically lower likelihood of including lifestyle amongst their three most highly ranked organisational objectives ($n=1,050$, $H=12.186$, $df=3$, $p=0.007$). Sparse cells prohibit statistical evaluation using a Chi-Square test of any possible differences in ranking of lifestyle as an organisational objective between small enterprises and medium-sized enterprises. However, there does seem to be a very weak, statistically significant association between ranking of lifestyle as an organisational objective and classification as either a small or a medium-sized enterprise ($n=1,050$, Cramér's $V=0.091$, $p=0.033$). Medium-sized enterprises appear less likely to include lifestyle amongst their three most important organisational objectives.
- A Kruskal-Wallis one-way analysis of variance indicates that there is no statistically significant association in the study sample between beliefs about access to growth finance generally and enterprise size ($n=1,030$, $H=2.913$, $df=4$, $p=0.572$). Furthermore, a Mann-Whitney test reveals no statistically significant difference in these beliefs between small enterprises and medium-sized enterprises ($n=1,030$, $U=85,610.000$, $p=0.416$).

- A Kruskal-Wallis one-way analysis of variance suggests that smaller enterprises responding to the survey are statistically less likely to believe they could attract further equity holders if they desired to do so ($n=1,034$, $H=10.229$, $df=4$, $p=0.037$). However, a Mann-Whitney test indicates no statistically significant difference in these beliefs between small enterprises and medium-sized enterprises ($n=1,034$, $U=83,795.000$, $p=0.144$).
- A Kruskal-Wallis one-way analysis of variance reveals that there is no statistically significant association in the study sample between beliefs about the importance of retaining control of an enterprise and enterprise size ($n=1,040$, $H=3.308$, $df=4$, $p=0.508$). Furthermore, a Mann-Whitney test suggests no statistically significant difference in these beliefs between small enterprises and medium-sized enterprises ($n=1,040$, $U=36,648.000$, $p=0.472$).
- A Kruskal-Wallis one-way analysis of variance indicates that smaller enterprises in the study sample are statistically less likely to have sought external finance; and, when they have done so, they are more likely than larger concerns to have experienced difficulties ($n=969$, $H=19.657$, $df=2$, $p<0.000$). A Chi-Square test reveals a statistically significant difference in incidence of financing problems between small enterprises and medium-sized enterprises, with the former experiencing more difficulties ($n=969$, $\chi^2=10.281$, $df=2$, $p=0.006$).
- A Kruskal-Wallis one-way analysis of variance suggests that larger enterprises responding to the survey are statistically less likely to believe that lenders focus on growth potential rather than upon financial track record ($n=1,037$, $H=21.091$, $df=4$, $p<0.000$). Furthermore, a Mann-Whitney test indicates a statistically significant difference in these beliefs between small enterprises and medium-sized enterprises, with the latter being less likely to believe that lenders favour growth potential over financial track record ($n=1,037$, $U=30,848.000$, $p=0.004$).

Amongst these findings there is some evidence suggesting the existence in Australia of a 'finance gap' for manufacturing SMEs.

6.2.12 Enterprise Characteristics Summary

It is evident from the findings presented in this section of the chapter that, in terms of enterprise size, manufacturing sub-sector and geographical location in particular, the study sample obtained from the *Best Financial Practice* survey is not strictly representative of the population of smaller manufacturing enterprises legally organised as proprietary companies in Australia. In the main, this is due to the enterprise size distribution being deliberately skewed away from the very smallest concerns during sampling for the survey. Having acknowledged this, the study sample clearly cannot be considered poor and/or unusable by contemporary business research standards in this country. With some justification, it can be claimed to approximate the larger end of the manufacturing SME spectrum comprising those concerns that are most likely to be:

- Legally organised as proprietary companies, but still essentially owner-managed.
- Growth oriented and growth enabled.
- Impacted by changes to financial reporting requirements mandated by the professional accounting bodies, by financiers, and by taxation and corporations regulation authorities.

Overall then, the sample and data obtained can be judged to be very suitable given the stated purposes of the research described in the thesis.

It is also evident from the findings presented in this section of the chapter that enterprise size in employment terms has some explanatory potential for relevant phenomena in the small and medium-sized enterprises investigated. Variables considered so far relate to manufacturing sub-sector, geographical location, manufacturing complexity, export commitment, owner-management, strategic planning, strategic management, growth commitment and growth constraints. Statistically significant associations with enterprise size in employment terms are evident in data reported for:

- Manufacturing sub-sector.
- Geographical location.
- Manufacturing complexity.
- Export involvement.
- Incidence of export market development plans.
- Extent of participation of owners in management.
- Presence of an external director.
- Incidence of written organisational goals.
- Incidence of written business plans.
- Incidence of financial plans.
- Fixed asset investment planning horizon.
- Beliefs about the relative importance of external and internal influences on business performance.
- Beliefs about the level of goal orientation and teamwork.
- Importance of growth as an organisational objective.
- Incidence of growth plans.
- Importance of lifestyle as an organisational objective.
- Beliefs about ability to attract further equity holders.
- Incidence of seeking external financing.
- Incidence of problems when seeking external financing.
- Beliefs about lenders' concern for growth potential versus financial track record.

Further consideration of associations between these variables and enterprise size forms part of the analysis presented in the following chapter of the thesis.

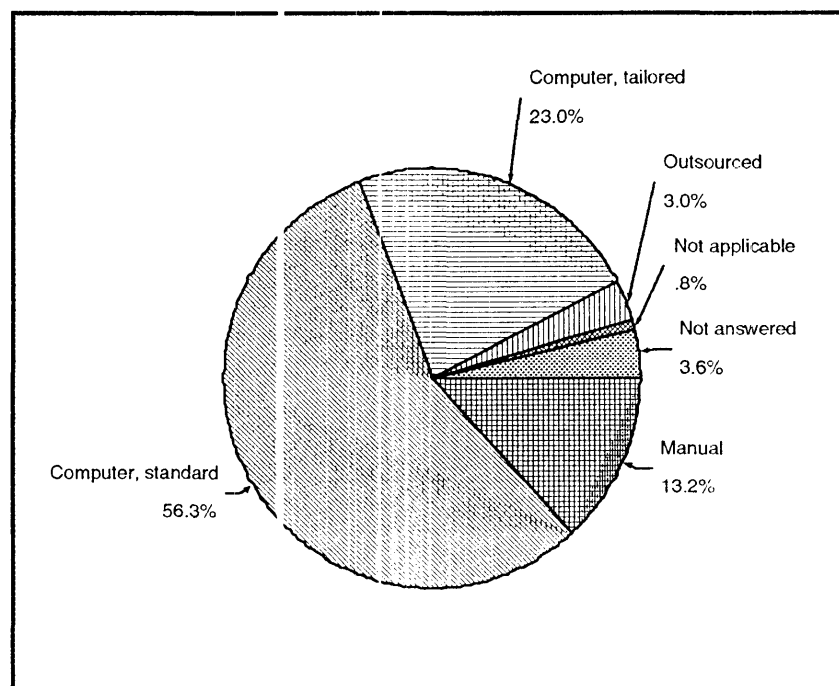
6.3 Financial Management Characteristics

6.3.1 Financial Systems

It is reasonable to expect that the nature and extent of both historical and future-oriented financial reporting amongst respondents to the *Best Financial Practice* survey is directly influenced by the financial systems available to them for these purposes. Specifically, the ease with which comprehensive historical financial reporting can be undertaken is mainly determined by the availability and features of a general ledger accounting system of some sort, however humble. Similarly, the ability to conveniently undertake extensive future-oriented financial reporting is established by the availability and features of some type a budgeting system, again however humble. This sub-section of the chapter examines the financial systems of both kinds reportedly in use in the study sample.

The nominal study variable GLACCSYS, reflecting the type of general ledger accounting system in use (if any) amongst respondents to the *Best Financial Practice* survey, is based on responses to part of Question 37 in the survey instrument. The usage pattern in the study sample is revealed in the figure below:

Figure 6.21: General Ledger System in Study Sample



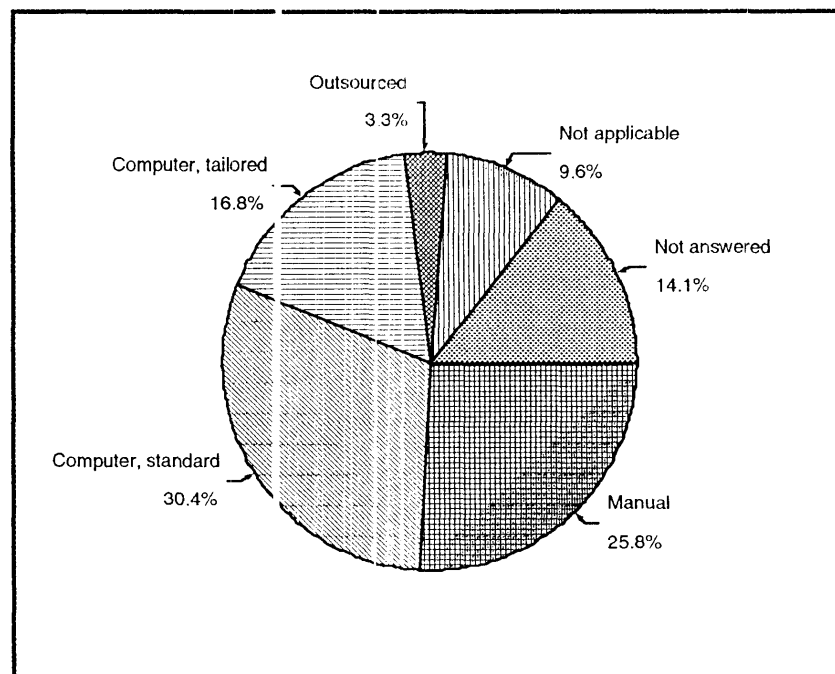
The modal response category in the study sample is 'computer, standard' indicating a computer-based general ledger accounting system with standard (or off-the-shelf) software. Overall, 85.7 per cent of respondents indicating they have an in-house general ledger accounting system report that it is computer-based.

A Kruskal-Wallis one-way analysis of variance reveals that larger enterprises responding to the survey are statistically more likely to use a computer-based general

ledger accounting system ($n=1,012$, $H=68.960$, $df=4$, $p<0.000$). Sparse cells prohibit statistical evaluation using a Chi-Square test of any possible difference between small enterprises and medium-sized enterprises in their use of general ledger accounting systems. However, there does appear to be a very weak, statistically significant association between being a small enterprise or a medium-sized enterprise and the general ledger accounting system in use ($n=1,012$, Cramér's $V=0.163$, $p<0.000$). Medium-sized enterprises seem more likely to have an in-house general ledger accounting system, and this system is more likely to be computerised and use tailored software.

The nominal study variable BUDGSYS, reflecting the type of budgeting system in use (if any) amongst respondents to the *Best Financial Practice* survey, is based on responses to part of Question 37 in the survey instrument. The usage pattern in the study sample is revealed in the figure below:

Figure 6.22: Budgeting System in Study Sample



The modal response category in the study sample is 'computer, standard' indicating a computer-based budgeting system with standard (or off-the-shelf) software. Overall, 64.6 per cent of respondents indicating they have an in-house budgeting system report that it is computer-based. Note the substantial proportion (almost 10 per cent) of respondents that believe a budgeting system is not applicable in their circumstances.

Sparse cells prohibit statistical evaluation using a Chi-Square test of any possible relationship between general ledger accounting system and budgeting system in use. However, there does appear to be a weak, statistically significant association between general ledger accounting system and budgeting system in use ($n=885$, Cramér's $V=0.333$, $p<0.000$). In fact, it is common in practice for general ledger accounting

software to included a budgeting facility (at least as an add-on feature). A Kruskal-Wallis one-way analysis of variance suggests that larger enterprises responding to the survey are statistically more likely to use a computer-based budgeting system ($n=902$, $H=64.905$, $df=4$, $p<0.000$). A Chi-Square test indicates a statistically significant difference in use of budgeting systems between small enterprises and medium-sized enterprises ($n=902$, $\chi^2=57.169$, $df=4$, $p<0.000$). Medium-sized enterprises seem more likely to have an in-house budgeting system, and this system is more likely to be computerised and use tailored software

6.3.2 Financial Audit

Earlier in the thesis it is pointed out that, as a precursor to initial support, or as a condition of on-going assistance, external providers of finance to small and medium-sized enterprises often require that their financial systems and reports be audited by an independent professional auditor. This helps to overcome the information asymmetry typically existing between those within and those outside such concerns. It also provides some assurance as to the veracity of information submitted in justification of an application for finance. Furthermore, as revealed in Chapter 3 of the thesis, the Australian Corporations Law can, in specified circumstances, require a financial audit of proprietary companies. This is particularly so for larger private companies and/or those that have sought external financing. From the viewpoint of this research, the incidence of financial audits may be significant in that they make it more likely that:

- Systems exist which facilitate at least historical financial reporting on a timely and relevant basis.
- Generally accepted accounting principles, and possibly promulgated accounting standards, are applied in historical financial reporting.
- Information contained in historical financial reports is reliable as a basis for sound financial decision-making.

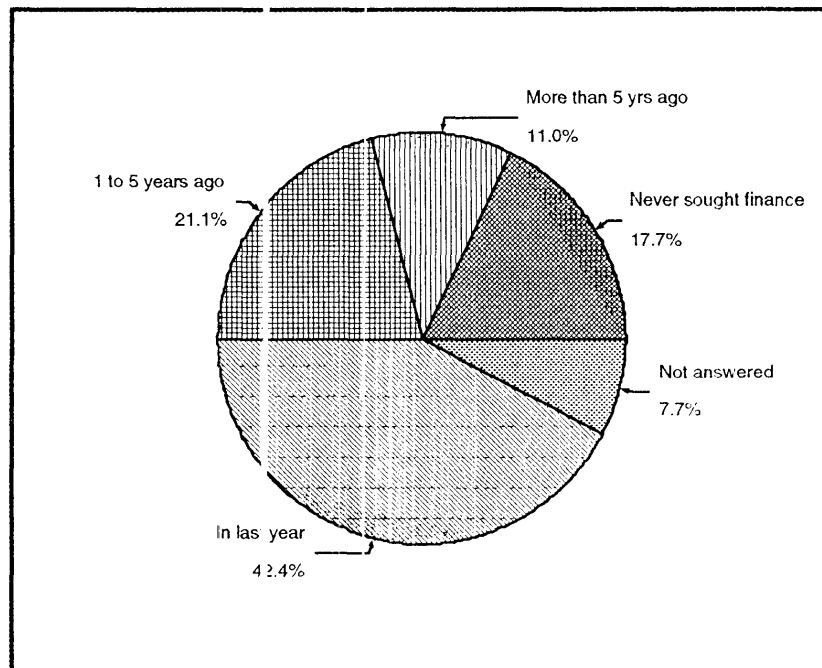
Whether or not enterprises in the study sample submit their financial systems and reports to an audit is indicated by data for a nominal study variable FINAUDIT based on responses to Question 18 in the survey instrument. Financial audits are apparently undertaken for 34.9 per cent of just over one thousand respondents to the *Best Financial Practice* survey answering the question. A Mann-Whitney test reveals that median enterprise size in the study sample varies with statistical significance between those audited and those not audited, with the former typically being larger ($n=1,028$, $U=89,123.000$, $p<0.000$). Amongst small enterprises in the study sample, 32.9 per cent have financial audits; whereas amongst medium-sized enterprises, 59.5 per cent have financial audits. A Chi-Square test comparing the proportions of those with and without financial audits amongst small enterprises and medium-sized enterprises in the study sample suggests that the proportions are not similar ($n=1,028$, $\chi^2=22.734$, $df=1$, $p<0.000$).

6.3.3 Business Financing

Particularly in Chapter 3, but frequently elsewhere in the thesis, the important influence that seeking external financing may have upon financial management practices in SMEs, including their financial reporting practices, has been emphasised. The primary reasons for this, relating to overcoming information asymmetries typically existing between those within and those outside such concerns, are restated in the previous sub-section of the chapter when considering the incidence of financial audit in the study sample. In this sub-section, information on the external financing experiences of respondent enterprises is presented, together with data on their overall dependence on debt versus equity financing.

The ordinal study variable FINSEEK, indicating how recently, if at all, respondents to the *Best Financial Practice* survey have sought external debt and/or equity finance, is based on responses to Question 28(a) in the survey instrument. The external financing pattern in the study sample is revealed in the figure below:

Figure 6.23: External Financing in Study Sample

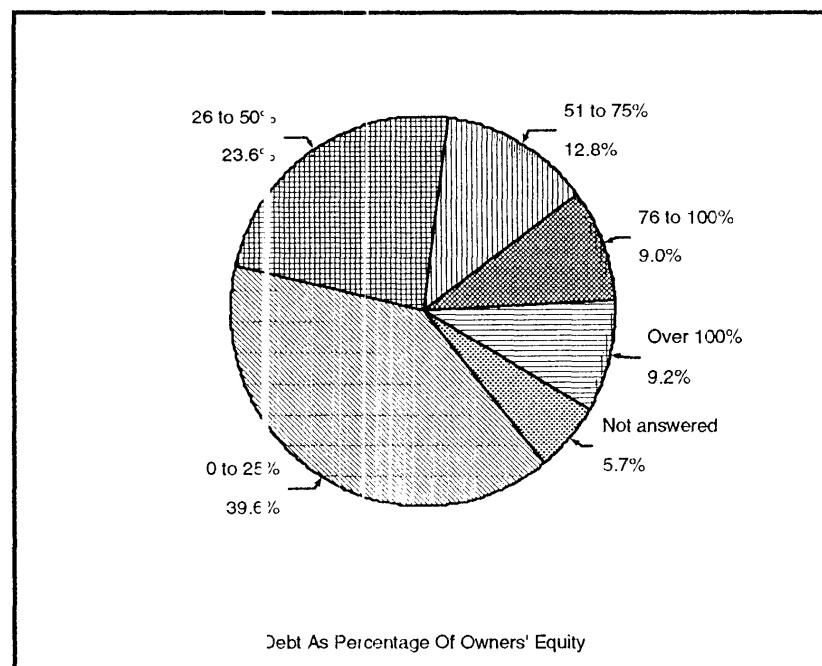


The modal response category is 'in last year' and the median response category is '1 to 5 years ago' – together suggesting relatively recent experience of seeking external finance in the study sample.

A Kruskal-Wallis one-way analysis of variance indicates that larger enterprises in employment terms are statistically more likely to have recently sought external financing ($n=969$, $H=15.843$, $df=4$, $p=0.003$). A Mann-Whitney test reveals a statistically significant difference in incidence of seeking external finance between small enterprises and medium-sized enterprises in the study sample, with the latter tending to have had more recent experience ($n=963$, $U=28,858.500$, $p=0.050$).

The financing practices of businesses over time are ultimately reflected in the structure of their balance sheets – specifically the relative proportions of debt and equity funds cumulatively used. Bearing in mind discussion in Chapter 3 of the thesis, this relativity can be seen as proxying, in some senses, for the amount of influence lenders may have over the affairs of indebted businesses, possibly including their financial reporting practices. The ordinal study variable DTERATIO, indicating the ratio of debt to equity in the balance sheets of respondents to the *Best Financial Practice* survey, is based on responses to Question 10 in the survey instrument. In the question, it is stated that the debt to equity ratio is borrowings, including overdrafts, as a percentage of owners' equity, with loans from owners being regarded as debt. The financial gearing or leverage pattern in the study sample is revealed in the figure below:

Figure 6.24: Debt to Equity Ratio in Study Sample



The modal response category is 0 to 25 per cent and the median response category is 26 to 50 per cent – together reflecting relatively moderate or conservative gearing in the study sample. A Kruskal-Wallis one-way analysis of variance suggests that debt to equity ratios tend to be statistically higher for those enterprises that have raised external finance more recently ($n=917$, $H=104.853$, $df=3$, $p<0.000$).

A Kruskal-Wallis one-way analysis of variance indicates that debt to equity ratio is higher with statistical significance for larger enterprises in employment terms ($n=990$, $H=23.785$, $df=4$, $p<0.000$). A Mann-Whitney test reveals a statistically significant difference in debt to equity ratio between small enterprises and medium-sized enterprises in the study sample, with the latter tending to be more highly geared ($n=990$, $U=29,991.500$, $p=0.024$).

It is interesting to examine the purposes for which SMEs in the study sample have sought funds as noted earlier, and how successful they have been in these financing endeavours. The following table gives nil, partial and total success rates based on responses to Question 28(b) in the survey instrument (names for the relevant ordinal study variables are indicated in the table):

Table 6.3: Fund Raising Success in Study Sample

Financing Purpose (VARIABLE NAME)	Not successful		Partly successful		Totally successful		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Business start-up (FINSTUP)	10	9.1	15	13.6	85	77.3	110	100.0
Temporary working capital (FINTMPWC)	33	11.7	56	17.2	232	71.2	326	100.0
Permanent working capital (FINPERWC)	35	12.4	56	19.2	199	68.4	291	100.0
Replacement existing capacity (FINEXCAP)	9	7.4	22	18.0	91	74.6	122	100.0
Export finance (FINEXPOR)	13	23.2	12	21.4	31	55.4	56	100.0
Provision additional capacity (FINADCAP)	23	9.4	39	16.0	182	74.6	244	100.0
Introduce new products (FINEWPRD)	14	15.4	12	13.2	65	71.4	91	100.0
Undertake research & development (FINRD)	13	22.8	11	19.3	33	57.9	57	100.0
Acquire existing business (FINACQ)	5	6.6	8	10.5	63	82.9	76	100.0
Other financing need (FINOTHER)	3	7.5	4	10.0	33	82.5	40	100.0

It can be seen that the rate for total success in external funding is around 70 per cent or better for all but export financing and research and development financing for which it is noticeably lower in the range 55 to 60 per cent. This could reflect the specialised and demanding nature of exporting and research and development as business activities, and perhaps that more stringent financing requirements must be met because of this.

Because of its size, a table showing associations amongst success rates for the various forms of financing identified in the previous paragraph is presented in Appendix C to the thesis (see *C3 Associations Amongst Financing Success Rates*). In the main, the associations range from moderate through to very strong and the majority are statistically significant. Kruskal-Wallis one-way analyses of variance suggest that financing success rate varies with recency of seeking external finance in the case of

permanent working capital financing ($n=291$, $H=7.053$, $df=2$, $p=0.029$) or replacement of existing capacity financing ($n=122$, $H=6.659$, $df=2$, $p=0.036$). In both cases, more recent fund raising appears to have been less successful. A series of Kruskal-Wallis one-way analyses of variance indicates that financing success rate does not vary with recency of seeking external finance in the case of start-up financing ($n=110$, $H=0.305$, $df=2$, $p=0.859$) or temporary working capital financing ($n=326$, $H=4.814$, $df=2$, $p=0.090$) or export financing ($n=56$, $H=1.497$, $df=2$, $p=0.473$) or additional capacity financing ($n=244$, $H=4.027$, $df=2$, $p=0.134$) or new product financing ($n=91$, $H=3.968$, $df=2$, $p=0.138$) or research and development financing ($n=57$, $H=2.581$, $df=2$, $p=0.275$) or business acquisition financing ($n=76$, $H=2.388$, $df=2$, $p=0.303$) or meeting other financing needs ($n=40$, $H=3.455$, $df=2$, $p=0.176$).

A Kruskal-Wallis one-way analysis of variance reveals that financing success rate varies with debt to equity ratio only in the case of business acquisition financing ($n=74$, $H=6.460$, $df=2$, $p=0.040$). In this case, fund raising appears to have been less successful for businesses with higher debt to equity ratios. A series of Kruskal-Wallis one-way analyses of variance suggests that financing success rate does not vary with debt to equity ratio in the case of start-up financing ($n=105$, $H=2.518$, $df=2$, $p=0.284$) or temporary working capital financing ($n=308$, $H=4.901$, $df=2$, $p=0.086$) or permanent working capital financing ($n=277$, $H=0.540$, $df=2$, $p=0.763$) or replacement of existing capacity financing ($n=117$, $H=0.111$, $df=2$, $p=0.211$) or export financing ($n=54$, $H=0.306$, $df=2$, $p=0.858$) or additional capacity financing ($n=238$, $H=0.976$, $df=2$, $p=0.614$) or new product financing ($n=89$, $H=0.000$, $df=2$, $p=0.951$) or research and development financing ($n=53$, $H=0.221$, $df=2$, $p=0.896$) or meeting other financing needs ($n=37$, $H=1.630$, $df=2$, $p=0.443$).

A series of Kruskal-Wallis one-way analyses of variance indicates that financing success rate varies with enterprise size in the case of start-up financing ($n=110$, $H=10.785$, $df=4$, $p=0.029$) or permanent working capital financing ($n=291$, $H=13.549$, $df=4$, $p=0.009$) or research and development financing ($n=57$, $H=11.222$, $df=4$, $p=0.024$). In all three cases, smaller enterprises have apparently experienced lower success rates – again evidencing the existence in Australia of a ‘finance gap’ for such businesses. A further series of Kruskal-Wallis one-way analyses of variance reveals that financing success rate does not vary with enterprise size in the case of temporary working capital financing ($n=326$, $H=8.586$, $df=4$, $p=0.072$) or replacement of existing capacity financing ($n=122$, $H=6.659$, $df=4$, $p=0.809$) or export financing ($n=56$, $H=7.153$, $df=4$, $p=0.128$) or additional capacity financing ($n=244$, $H=8.311$, $df=4$, $p=0.081$) or new product financing ($n=91$, $H=0.055$, $df=4$, $p=0.944$) or business acquisition financing ($n=76$, $H=2.862$, $df=4$, $p=0.587$) or meeting other financing needs ($n=40$, $H=2.206$, $df=4$, $p=0.698$).

In the main, sparse cells prohibit statistical evaluation using Chi-Square tests of any possible differences in success rates for the various forms of financing identified