Anatomy of New Business Activity in Australia:
Some Early Observations from the CAUSEE Project

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Introduction

The Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) is the largest study of new firm formations ever undertaken in Australia[1]. In a nutshell, CAUSEE aims to uncover the factors that initiate, hinder and facilitate the process of emergence and development of new, independent firms. Through contacts with a random sample of 30,000 Australian households the project has identified and interviewed close to 600 founders of on-going business start-ups – *Nascent Firms;* i.e., efforts that are under way but have not yet become operating businesses – as well as more than 500 owner-managers of *Young Firms* – that is, firms that started trading in 2004 or later. Founders of these firms have been taken through a comprehensive telephone interview about the state and development of their start-ups. The project will follow the development of these nascent and young firms over a four year period.

This report represents a first release of selected, descriptive findings from the first wave of data analysis. Although some reported findings may have important implications it should be realised that what is presented here represents just a glimpse of the rich academic and practice-orientated output that is expected from the project.

Background to the CAUSEE

CAUSEE is the first large-scale, longitudinal study of emerging businesses to be undertaken in Australia. It employs a novel and rigorous methodology of capturing emerging firms and following them over time that was first developed for the *Panel Study of Entrepreneurial Dynamics* (PSED) in the US (Gartner, Shaver, Carter and Reynolds, 2004; Reynolds, 2007). This approach has several important advantages over other methods of studying start-up businesses that substantially increases confidence in the study's findings. The unique real time, longitudinal design avoids the selection bias involved in only studying start-ups that actually became operational firms (a practice somewhat akin to trying to understand the ins and outs of gambling by only studying those who won). The design also reduces biases of hindsight, memory decay and rationalization after the fact, which easily distorts results when business founders are asked to account for the start-up process in retrospect.

The initiator of the US PSED studies, Professor Paul Reynolds, is a Partner Investigator of the CAUSEE project. CAUSEE Chief Investigator, Professor Per Davidsson (QUT), has been involved in PSED as well as PSED II and was Chief Investigator of the Swedish counterpart study. The US PSED project, which yielded a large number of academic and practice-oriented research reports and spawned

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counterpart studies in several other countries (Alsos and Kolvereid, 1998; Delmar and Davidsson, 2000; Diochon, Menzies and Gasse, 2003; Van Gelderen, Thurik and Bosma, 2005) has currently been succeeded by the ongoing PSED II study (Reynolds and Curtin, 2008). Davidsson and Reynolds are also the authors of major overviews of this type of research (Davidsson, 2006; Reynolds, 2007; Reynolds and Curtin, 2008) and of some of the best cited articles emanating from it (Carter, Gartner and Reynolds, 1996; Davidsson and Honig, 2003; Delmar and Davidsson, 2000; Reynolds, 1997). The second Chief Investigator, Associate Professor Paul Steffens (QUT), brings Australian knowledge and experience to the project, and has together with Professor Davidsson conducted award-winning research on Australian small firm growth and profitability. Additional Chief and Partner investigators are Dr. Ted Baker (North Carolina State U.), Dr. Jason Fitzsimmons (QUT/U21 Global), Dr. Saras Sarasvathy (U. of Virginia) and Dr. Siri Terjesen (QUT/Texas Christian U.). The project also engages a number of research students.

The prevalence of Australian business start-up activity has previously been assessed through participation in the *Global Entrepreneurship Monitor* (GEM) project (see, for example, Hindle and O'Conner, 2006; Hindle and Rushworth, 2003), which compares such data for a large number of countries across the globe (Bosma and Harding, 2007; Reynolds et al., 2005). GEM results have generally indicated relatively high levels of independent entrepreneurial activity in Australia; however, concerns have been expressed regarding the 'quality' of the start-ups and the relatively low presence of new firms with strong potential for growth and innovation.

CAUSEE shares with GEM the unique survey methodology for identifying a representative sample of on-going business start-ups by performing a screening interview with a random sample of households. However, CAUSEE works with a much larger random sample than GEM, thereby lending itself to greater statistical precision and more sub-group comparisons. Importantly, GEM conducts only short interviews with nascent and young firms they identified, whereas CAUSEE interviews firms for 40-60 minutes, providing rich data on each case. An even more important difference is that CAUSEE will follow the development of the firms over time by re-interviewing them every 12 months over a 4-year period.

CAUSEE aims to uncover the factors that initiate, hinder and facilitate the process of emergence of new economic activities and organizations. It aims at making top quality contributions to the international research frontier, but is also expected to lead to highly relevant results for policy-makers and business founders. The key components of the study are illustrated in **Figure 1**.

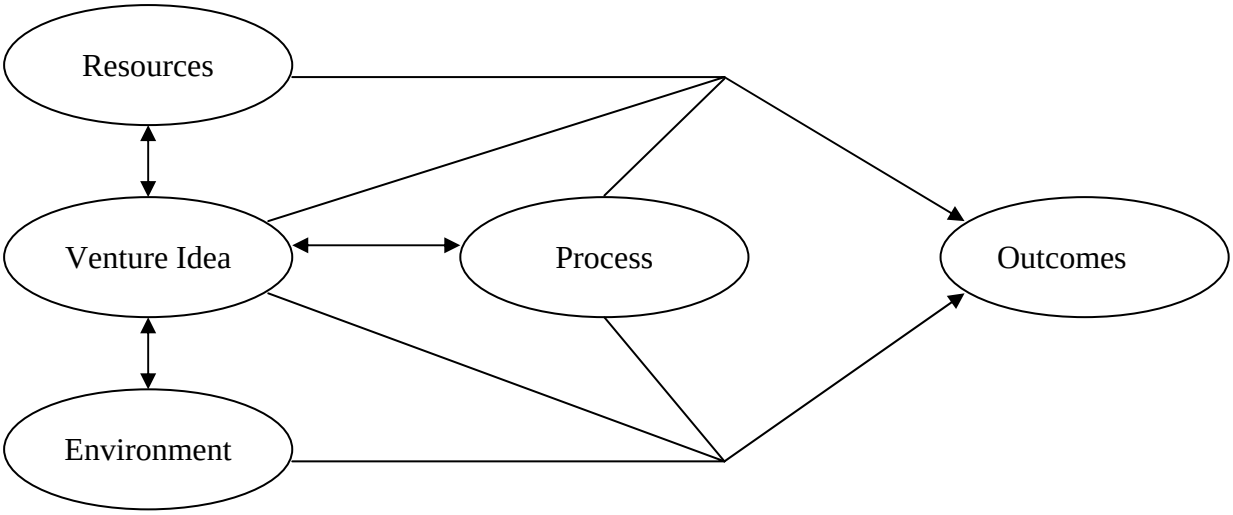

Figure 1. **The components of the CAUSEE research**.

The emerging new *venture* (or firm) is the focal point of our study. This is why Figure 1 – unlike much other research on entrepreneurship – does not single out *individuals* as a main category. In the CAUSEE context the founders and their knowledge are seen instead as one of the important *resources* that determine the fate of the venture. Substantial sections of the questionnaires are devoted to the question of resources. This will allow addressing questions like: How much time and money needs to be invested to get the firm going? Where are resources sourced and how are they creatively combined to achieve much with little? How are resource-based advantages built and disadvantages dealt with?

Another important project focus is to assess the effects of key characteristics of the *venture idea*, such as industry affiliation; brick-and-mortar vs. Internet-focus; level of technological sophistication and the degree and type of novelty the emerging venture introduces to the market. The latter is an important part of the research, albeit not highlighted in the present report. The relationship between venture idea characteristics and achieved outcomes is also an important issue. It may be suspected, for example, that more advanced ventures are over-represented among failures *as well as* among the highest performers.

As regards the *environment* the project will allow comparison with the US and among Australian states and regions. From a more theoretical angle, effects of market structure and/or geographical proximity to critical resources will be investigated.

The longitudinal design of the study, with repeated data collection over several years, makes it especially suited for studying *process* issues. This includes assessing the pace and sequence that typical 'start-up behaviours' (such as developing a product; arranging finance; finding premises; talking to would-be-customers; writing a business plan, etc.) are undertaken in more and less successful cases. A central aspect of CAUSEE is to assess the prevalence and outcome implications of different types of processes, ranging from the very planned and orderly to the emergent and iterative.

Assessing *outcomes* over time is an important aspect of the project. At the crudest level, this involves assessing the factors associated with dissolution versus survival. This said, the project does not simply assume dissolution of the venture represents 'failure'. Rather, the research will look for positive reasons (better alternatives, for example) and positive results (learning, for example) of abandoned

start-ups. Furthermore, it will explore negative aspects of keeping alive businesses that possibly should have been abandoned (that is, throwing good money after bad). Further, towards the end of the four-year period it should also be possible to assess which ventures have become growing and/or highly profitable firms rather than merely surviving, subsistence-type businesses.

As indicated by the joined arrows in Figure 1 the underlying assumption of the research is not that each of the above factors has a separate effect on the outcome. Rather, issues of *fit* between components are regarded a central issue. This involves, for example, the matching of the people with ideas and ideas with the environment on the one hand, and the process on the other. For example, it may be suspected that venture ideas with limited innovative content can be successfully implemented via a highly planned and rational process, whereas a more flexible approach may be needed for ventures representing some dimension of high novelty. However, analysis of contingent relationships of this nature will not appear in this early report.

Method

The general approach has been described in the previous section. Here we describe the CAUSEE sampling and data collection process in some more detail.

After comprehensive questionnaire development work, a version of the instrument was pre-tested on a convenience sample of 71 nascent and young businesses in Nov.-Dec., 2006. After analysis, re-design, programming and internal testing a full scale pilot test with computer aided telephone interviewing (CATI) using a random digit dialling (RDD) procedure was commissioned to TNS and undertaken in April-May, 2007. This pilot test included contact with some 1,810 Australian households for a yield of 78 nascent- or young firm founders who also completed the full interview[2]. After further testing and re-design the large scale screening for eligible cases started in early July 2007 and continued into April, 2008.

In the main study, a total of 28,383 adults (with equal male/female representation) in randomly selected households completed a screening interview. This interview had four possible outcomes: 1) the respondent is involved in a *Nascent Firm* (NF) and qualifies as a spokesperson for that firm, 2) the respondent is involved in a *Young Firm* (YF) and qualifies as a spokesperson for that firm, 3) the respondent qualifies as neither and is dropped from further interviewing, or 4) the respondent qualifies as neither but is randomly selected (1 in 50) for the *Comparison Group* (CG), which is used for socio-demographic comparison between business founders and others. If a respondent qualified in both the NF and YF categories we gave priority to the former.

In order to qualify as NF or YF spokesperson the respondent first had to answer affirmatively to at least one of the following questions:

1. Are you, alone or with others, currently trying to start a new business, including any self-employment or selling any goods or services to others?
2. Are you, alone or with others, currently trying to start a new business or a new venture for your employer, an effort that is part of your normal work?
3. Are you, alone or with others currently the owner of a business you help manage, including self-employment or selling any goods or services to others?

[2] These cases from the pilot round are not included in the analyses presented in this paper.

Both categories also had to confirm that they were (or intended to be) either owners or part owners of the (emerging) firm. Further, for the NF category they had to confirm they had undertaken some concrete 'start-up behaviour' such as looking for equipment or a location, organizing a start-up team, working on a business plan, etc., within the last 12 months. Otherwise, or else they were deemed under qualified. Conversely, if they confirmed that the firm's revenues had exceeded expenses for six of the last 12 months they were deemed over qualified (and instead tested for eligibility in the YF category). Finally, the preliminary YF cases were retained only if they confirmed that they started "trading in the market doing the type of business you are currently doing" in 2004 or later.

This process yielded 977 Nascent Firms (3.4%) and 1,011 Young Firms (3.6%). These were directed to the full length interview (40-60 minutes) either directly following the screener or later by appointment. The full length interviews were completed by 594 NF and 514 YF cases. These are the cases we will focus on in most analyses in this report. Some analyses only require screener data and we can then use the somewhat larger sample of identified NF and YF respondents. In the latter type of analysis we sometimes also use data from the 481 Comparison Group cases that were randomly selected among those who did not qualify as NF or YF.

In addition to these random samples the CAUSEE research includes judgment samples of 100+ 'high potential' cases in each of the NF and YF categories. These were sourced from a wide range of organisations that might get in contact with this type of start-ups. They were subjected to an expanded, customised screening interview in order to make sure they satisfied predetermined 'high potential' criteria. However, the high potential over sample is not included in any analyses in the present report.

The random sample screener interview was closely harmonised with PSED II in order to make it possible to compare reliably between Australia and the US. Parts of the main questionnaire also include questions that were asked in exactly the same way in the two studies. However, when we comment on country comparisons in this report we have not pooled the data sets and formally tested for statistical significance. Neither have we at this stage applied weighing to correct for any socio-demographic bias in our sample (compared to the Australian adult population). For these reasons the country comparisons we comment on should be regarded preliminary. We will only comment on somewhat substantial differences. Large parts of the CAUSEE questionnaire were developed specifically for CAUSEE and for these parts we will consequently not provide country comparisons in this or any later reports.

Results

The main focus of the CAUSEE project is to examine the characteristics and strategies of nascent and young Australian firms, and how these relate to eventual outcomes. The project will be able to report more about outcomes in following years when more becomes known about the fate of the businesses it follows. The current report provides an overview of the characteristics of Australian NFs and YFs, and where possible compares these with international findings.

It is also possible to compare characteristics of NF and YF. In doing so, it is possible to make some tentative interpretations about the success of groups of firms. Just by way of example, if we find that a greater percentage of NF than YF are solo (single owner) businesses, then we might initially assume that solo businesses are

more likely to fail to become operational young firms than partner or team businesses. However, there are in fact four possible reasons for this difference:

1. Survival differences: As above, solo NFs are less likely to survive to become YFs.
2. Rate of progress differences: Solo start-ups remain in the nascent phase for a longer time on average than partner or team firms and therefore have a greater chance of being included as NFs in the survey.
3. General-level changes over time: More solo NFs are started now than when the YFs were started.
4. Firm-level changes over time: Some solo firms add owners in the process of developing into a YF.

These four possible explanations exist whenever we observe differences between NFs and YFs. Consequently, it is important to carefully interpret such differences. In NF-YF comparisons below we apply the interpretations we find to be the most plausible. Later CAUSEE reports that use longitudinal data will give more definitive answers to what process is driving the observed differences between nascent and young firms.

Level of Entrepreneurial Activity

Although the main purpose of CAUSEE is not to assess and compare the level of independent entrepreneurial activity in the country (the purpose of the Global Entrepreneurship Monitor) a few observations on level of activity deserve mention. First, we have noted above that our random sampling procedure identified 3.4 and 3.6 percent of the respondents as involved in NF and YF efforts, respectively. These figures indicate a lower prevalence rate than what has usually been found for Australia in the GEM research (Bosma and Harding, 2007; Hindle and O'Conner, 2004). Recent US data suggests that at least in part this difference can be explained by subtle differences in sampling and screening criteria (Reynolds, forthcoming, 2007). By way of international comparisons, PSED II identified 1,571 NF cases from a sample of 31,845 (4.9 percent) adults in the US, indicating a higher prevalence rate than CAUSEE while using closely harmonised procedures (Reynolds and Curtin, 2008). The CAUSEE prevalence rate for NFs is clearly higher than reported for the year 1998 in the Swedish PSED counterpart study despite its somewhat less demanding criteria for inclusion (Delmar and Davidsson, 2000). Over all, our findings are consistent with the major impression from the GEM studies that the level of independent entrepreneurial activity in Australia is relatively high compared to other ‘developed’ or ‘Western’ countries. Our comparison with PSED II, however, suggests that the number of start-up efforts in relation to the size of the population is not quite as high as in the US.

What types of firms are started?

In this age of large multinationals, global franchising systems and omnipresent Internet it may be easy to think that the traditional, independent, brick-and-mortar business start-up is a thing of the past. But that is a false conjecture. Our data show that the vast majority of our cases – 88 per cent – are independent new businesses started by an individual or a team. Only some 5 percent are franchises or multi-level marketing initiatives. A similar percent of businesses are partly backed by existing businesses. There are no marked differences between the NF and YF categories in these regards (**Figure 2**). Neither do Australian results differ markedly from those

obtained in the US, apart perhaps for the higher level of multi-level marketing programs in that country. When interpreting these data it should be remembered that cases are included only if a) the activity of the firm is new and b) the respondent is or is going to be an owner or part owner of the business.

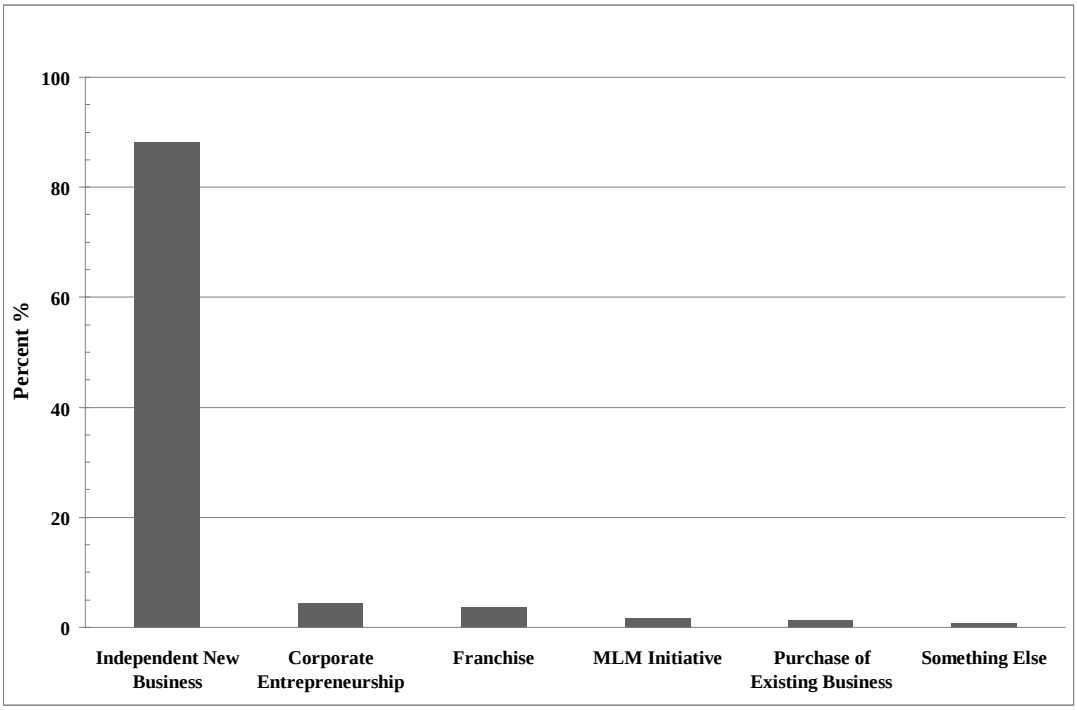

Figure 2. Type of start-up.

As regards online business, over 80 percent of the Young Firms have *no* online sales at all, and less than 7 percent generate more than 50% of their revenue via the Internet. The online sales plans of the Nascent Firms are considerably higher (**Figure 3**) but it may still come as a surprise that more than half plan for no online sales and less than 10% are tying to set up a purely online business.

The difference between NF and YF is large and important. As discussed above, it may be interpreted as showing that:

1. There is a real increase in Internet orientated business occurring over time;
2. The expectations of Internet sales for NF may not match the reality of actual Internet sales once they develop into YF; or,
3. There is a difference between those who try and fail vs. those who succeed in setting up a business and make it survive its early years.

Subsequent CAUSEE reports using data from several points in time and following the fate of the NFs will be able to determine which effect is the stronger. In this case we believe at least the first and the third of the effects are in operation. It appears plausible that the proportion of businesses relying on Internet sales should increase over time. As we shall see, the difference is also likely linked to differences in the industry make up of the cohorts, which may reflect differential survivability across industries.

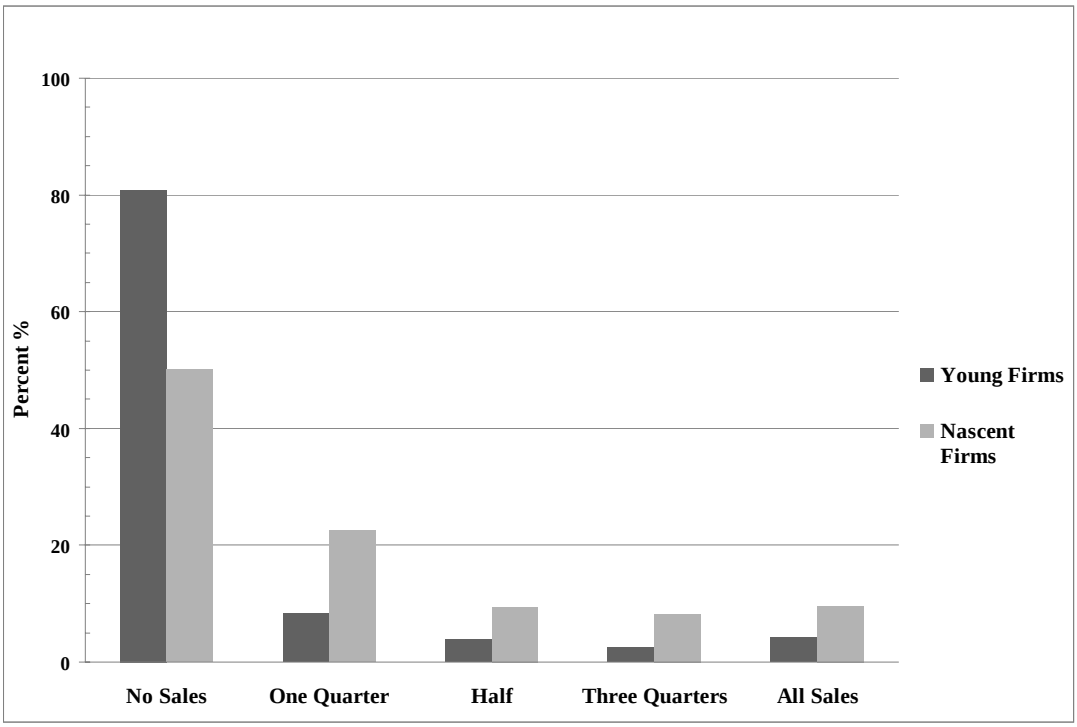

Figure 3. **Percent Internet sales.**

It is important to note that the somewhat low figures for online sales do not necessarily reflect a lack of 'Internet-savvy' in these businesses. Responses to other questions reveal that 84 percent of the NFs either already have or plan to set up their own website, and 70 percent either have or plan to join some Internet-based community or network for the purpose of furthering their start-up effort. Across NFs and YFs some 50 percent have used Internet-based sources of business advice. The use and rated importance of such sources is somewhat higher for the NFs, confirming an increasing role for the Internet among Australian start-ups over time.

To the extent that some might regard Venture Capital start-ups entering the market with a war chest of millions of dollars as in any sense 'typical' the CAUSEE data provides a good reality check. Members of this stereotypical category – while possibly important on a 'per firm' basis – are so unusual that they are close to non-existent in a random sample of start-ups. In our sample of 1,108 firms we find just two (2) such firms – one NF and one YF. Indeed, findings in the US are similar. As pointed out by Reynolds and Curtin (2008) the total annual number of VC deals in the US is in the 2-3,000 region, so only a few hundred would involve start-ups. This should be contrasted to the annual number of start-up attempts in the US, which count in the millions. Consequently, VC-backed start-ups are close to non-existent in the PSED II random sample of some 1,000 Nascent Firms as well.

A profile of the industries in which Australian firms are being started in is displayed in **Figure 4** in aggregated form. The following discussion is based on a finer delineation into 16 industries. The industries that comprise more than 10 percent of either NFs or YFs are Retailing, Consumer Services, Health, Education and Social Services, Construction and Business Consulting/Services. Manufacturing accounts for 5.9 percent of the start-ups, similar to the 4.5-6.5 percent reported for the US (Reynolds and Curtin, 2008). The Australian industry distribution for NFs is similar across the board to that reported for the US (PSED and PSED II do not report YF figures).

Figure 4 reveals sizeable and important differences between the NF and YF categories. In particular, the proportion of NF is much higher than YF in Retailing and Manufacturing. The tendency is similar (but weaker) for Consumer Services and Health, Education and Social Services. Again, there are different possible interpretations. Arguably, Manufacturing is a special case among those that have over representation among NFs. It may be that manufacturing firms are more complex (and ambitious) businesses to set up and that the start-up process therefore takes longer. This alone could produce the observed pattern even if the Manufacturing start-ups are as successful at getting started and surviving as the average start-up. However, the result may also reflect a higher tendency for Manufacturing start-ups to give up in the process due to the cost and complexity of getting such firms going. One plausible interpretation of the pattern for Retailing is that many dream of starting a firm in this industry but fail to actually get it going or fail to sustain if for very long. This may be due to having low entry barriers while having to deal with large numbers of small-ticket, price sensitive customers. The same would apply to large parts of Consumer Services and Health, Education and Social Services as well.

The same pattern for Retailing is strongly supported by US data, which also has the percentage of Retailing NFs about twice that of the sector's share of established firms (Reynolds and Curtin, 2008). The NF vs. YF difference we have identified is a warning signal for those who wish to start their own firm in Retailing or other low entry-barrier, high price-competitiveness industries.

In contrast, Construction and Business Consulting/Services show a marked higher prevalence of YF compared with NF. The Construction and Business Services start-ups deal with fewer and less price-sensitive customers; presumably the founders often have one or more important customer contacts established already when they set out to found their firms.

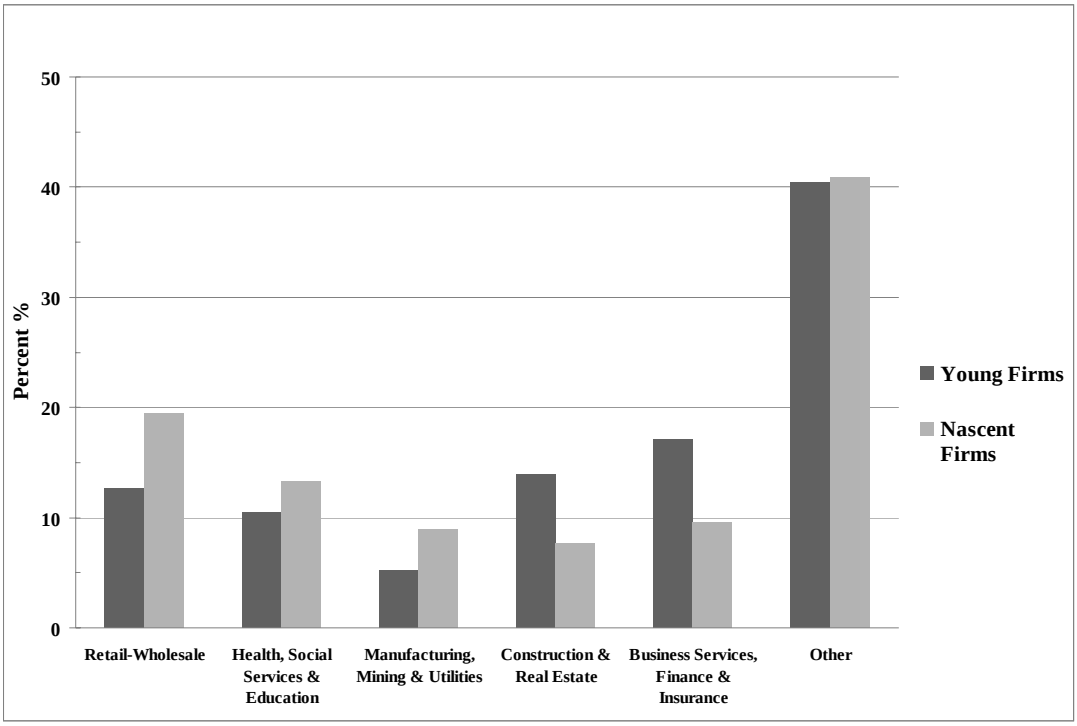

Figure 4. **Percent industry affiliation.**

Despite reporting relatively high prevalence rates compared with other countries, the GEM project have voiced pessimism about entrepreneurship in Australia (Hindle and O'Conner, 2004; Hindle and Rushworth, 2002). For example, the former conclude that:

> "Australia consistently displays relatively high rates of business participation, especially in the start-up phase, but growth intentions (through both export and technology) and incorporation of innovation are low despite a high claimed level of opportunity motivation."

While the CAUSEE data in part confirm this view, comparative analysis with the US reveals that this is not a distinctly Australian phenomenon. Indeed Australian firms are on par, or more advanced, than their US counterparts. Throughout our analyses one should realise that in the vast majority of cases we are talking about very small businesses. A minority has any employees at all at this early stage. About two thirds in both categories are still located in a residence or personal property. Similarly, about 50 percent in both categories are sole traders rather than some more advanced legal form, and most founders have limited growth aspirations. However, it is true for any country that in numbers a random sample of business start-ups will be dominated by relatively mundane businesses. Besides, Apple, Google and IKEA also once resided in homes or the iconic garage. An important question is whether Australia stands out from other countries in this regard – and if it stands out negatively.

In **Table 1** some comparative indicators have been compiled. The PSED and PSED II data were sourced from Reynolds and Curtin (2008). It should be noted that the most relevant comparison is that between PSED II and CAUSEE-NF which are very similar in terms of sampling and time period. CAUSEE-YF should not be compared to the US data, which only refers to Nascent Firms.

Table 1. Relative potential/sophistication for US and Australian Start-Ups

	US: PSED (NF)	US: PSED II (NF)	AUS: CAUSEE (NF)	AUS: CAUSEE (YF)
Firm has moved to own, dedicated premises	14%	9%	10%	18%
Legal form is some type of limited liability company	20%	17%	18%	26%
Has hired employee(s)	14%	7%	14%	38%
Wants maximum growth rather than manageable size	22%	22%	25%	16%
Considers the business to be 'hitech'	36%	24%	31%	27%
Claims R&D expenditure will be a major focus	29%	25%	44%	24%
Claims required technology was not available 5 years ago	34%	23%	30%	20%

The table indicates that Australian NFs are no less advanced than their US counterparts. Rather, the tendency is in the opposite direction – Australian start-ups on average appear somewhat more sophisticated or ambitious. The self-assessment nature of some of the questions may have led to biased (probably exaggerated) estimates. However, as the US and Australian respondents have received the exact same questions this limitation of the data can hardly explain any group differences.

Unpublished data from the Swedish PSED counterpart study confirm that Australian founders' growth aspirations are high in comparison.

The NF vs. YF differences within the CAUSEE data perhaps suggest a higher degree of realism by YFs, which display lower figures for growth aspirations and technological sophistication. The difference may also be partially due to start-up cohorts becoming more 'advanced' over time. Still another reason that partially explains this difference is that more ambitious projects have a lower probability of getting to or surviving an operational stage (that is, to 'graduate' from nascent to young firms). While this would be a cause for concern it does not appear to be a uniquely Australian problem; similar tendencies have been observed before in other countries (Davidsson, 2006; see also Gimeno, Folta, Cooper and Woo, 1997). Finally, what looks like a trend towards US start-ups becoming *less* advanced over time (PSED II vs. PSED) is probably due to the sampling criteria being in some respects more inclusive in PSED II. That is, the latter study (like CAUSEE, which shares the same design differences to the original PSED) is likely to include a higher proportion of 'marginal' businesses, increasing the number of identified start-ups but bringing down the proportion of the overall sample that is more progressive or advanced.

In summary, the vast majority of independent start-ups in Australia are fully independent rather than franchises or otherwise backed by other companies, including VCs. They occur in large numbers in a range of industries; however, they appear much more likely to get up and running and survive in some industries – notably construction and business consulting – than in others, like retailing and consumer services. Most of them are relatively mundane efforts with limited growth aspirations or technological sophistication. However, this is a characteristic they share with start-up cohorts in other countries; the average Australian start-up appears more rather than less advanced than its US counterpart. In the next section we will take a closer look at who found these firms, and why.

The Founders and Their Motivations

An important first insight about business founders is that they are not all lone wolfs. Currently in Australia just over 50 percent of both NFs and YFs are involved in efforts that have more than one owner. This is similar to what has been found in the US (Ruef, Aldrich and Carter, 2003) and Sweden (unpublished)[3]. Those who believe 'multiple-owner start-up' translates to a well-balanced team with members carefully selected for their complementary functional business specialisations are up for another reality check. In the CAUSEE data well over half of the multiple-owner start-ups are founded by spouses or *de facto* couples (cf. Ruef et al., 2003).

Figure 5 displays the proportion of Solo, Partner (any two owners) and Team (three or more owners) start-ups. This figure reveals an unexpected and somewhat surprising finding: the proportion of Team start-ups is much smaller among YFs compared with NFs, implying that Team start-ups may be less likely to succeed. This appears to run counter to the general conclusion in the literature is that team start-ups tend to be more successful – and other parts of our data support that notion. Yet, it turns out that when we ask our YF founders (the only group ready to report such outcomes) about their satisfaction with the business' performance in terms of net

[3] Importantly, this does not mean that a majority of *start-up efforts* are team-based in either country. Because the sampling mechanism samples households, team start-ups with owners from different households have higher sampling probability than solo start-ups and those started by several members of the same household.

profit, sales, cash flow and value growth the Team founders are consistently more satisfied than the other groups. The solution to this apparent paradox may be that team based start-ups are more complex and more conflict prone and therefore make slower progress and/or are more likely to dissolve before getting to an operational stage. This would explain the lower occurrence of Team start-ups in the YF group. Once started, the Team start-ups appear to benefit from their greater human and other resources and therefore conform to the above-average performance generally found in earlier research.

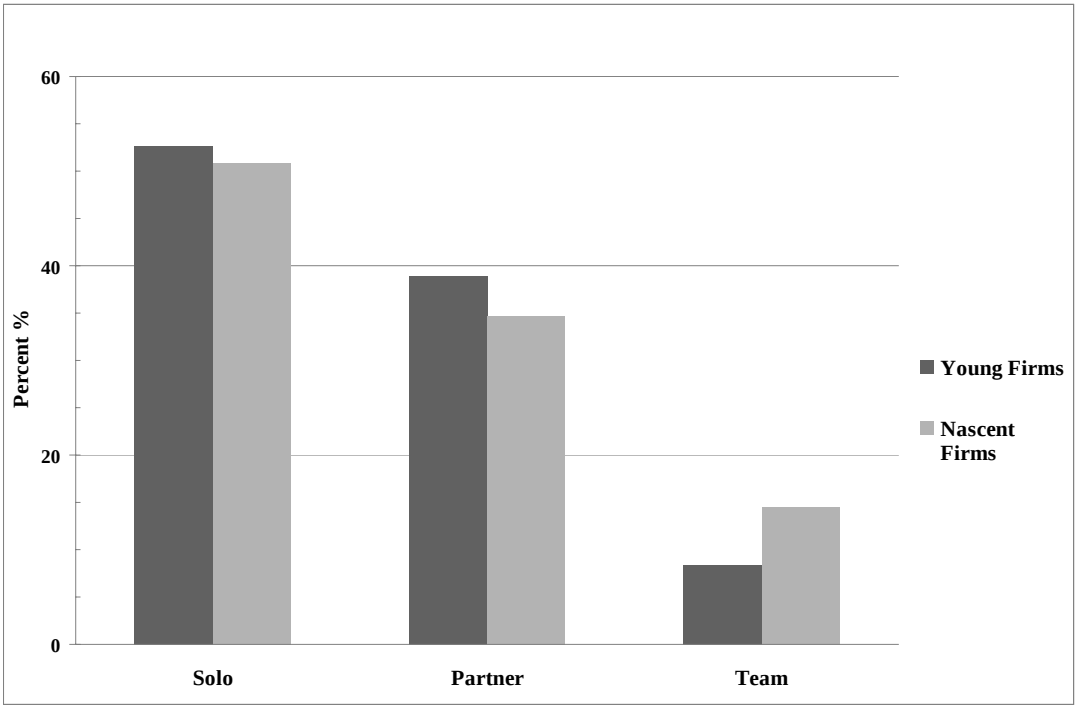

Figure 5. Solo, partner or team start-up.

Knowing that many ventures have more than one founder we focus on the individual founders-respondents in the remainder of this section. However, where applicable we have asked the respondent to answer on behalf to the team.

While Australian business founders come in all ages there is a peak around the age of 40. The unweighted average age among both NFs and YF is 43 years, which is significantly younger than the non-enterprising Control Group (49). At least based on the current, unweighted data the mean age appears slightly higher than in comparable samples in the US and Sweden (see Delmar and Davidsson, 2000; Reynolds and Curtin, 2008); however, both report proportions in age classes rather than mean age so an exact comparison is not possible). With the Australian possibilities of relatively early retirement and lump sum payout of superannuation funds one could speculate that business founding as a second (or higher number) career in retirement would be comparatively frequent. This does not seem to be the case, however. The vast majority of founders (82 percent) come out of employment or self-employment. Further, while 19 percent are over 55 years only 7 percent are above 65 and among Nascent Firm founders less than 3 percent describe themselves as retired, which is far less than the Control Group figure of 27 percent. While many international studies have pointed out unemployment as a major driver of firm foundation this is not the case currently in Australia. Less than 3 percent of the NF founders are unemployed.

This is equal to the Control Group figure, so we find no heightened tendency among the unemployed to found their own businesses.

This notion is also supported in responses to a subjective question concerning the motivation to found the new business. It asked whether the decision was driven mainly by perception of opportunity or mainly by sense of necessity (lacking other alternatives for gainful employment). Over 70 percent of NF and YF founders say the start-up was opportunity driven while 9 and 13 percent, respectively, see it as sprung out of necessity. The remainder allow for a bit of both or volunteered an answer suggesting that although not exactly forced by necessity they sought for better alternatives to an existing job. This dominance of opportunity driven business foundings in the CAUSEE data mirrors what has previously been reported from the GEM project (Hindle and O'Conner, 2004, 2006; Hindle and Rushworth, 2003). The proportion of NF claiming pure necessity motives reported for the US by Reynolds and Curtin (2008) is 12 percent.

It is also commonly believed that business founders first decide that they want to go into business for themselves; that they want to start a company. Then they search for and evaluate several alternative business ideas before they settle for one, which they further develop and eventually create their business around. Bhave (1994) found that an alternative process was also common. In this second model it is a specific opportunity rather than a long nurtured dream that triggers the decision to found a firm. Consequently, no search for alternative business ideas is involved; either a start-up is attempted around the one, triggering opportunity or no start-up is attempted. CAUSEE data suggest 'business idea as trigger' process is much more common than is the sequence where the decision to start a business comes first (**Figure 6**). Only 16 percent of the NFs claim the decision to start a business came first. However, while this process sequence was the least common also among the YFs it is substantially more common in that group (25 percent). This may reflect either a stronger commitment to realising a firm start-up or a positive effect on realisation or survival stemming from systematic analysis of several alternative ideas before one is selected.

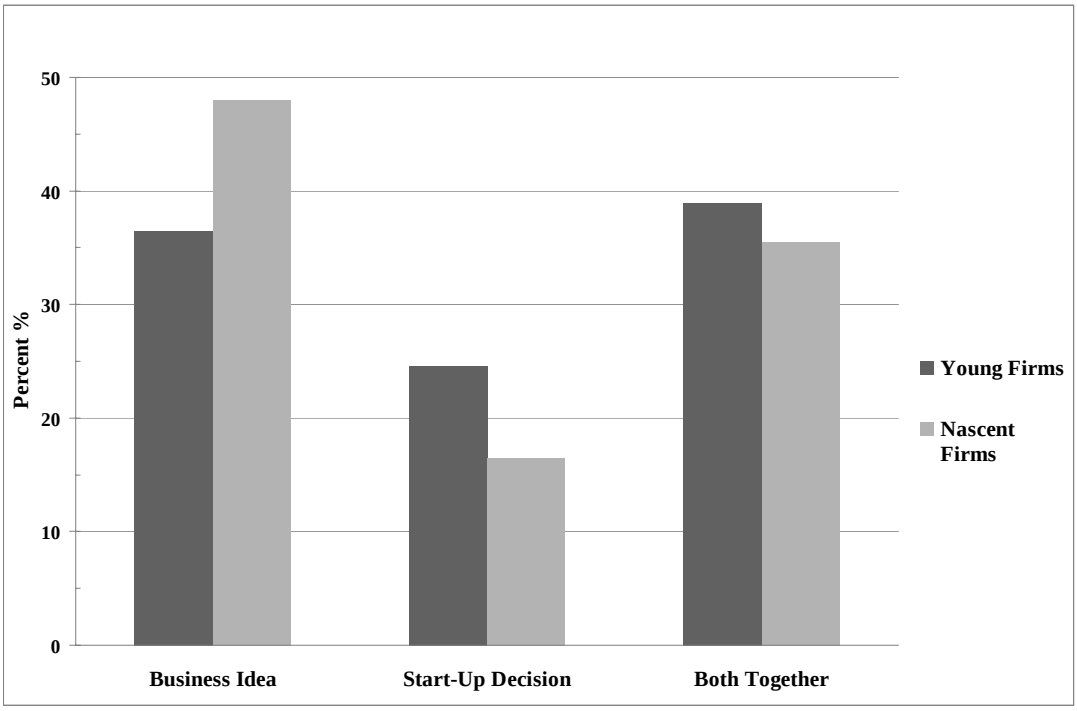

Figure 6. **Which happened first, business idea or decision to start?**

Figure 7 shows that female participation in start-up activity in Australia, while not on par with that of men, is relatively high. The 43 percent of the Australian NFs being female is at least equal to what is found in the US (although the form of reporting used by Reynolds and Curtin, 2008, makes exact comparison difficult). is the relative proportion of females is definitely higher than that reported for Sweden – a country with very high female participation in the workforce and a reputation for relatively high gender equality in general – by Delmar and Davidsson (2000).

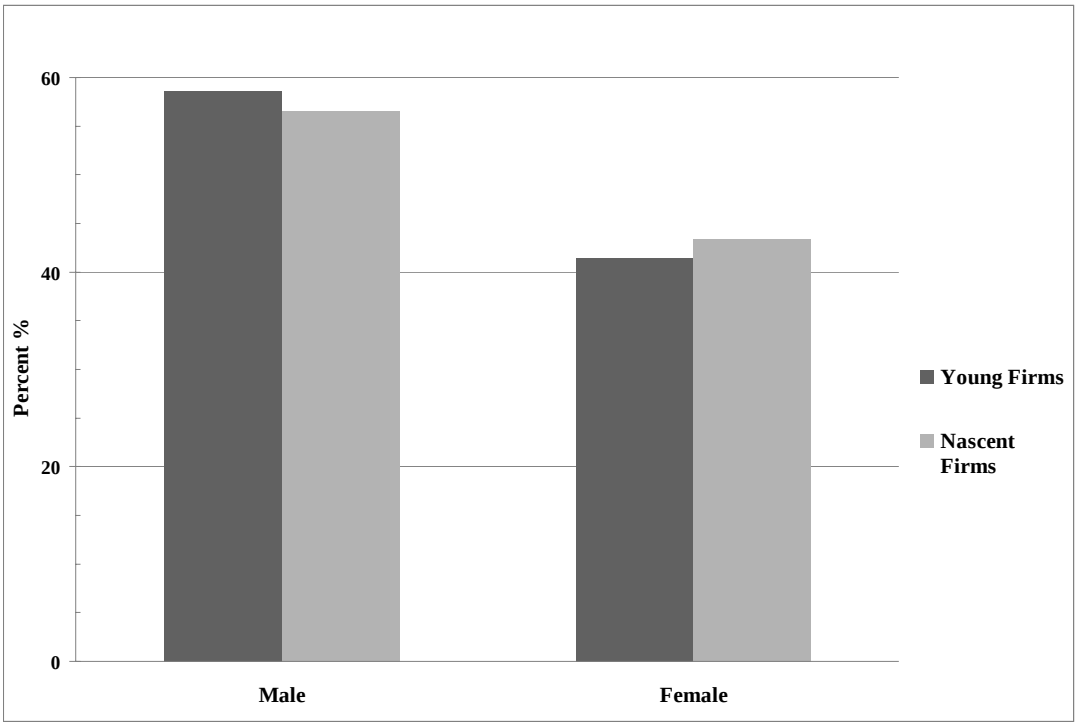

Figure 7. **Proportion male and female founders.**

Figure 8 shows that there are marked differences in the industry distribution of start-ups by gender. Comparing these results with those displayed in Figure 4 leads to an important finding: women are over represented in those industries that have a low survival rate of NF (an over representation of YFs to NFs). Conversely, women are under represented in some of the industries with a higher survival rate. This suggests many women business founders are active in industries where successful establishment and survival of the business is relatively difficult. It also suggests that what may erroneously be interpreted as female under performance in a less careful analysis is in reality an industry effect. The interpretation that the NF-YF industry proportion differences are an industry effect rather than a gender effect is supported in our data by the fact that the NF-YF gender difference is small and not statistically significant despite the 'industry handicap' female founders as a group face. This interpretation is also consistent with multivariate analyses in earlier research – including an Australian study – that while women are under represented among business founders as well as in the small minority of rapidly growing firms, there is no general under performance by females once they have entered the process of founding a firm (Davidsson, 2006; DuRietz and Henrekson, 2000; Watson, 2002).

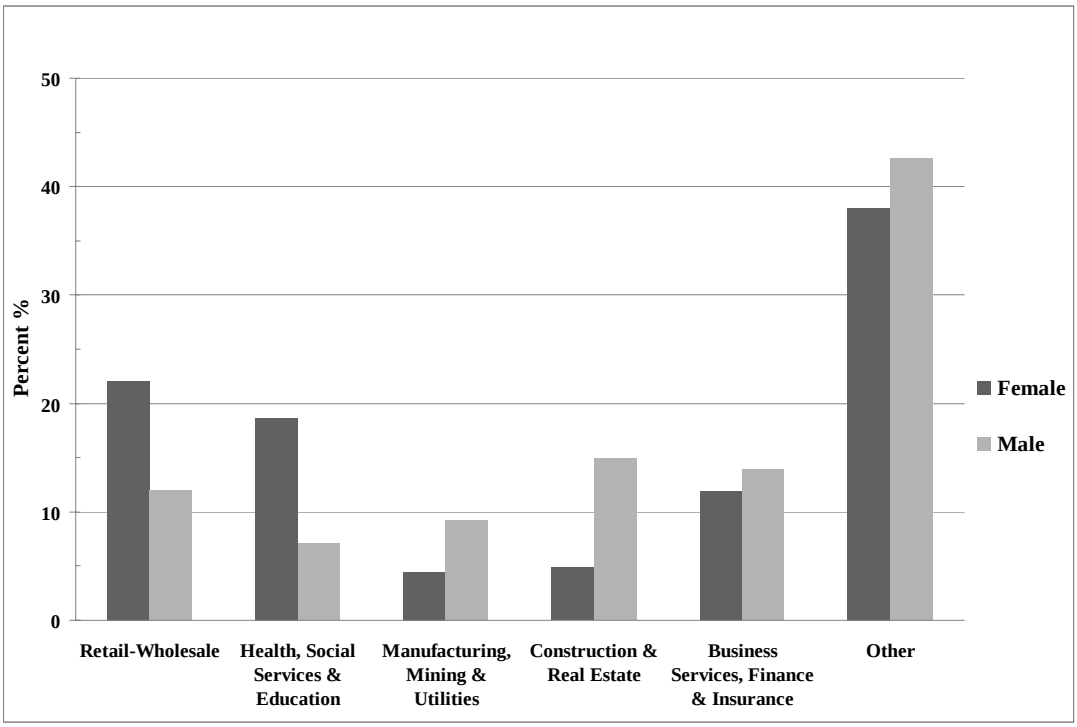

Figure 8. **Industry affiliation by gender.**

We can further note that business venturing is well dispersed across the diverse Australian population. There are no statistically significant differences in the ethnic composition of NFs vs. YFs vs. Control Group members. All groups are dominated (81-84 percent) by people of European decent, other tested categories being Indigenous Australian (2-4 percent); Asian (3-5 percent); Middle Eastern (0.5-1 percent); Mixed Ethnicity (3-4 percent) and Other (6-7 percent). Neither is there any marked tendency for immigrants or those with parents born outside Australia to be differently represented among business founders, except for a somewhat peculiar over representation of people with one (and only one; usually the mother) parent born overseas among the NFs (15 percent compared with 10 percent for YF and CG). It is hardly evidence that deserves elaborate interpretations.

Finally, it is worth pointing out that higher educated individuals are over represented as business founders. The data reveals 37 percent of the business founders are university graduates which is higher than the control group (27 percent) and higher than in the PSED II study in the US (approx. 33%; Reynolds & Curtin, 2008). In addition, a large proportion of the founders have previous experience from owning and running businesses. Just over 50 percent of the NFs and YFs combined were started by individuals or teams that had previous experience from starting a firm. This evidence on education and experience again challenges earlier concerns about the 'poor quality' of Australian start-ups.

An even larger share of business founders, 57 percent, had at least one parent who had been running their own business. This is considerably higher than in the Control Group, where 45 percent reported such parental role model experience. The CAUSEE figure is also slightly higher than international comparisons: 52 and 53 percent for the US PSED and PSED II, respectively (Reynolds and Curtin (2008) and 50 percent in Sweden (Delmar and Davidsson, 2000). While PSED II does not have a control group, PSED is about the only study ever reported where there is no over representation of business founders among those who have a self-employed parent

(Davidsson, 2004; Kim, Aldrich and Keister, 2006). Swedish results by contrast indicate an even stronger parental role model effect (50/37 percent) than what we found above for Australia (57/45 percent).

In summary, roughly half of Australian business founders operate on their own while the other half work in teams of two or more founders. It appears that larger teams may have a difficulty getting the start-up up and running; however, if they do they tend to achieve comparatively strong business performance. Founders come from all age groups but predominantly from those previously employed or self-employed – often individuals with prior start-up experience and/or self-employed parental role models – and not from the unemployed or those in retirement. In most cases the start-up is opportunity driven and triggered by a specific idea or opportunity rather than being necessitated by circumstances or the fruit of systematic search for and evaluation of several business ideas. Importantly, female participation in start-up activities is relatively high in international comparison and despite women founders being over represented in industries where successful completion of the start-up may be reduced there is no sign of under performance by female Australian business founders. Finally, business start-up activity appears fairly evenly dispersed among ethnic groups and immigrants as well as first- or later generation born Australians.

Sources of Funding and Advice

The CAUSEE questionnaire captures considerable amounts of information on the financial and knowledge resources accessed and used by start-ups. In this section we focus mainly on a set of questions regarding the *sources* of funding and advice that are used by firms and whether each source is of major or minor importance for them (we will also take glimpses from other parts of the questionnaire). Later reports will go much deeper into the resource issues, using data that we have left untouched in the preparation of this report.

As regards funding, we have noted already that Venture Capital funding is close to non-existent in this random sample of start-ups. Those who build their expectations on close familiarity with the small business sector – or the Venture Capital industry – rather than popular media images may not be surprised by that fact. Yet it may come as a surprise that a majority of firms – as many as 325 of our 594 Nascent Firms plan to realise the start-up *without any outside funding at all.* Although aversion to outside control is a well-known characteristic of many small firm owner-managers (Sapienza, Korsgaard and Forbes, 2003), this finding is surprising. There may be several explanations for this. First, we have noted that many start-ups are very mundane, tiny scale efforts that may not require much in the way of start-up capital. Second, some founders may underestimate their need for funding; not least the need for working capital once they start trading. Third, we have noted that many founders have run businesses before; many of those presumably are in control of funds from prior business success that can cover the start-up costs. Finally, many founders apply creative, iterative and incremental strategies – known under labels such as ‘effectuation’ (Sarasvathy, 2001), ‘financial bootstrapping’ (Winborg and Landstrom, 2001) and ‘bricolage’ (Baker and Nelson, 2005) – that make it possible for them to reach impressive results with seemingly very small inputs. These are themes that the CAUSEE design covers and which will be thoroughly investigated in later reports from the project.

Table 2 presents data on the use of various possible sources of funding for the start-ups. The wording of the question and response alternatives varied slightly between NFs and YFs (‘founders’ vs. ‘owners’ and ‘since the earliest days…’ vs.

'within the past 12 months'). Therefore, while the data are roughly comparable, formal statistical testing or far-reaching interpretation of any differences is not advisable.

Table 2. Sources of Funding

Source	*Not used*		*Minor source*		*Major source*	
	NF	YF	NF	YF	NF	YF
Personal savings	13	25	15	24	72	52
Personal credit card	54	54	25	28	21	19
Money from another business that the founders' also own	84	96	6	2	9	2
Government grants	93	95	5	5	2	1
Delayed payment terms from suppliers	87	79	8	13	5	9
Advance payment from customers	86	78	9	15	5	7
Loans from family members	86	91	9	7	5	2
Loans from friends, employers or colleagues	95	96	4	3	1	1
Founders' personal secured-bank loans	83	84	4	6	12	10
Founders' other personal loans, overdraft or other credit facilities from a bank	84	84	9	10	7	6
Secured bank loans to the business itself	92	91	3	4	5	6
Other loans, overdraft or other credit facilities from a bank to the business itself	94	91	5	6	1	2
Loans from any other organisation to the business itself	96	95	3	3	1	2
Equity from family members	95	91	5	7	1	2
Equity from friends, employers or colleagues	98	99	1	1	1	0
Equity from other private investors ('business angels')	98	99	1	1	1	0
Equity from Venture Capital firms or any other organisations	100	100	(one case each among NF and YF, respectively)			

Note: Entries in percent. Entries may not sum to 100 vertically due to rounding error.

What is most striking about the data in Table 2 is the very limited use of many sources. Representatives of some sources of funding may be surprised at what small share of the potential market they serve (or are 'invited' to serve). Striking is also the relatively small differences between NF and YF other than in the use of personal savings and to some extent customers and suppliers – a natural drift as the firms enter an operational stage. In most cases firms do not seem to undergo revolutionary change in their funding (source) structure from 'inception' through early life.

Only one source – personal savings – is used by more than 50 percent of all start-ups. Despite (in)famous references to the '3 F:s' – friends, family and fools – the instances of loan or equity funding from such sources are few. Only single-digit percentages of firms use such sources as major providers of funding (meaning 20 percent or more of funding needs). Among 'bank products', credit card debt is by far the most used, and even among the YFs personal loans and overdrafts appear in total a more important source of funding than business loans and overdraft facilities. It can be noted, though, that personal bank loans rank third on the list of sources of major importance. In another part of the questionnaire the Nascent Firm founders were asked whether they had opened a bank account for the business. Close to 40 percent said they had done so and another 47 percent planned to do so while 9 percent reported they were using an existing account for the business' purposes.

With that let us turn to sources of (business) advice. The use of different sources for such is displayed in Table 3.

Table 3. Sources of Advice

Source	*Not used*		*Minor source*		*Major source*	
	NF	YF	NF	YF	NF	YF
Family members	49	52	26	30	25	17
Friends, employers or colleagues	36	40	36	37	28	23
External investors like venture capitalists or 'business angels'	100	93	0	7	0	1
Board members other than those categories already mentioned	85	92	10	6	5	1
Bank staff member	85	88	13	11	2	1
Potential/actual customers	39	46	37	32	24	22
Potential/actual suppliers	56	64	26	24	18	12
Chartered accountant	61	50	24	35	15	16
Lawyer	80	79	14	17	7	5
Consultant at government agency or not-for-profit organisation	74	80	18	15	8	5
Independent tax consultant	82	75	14	20	4	5
Other commercial consultant	86	86	10	11	4	3
Internet websites or communities	50	56	30	29	21	15
Other business media (print & TV/radio)	60	64	31	30	9	7

Note: Entries in percent. Entries may not sum to 100 vertically due to rounding error.

Here we see a more diverse use of sources in many cases compared to the funding analysis. Yet, many providers may still be surprised at the high levels of non-use. For example, some 75-85 percent report not using government agency or NGO consultants, tax consultants, or other commercial consultants. Again the patterns for NFs and YFs are similar. The relative importance of family members (and perhaps friends as well) is lower for YFs; arguably a natural and expected development. Somewhat surprisingly, YFs do not rate customers and suppliers important to a higher extent than do NFs. As we have noted already, NFs are more Internet-intensive than are the YFs. We may note that this is not associated with a difference in the mean age of the founders between the categories.

An important personal source of advice is the chartered accountant – ranking 4th in 'popularity' in Table 2 and the most important type of paid consultant by a considerable margin. In another part of the questionnaire we asked the NF founders whether they had yet retained an accountant and a lawyer for the business. We also asked about other potential sources of contacts and advice – joining associations and networks for the purpose of helping developing the business. The results are reported in **Table 4**.

Table 4. Nascent Firm's Advice and Networking Activities

Activity	Yes	No, but will in the future	No, not relevant
Has retained accountant?	47	40	13
Has retained lawyer?	17	33	50
Has become member of trade/industry association?	16	46	38
Has contacted (Gov. or NGO) business assistance organisation?	34	39	28
Has joined Internet-based network?	21	49	30
Hs joined face-to-face business network or service club (e.g., Rotary; Lions)?	13	35	52

Note: Entries in percent. Entries may not sum to 100 vertically due to rounding error.

The perceived importance of accountants again stands out in these data, with only 13 percent regarding it not relevant to retain an accountant. By contrast, 50 percent of the founders do not believe they need to retain a lawyer for the purpose of this business. Notable also is the relatively low use of trade/industry organisation

membership and joining formal, face-to-face business networks. Especially the latter is a cause for concern as this has been singled out in previous research as one of the strongest contributing factors for taking the emerging firm to an operational stage (Davidsson and Honig, 2003).

Summary

The Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) is the largest study of new firm formations ever undertaken in Australia. The project aims to find out what factors initiate, hinder and facilitate the process of establishing new, independent businesses. For this purpose, the project follows the development of two categories over time; on-going start-up efforts (Nascent Firms) and operational firms that started trading in 2004 or later (Young Firms). In this early report we have released selected, descriptive findings from the first wave of data collection in this multi-wave, four-year study. Below we reiterate some of the more important findings:

- Our results are consistent with the conclusion in previous research that in quantitative terms entrepreneurial activity, measured as the prevalence of owner-managed young firms and on-going start-up attempts, is relatively high in Australia. However, our data suggest the numbers in relation to the size of the population is lower than in the US.
- The typical start-up is a 'traditional', fully independent, brick-and-mortar business. Few are franchises or otherwise backed up by an existing business; 80 percent of Young Firms have no online sales (although Internet use is higher for other purposes and increasing over time); most are at this early stage sole proprietorships that are run from home and do not yet have any employees, and only a minority of businesses are strongly growth-oriented or highly sophisticated in technological terms. However, it is true for any country that the average start-up is relatively mundane, especially at early stages.
- Our analyses show that Australian start-ups in fact compare well to start-ups in the US in that many firms are founded by experienced and highly educated founders and that the firms they found are at least as growth oriented and technologically sophisticated. If anything, Australian start-ups on average appear more progressive than their US counterparts.
- Start-up efforts in industries like Construction or Business Services seem much more likely to get their businesses up and running than do those that try to set up firms in Retailing; Consumer, Health or Educational Services, or Manufacturing. That is, to the extent the founders can choose, industry selection is a critical success factor.
- More than 40 percent of Australian business founders are women, which makes the female participation in business start-ups comparatively high – on par with the US and higher than many other countries.
- However, many women founders go for industries that are relatively tough to succeed in, like Retailing and Consumer Services. Despite this there is no indication of female under performance – once in the process they appear to do no worse or better than men
- Teams with three or more founders seem much less likely to get their start-ups to an operational stage. Once up and running, however, they perform better than solo entrepreneurs. It thus appears that being a team adds complexity and conflict potential that may make the effort come out stillborn, but once up and

running the team start-ups seem to benefit from having a broader knowledge-, resource- and network base.

- The range of funding sources commonly used is narrow. Most start-up businesses rely heavily on personal savings and credit card debt for funding. Not only bank loans but also contributions from family and friends are relatively low in frequency. Venture capital-backed start-ups make up a minuscule share of the population of business start-ups.
- The range of sources used for information and advice is broader and includes widespread use of Internet-based sources. Accountants are by far the most important paid consultant. The low emphasis founders put on joining face-to-face business networks for the purpose of furthering their start-up effort is a cause for concern, as previous research has pointed to this as one of the strongest contributing factors for bringing the start-up to an operational stage.

Subsequent reports from the project will cover additional topic areas. When additional waves of data have been collected the analyses will also turn to more direct assessment of developments over time in nascent- and young firms rather than relying on the assumption that a comparison of these two groups reflects changes over time.

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