The Australian Centre for Entrepreneurship Research

'CAUSEE' Research Briefing Paper

EMERGING AND YOUNG HIGH POTENTIAL START-UPS

March 2011

The Australian Centre for Entrepreneurship Research

'CAUSEE' Research Briefing Paper

EMERGING AND YOUNG HIGH POTENTIAL START-UPS

Highlights

- Australian start-ups compare favourably to their US counterparts.
- High Potential (HP) start-ups appear to be often initiated by experienced entrepreneurs, with more HP founders running other businesses in parallel.
- We find clear evidence that HP start-ups are harder to get up and running than are other start-ups. However, they do perform better than regular start-ups.
- HP start-ups tend to complete more activities earlier, and be more goal directed.
- HPs start-ups are very often founded by teams, in particular by non-spousal teams. This difference is more pronounced in those start-ups who are operational. Being in a team rather than going solo may be a success factor for HP start ups.
- HP start-ups are more attracted to international market opportunities. However, there is also indication that HPs find it hard to realise these international opportunities to the extent envisioned.
- HP start-ups have higher and improving resource advantages, particularly networking.
- HP start-ups change and adapt their business ideas far more than other start-ups.
- There is a surprisingly low use of many sources of funding, and the use of funding sources are more similar for HP and regular start-ups than one might have expected.
- Business angels and venture capitalists while almost exclusively engageing with HP start-ups rather than regular start-ups but are involved with a small minority of the HP start-ups.
- Despite their higher internal levels of education and experience, HP founders use outside sources of information and advice to a greater extent than do non-HP founders. The largest relative HP vs. regular start-up differences are found for the use of lawyers and commercial consultants.

Industry Partners

Australian Government
Australian Research Council

nab

BDO

QUT

The CAUSEE study

The Comprehensive Australian Study of Entrepreneurial Emergence research project, or CAUSEE, is the largest study of business start-ups ever undertaken in Australia. It is the only large-scale study to track ventures over time. CAUSEE aims to uncover the factors that initiate, hinder and facilitate the process of emergence of new economic activities and organisations. The project provides an exciting opportunity to improve our understanding of independent entrepreneurship in Australia.

CAUSEE has identified a random sample of approximately 600 emerging, but not yet operating (Nascent – NFs) business start-ups[1]. As well, the project has also identified a further random sample of approximately 600 newly established young firms (YFs) that had already commenced trading.

The focus of this report: High Potential Start-ups

In this report we take a look at what separates high potential emerging and young start-ups from others. We compare the characteristics, intentions and behaviours of start-ups that we judge to be 'high potential' with other start-ups. We utilise the first two years of data from the CAUSEE study (see below). We also compare Australian start-ups with a similar study conducted in the US.

It is no easy task to identify exactly which start-ups are 'high potential' at a very early stage of their development. The start-ups we study are too early stage to assess concrete measures such as sales, employee or profit growth. Prior research has often linked HP start-ups with those start-ups starting in high technology or highly innovative industries. However, contrary to anecdotal evidence, high growth successful businesses come from a variety of industries and occur through a variety of circumstances. To this end we defined 'high potential' start-ups as new entrepreneurial innovative ventures with high aspirations and potential for growth. The criteria used to define the HP start-ups included:

- Human capital (education, management experience and start up experience),
- Growth aspirations (growth orientation),
- Technological sophistication and novelty, and
- Being in a growth friendly industry[2].

Based on these criteria we developed a scoring system to assess the likelihood that a specific firm has the potential to develop into a high growth, high value firm. We define 'high potential' (HP) start-ups as the top 10 per cent of start-ups based on this score. By their very nature HPs are rare, so obtaining a sizeable sample of them is prohibitively difficult and costly if using random sampling techniques. To this end we created an oversample of HP's start-ups. Therefore, we purposely identified about 65 additional high potential nascent and young firms each through government agencies and firms that provide service and advice to high growth firms. These firms satisfy the same scoring criteria as the top 10 per cent of the random sample. We refer to nascent and young firms which do not qualify as high potential as regular start-ups. Figure 1 explains in greater detail how the cases were sampled.

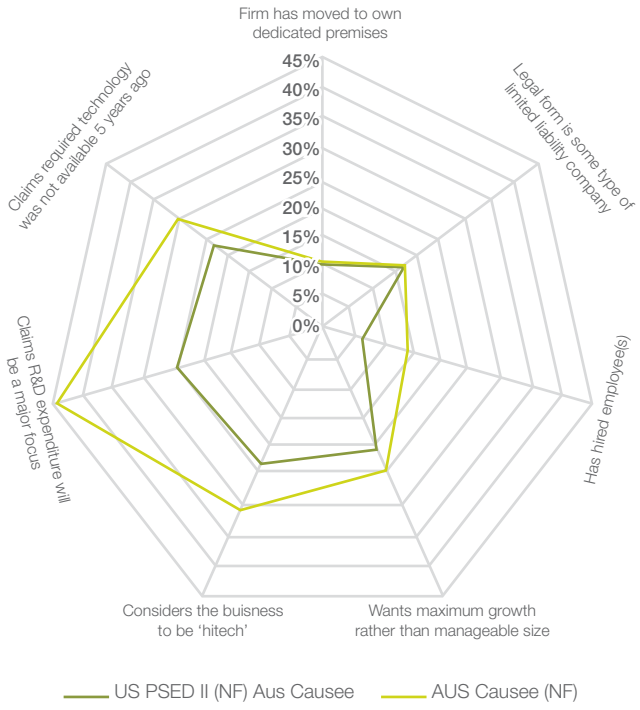
Figure 1: From where was the data obtained?

High-Potential Start-ups	High Potential Nascent Firms Over-Sample (67)	High Potential Young Firms Over-Sample (68)	Purposive Sample
	High Potential Nascent Firms Random Sample (88)	High Potential Young Firms Random Sample (39)	Random Sample
Regular Start-ups	Regular Nascent Firms Random Sample (537)	Regular Young Firms Random Sample (522)	
	Nascent Firms (pre-operational)	Young Firms (1–3 years old)	

We compare well to the US

To allow us to benchmark Australian start-ups, the CAUSEE study is partially harmonised with a sister study in the US, the Panel Study of Entrepreneurial Dynamics (PSED II[3]). A range of indicators of the firm potential and sophistication are compared in Figure 2. Since PSED II only collects data on nascent firms, we can only directly compare CAUSEE nascent firms (NFs).

Figure 2: Relative potential/sophistication for US and Australian Start-Ups



In contrast to what many might expect, we see that Australian start-ups appear somewhat more sophisticated and ambitious than their US counterparts. In particular, conducting research and development and utilising new technology are both more prevalent for Australian firms.

HP start-ups: more experience, education, and growth potential

Figures 3 and 4 highlight some of the differences between HPs and regular start-ups along those criteria that were used to define the groups. This demonstrates that the HP group has higher levels of education, experience and technological sophistication. They also have much higher aspirations for growth. Overall, the descriptive data suggests that our criteria has led to the delineation of a sub-group of start-ups that is markedly different from other start-ups and which can with reasonable justification be labelled 'high potential start-ups'.

Figure 3: Sample characteristics: education and investment

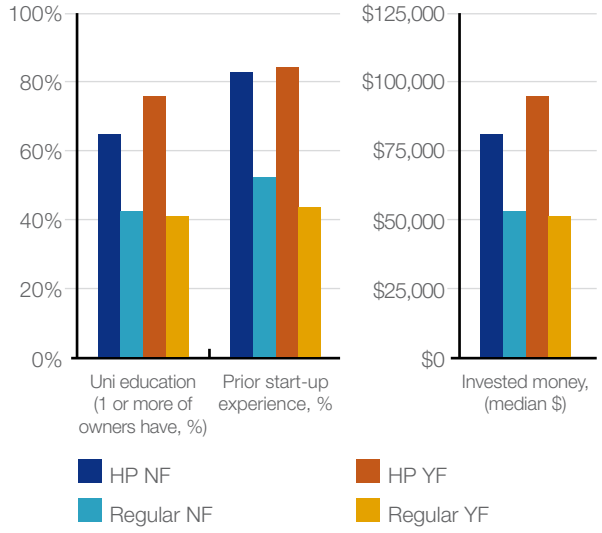
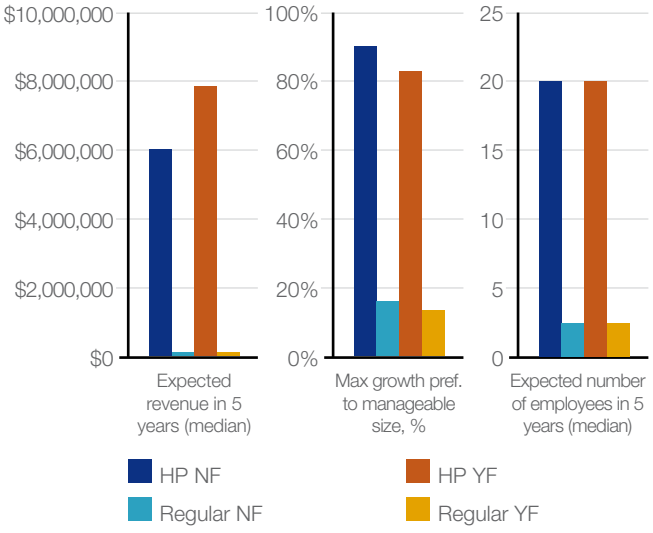


Figure 4: Expectations and ambitions



HPs perform better, but not necessarily riskier

It is generally felt that while HP start-ups tend to deliver higher returns (by definition), they can be riskier propositions. Figure 5 compares the HPs to others in terms of how well they are performing one year after the first interview. For NFs we compare whether they have terminated the effort, become operational (sales > 6 months over the year), or are still trying to launch the business. For the YFs, we compare termination rates and sales growth.

Surprisingly, what we find is much fewer HP start-ups terminating, particularly for the nascent firms. We see no evidence that HP start-ups are riskier, with high failure rates (although we need to interpret this with some caution since the HP sample was not generated randomly). In fact, our evidence suggests that high potential start-ups have a lower termination rate, possibly reflecting greater commitment from the founders. However, the results also clearly show that HP-NFs need much more time to become an operational business. One year after the initial interview just over half of the HP-NFs compared to approximately one quarter of the regular NFs were still trying to set up the business.

We also confirm that the HP-YFs have higher levels of sales, and stronger sales growth than other YFs (Figure 6).[4]

Figure 5: Start-up performance in wave 2

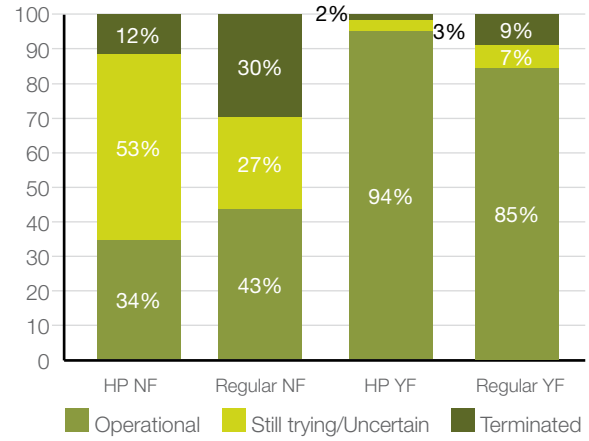
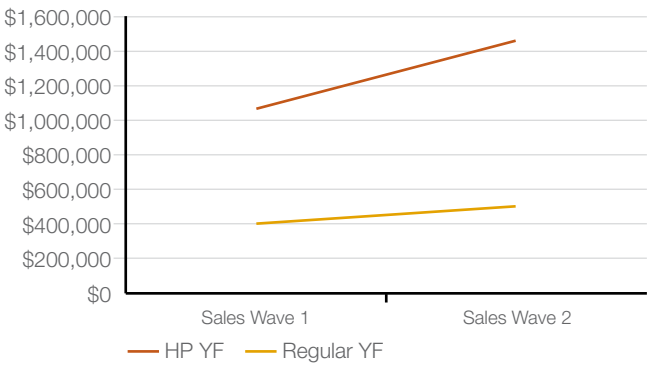


Figure 6: Sales growth of young firms

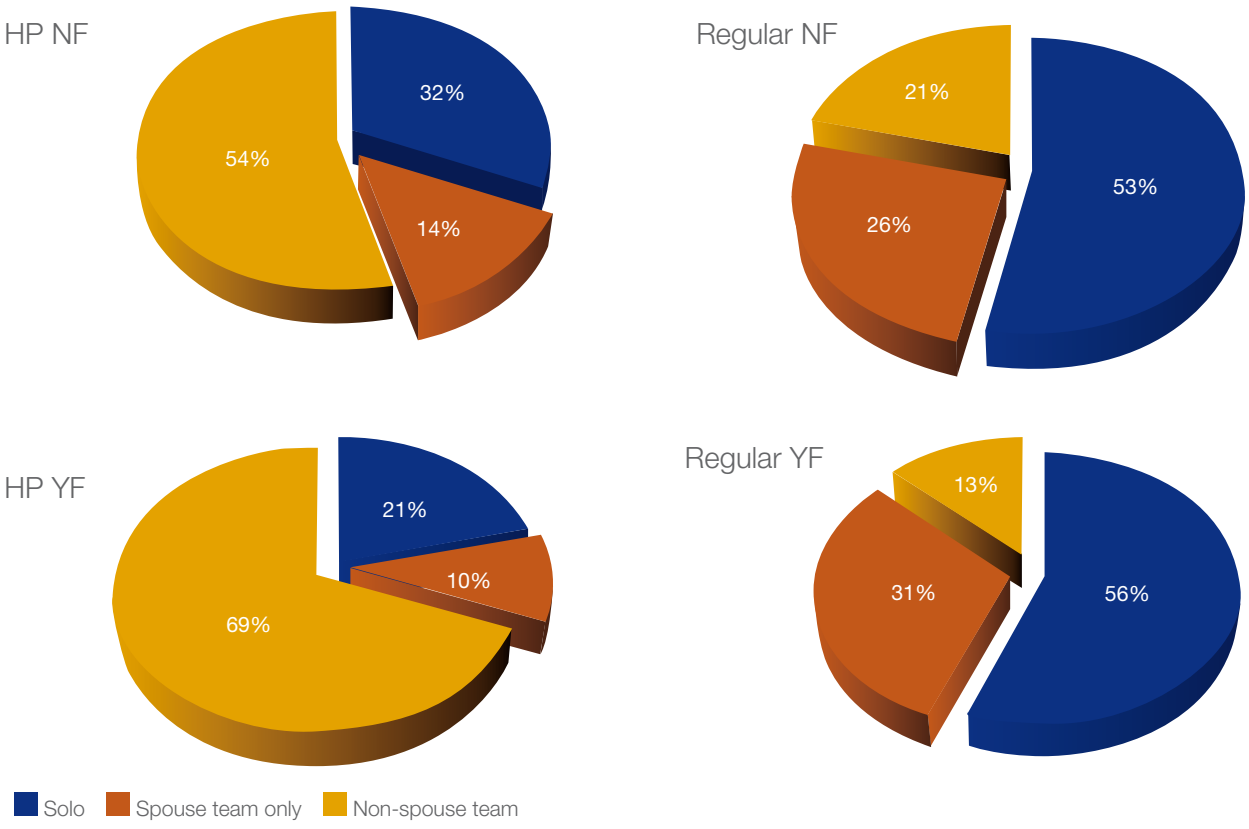


Teams start high potential start-ups

Some portray 'the successful entrepreneur' as something of an omnipotent, lone wolf. Others ascribe high growth and success to a educated; functionally well balanced team with high growth aspirations.

The founders of HP start-ups in the CAUSEE data sample to a considerable extent closely match the image of entrepreneurial teams made up of a highly educated well balanced group of people. The difference to regular start-ups is particularly pronounced when we compare the number of teams other than spousal teams for the young firm category – 69 per cent for HP-YFs against only 13 per cent of the regular YFs. This is a very sizeable difference. Figure 7 summarises some of the differences.

Figure 7: Prevalence of team start-ups

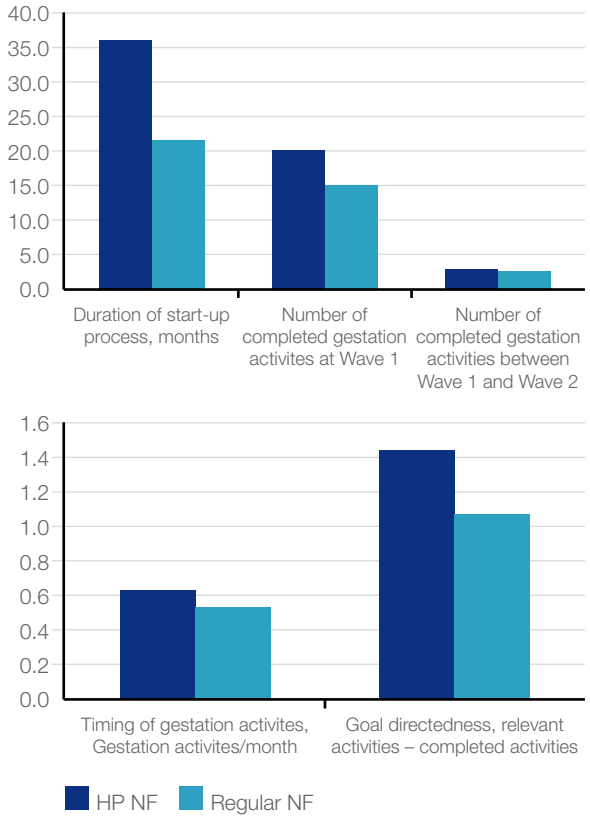


Start-up process: HPs take longer, are more difficult and more goal directed

It is generally thought that the process of starting a new high potential business is different to regular businesses. CAUSEE investigates just how the start-up processes are different. For NFs our study carefully investigates 'gestation activities' – what activities a firm has done to help the business get up and running – and when they do them. A comparison of between HPs and non-HPs for this package of questions is informative. These results are reported in Figure 8.

In summary, HPs have a longer and more complex start-up process, with more activities required to get the business operational. To some extent this could be because more activities are relevant. However, it definitely also reflects that they have been in the start-up process longer. Based on the 'time stamping' of the activities, the nascent HPs have on average been in the process for 35 months at the time of the first interview while the non-HPs have been attempting the start-up for less than 22 months. This is a sizeable difference. However, HPs do not tend to achieve tasks at a higher rate than regular start-ups. HPs are also more likely to know what they are doing (goal directed) and gain momentum by completing activities earlier. In contrast, regular start-ups learn and adapt as they develop. This can have both positive and negative implications. Regular HPs also tend to leave many activities until later in the process.

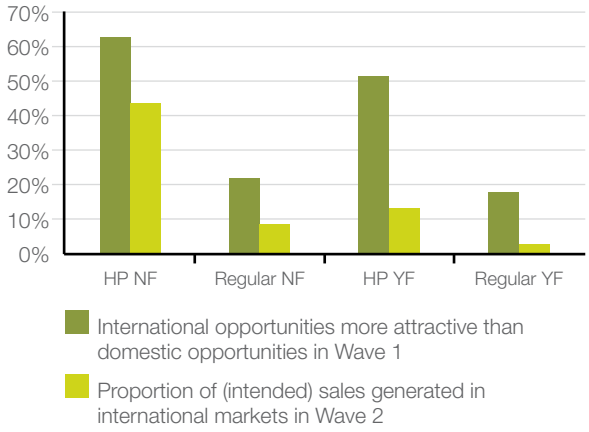
Figure 8: Start-up process differences between HP and regular nascent firms



HP start-ups are more internationally orientated

Figure 9 shows that a large share of HP start-ups perceive overseas market opportunities to be more attractive than those available in the domestic market. Their sales in foreign markets – in the case of NF intended sales – are also much higher than for regular start-ups.

Figure 9: Internationalisation



These observations are, arguably, fully in line with what we would expect. However another important observation is that despite HPs high desire for international opportunities the actual international sales of HP, YFs are modest – 14 percent of revenue on average. This figure is also much lower than the 43 percent international sales that nascent HPs aim for. These results demonstrate that while international opportunities may seem attractive they are not easy to bring to realisation during the early life of a new firm. The lower rated attractiveness by YFs compared to NFs also indicates that international opportunities may sometimes seem less attractive when start-ups learn the true investment of money and effort needed to realise them.

HP start-ups have stronger and improving resources advantages, particularly networking

Figure 10 compares the resource advantages of HP start-ups with others. We also investigated improvements in resource advantages over a twelve month period (Figure 11). As expected, the resource advantages of HPs are stronger. What is most striking is the much stronger advantage for the use of networks for HP firms, and the larger improvement in the use of networks between waves 1 and 2 for HP-NFs. Furthermore HP start-ups have a stronger advantage in terms of product uniqueness compared with regular start-ups.

Figure 10: Resource advantages at wave 1

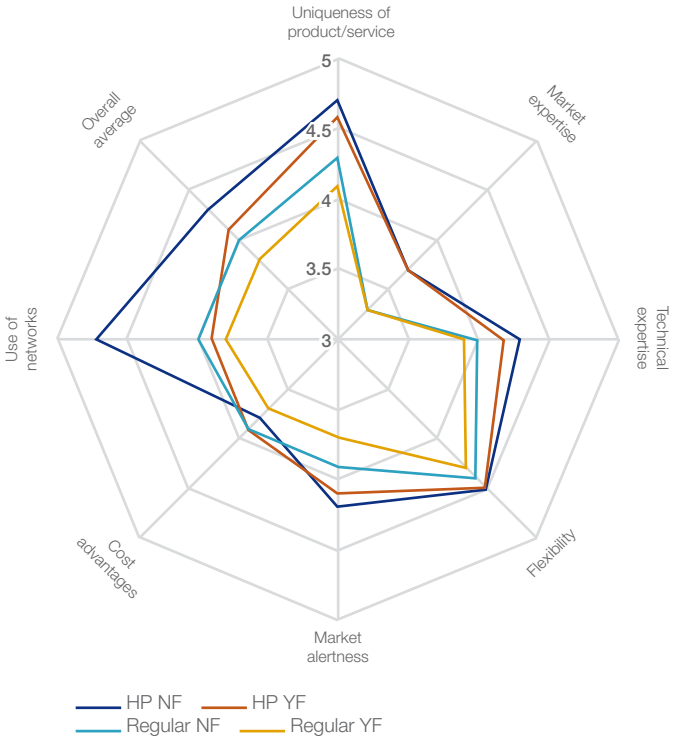
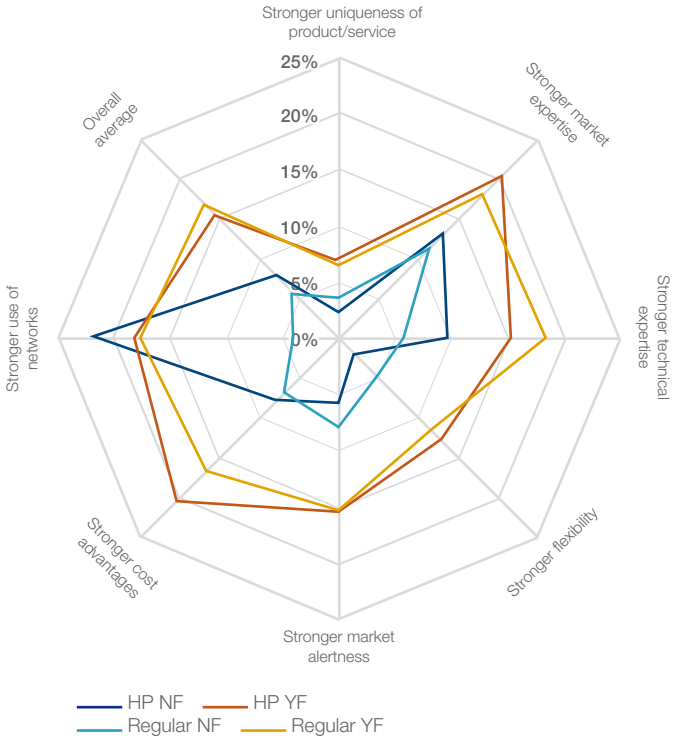


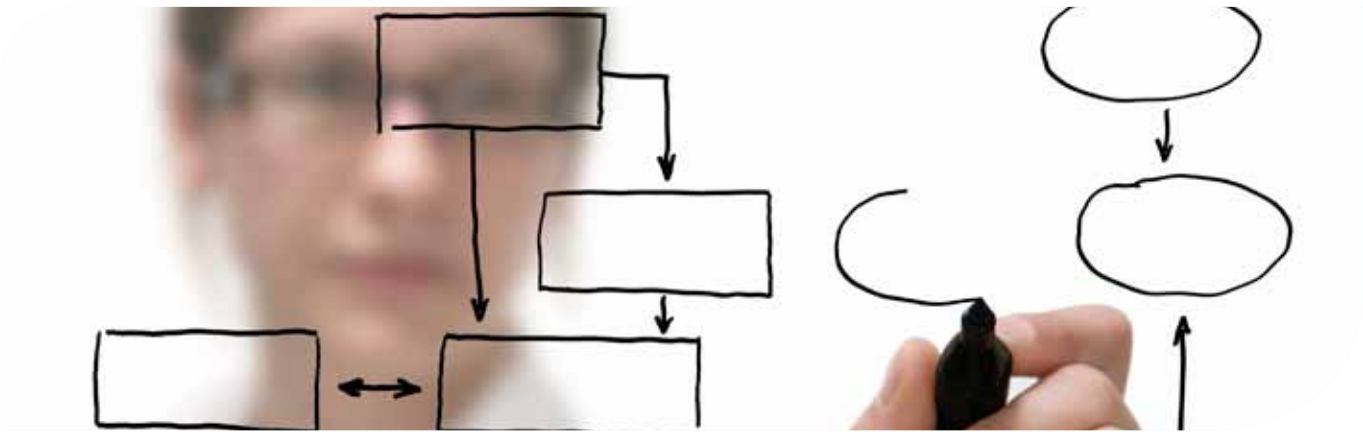
Figure 11: Improvement of resource advantages from wave 1 to wave 2



HP start-ups adapt their business idea far more

It is widely thought that HP start-ups face more uncertainty, both about the business idea itself, and perhaps also in regard to turbulence in their business environment. Twelve months after the first interview, we asked these start-ups whether their business idea had changed considering four aspects of their business idea (Figure 12).

What we observe is that HP start-ups are much more likely to adapt and change more than other start-ups. This is particularly pronounced for YFs, where a substantially higher proportion of HPs firms made changes across all four aspects. HP-NFs are much more likely to alter their product, but are similar to other start-ups across the other aspects.



HP start-ups funding patterns are not as distinct as one could expect

We noted earlier that, as expected, much more money has been invested in the average HP start-up than in its regular counterpart. In this section we take a closer look – albeit still somewhat cursory – at the funding patterns for HP and regular start-ups (Figure 13).

There are two things that we find particularly interesting. The first is the widespread *non-use* of many funding sources, even among HP start-ups. Only two sources – personal savings or investments, and personal loan or credit – are used by a majority of all subgroups. No other source is used by a majority in any analysed sub-group. The second observation is that there is a relatively small difference in funding sources for HP and regular start-ups. Where these differences are pronounced – for example, government grants and business angels – it seems that it is a direct consequence of the types of sources that have been utilised for sampling HPs. The YF vs. NF difference among HPs is also worth noting in this figure. It appears that due to their increasing funding needs, HPs use a broader range of funding sources over time without favouring any particular source very strongly. Finally, it is worth pointing out that even in this sample which has been carefully selected so as to represent the 'high potential' end of the spectrum, business angels and formal venture capitalists are involved only in a small minority of the cases.

For many other funding sources the HP vs. regular start-up differences must be judged surprisingly small given the vastly different characteristics of the two groups. This appears to be particularly pronounced for bank products (Figure 14). This may reflect that banks are not capitalizing on the start-up business market to the extent that they could, and that they may not be segmenting that market effectively in their efforts to serve it (although this analysis is too coarse-gained to establish this with any certainty). Of course, this market may simple be not particularly attractive to banks.

HPs use external advisors and expertise more

We know that by definition, HPs have higher levels of human capital, in the form of education and experience of the founders. But what about the use of external advisors or expertise? Figure 15 provides some further information regarding the use of external sources of advice among HP and regular start-ups.

The results show that despite the apparent higher internal competence of HPs they also use external expertise or advisors to a greater extent than regular start-ups. The exception is in the use of advice from family members, which nascent HPs are less likely to rely on than are others. Conversely, potential suppliers appear to be more important for nascent HPs than for others. Much higher use for HPs than others are also found for board members, lawyers and consultants other than tax consultants. Bank staff members are reported as advisors by less than 20 percent of the cases, and the HP vs. non HP-difference is not pronounced for this source of advice. The use of the accountant is likewise not dramatically different between HPs and others, but more prevalent in all groups. As regards NF vs. YF differences a peculiarity is that board members are used much more by nascent firm founders than those young firms that are already operational.

Figure 12: Business idea changes from wave 1 to wave 2

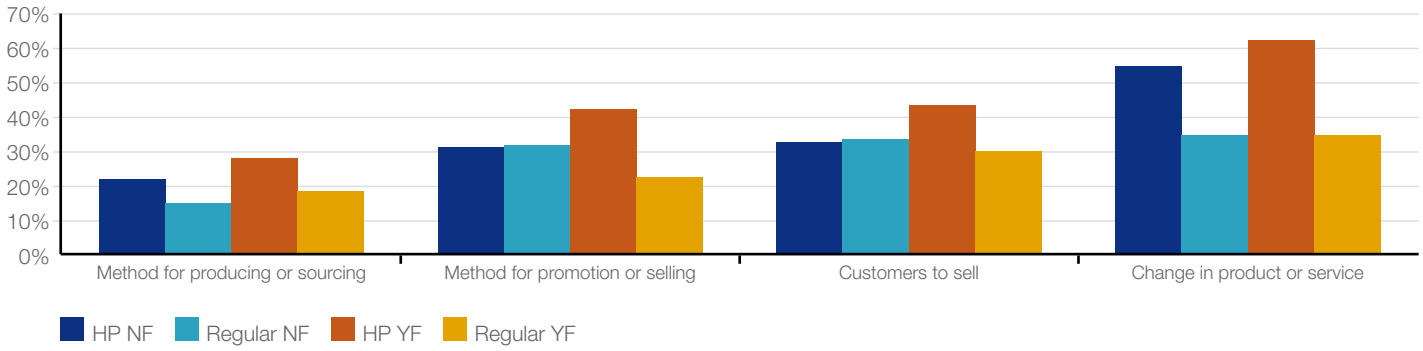


Figure 13: Sources of funding (% of firms using each source)

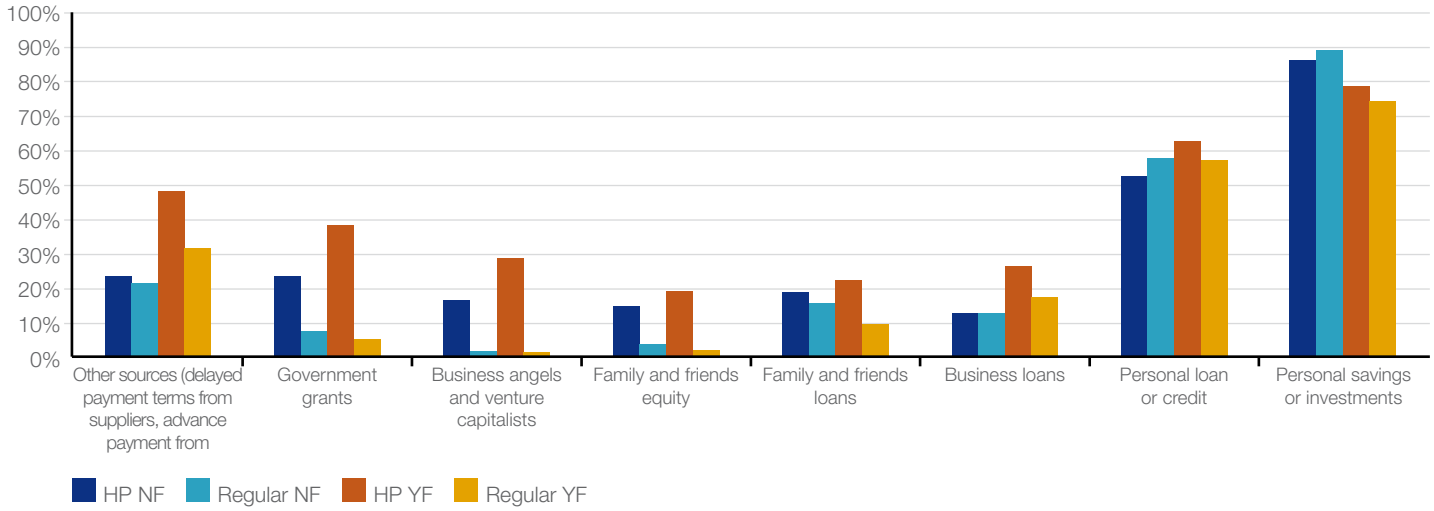


Figure 14: Use of bank products

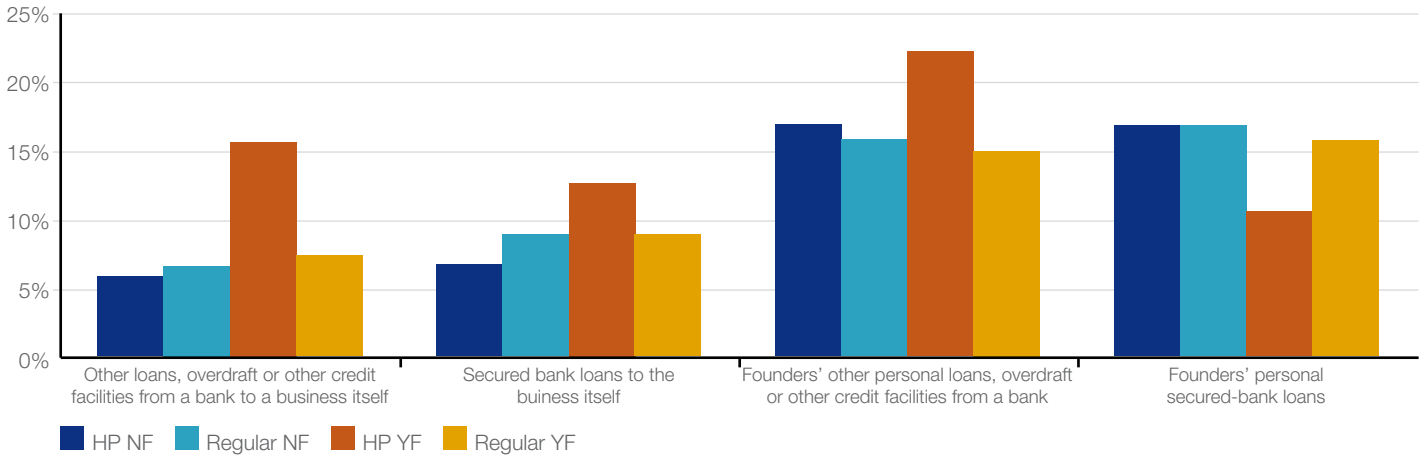
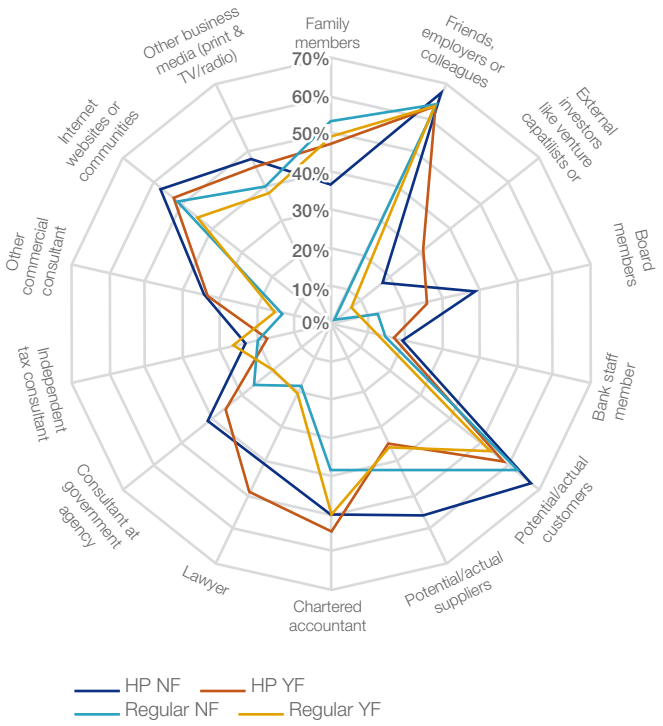


Figure 15: Sources of advice



So what does all this mean?

The findings in this report present an interesting portrayal of Australian High Potential start-ups, which sees them compare favourably to their US counterparts. We should not fall into the 'cultural cringe' trap and assume entrepreneurship is bigger and better overseas. Australian entrepreneurship is alive and well.

Despite suggestions that HP start-ups can be riskier propositions, our evidence suggests that the termination rates of HP start-ups do not reflect this. In fact, HPs appear to be less risky – perhaps due to the larger commitment often by more than one founder. This implies that those evaluating and/or funding new ventures should not necessarily associate higher potential with higher risk. Of course, the start-up process of HPs is more complex and takes more time. Nevertheless, HPs do perform better than regular start-ups. In other words, rewards accrue in the longer term for those with patience.

There appears to be little difference between the funding sources of HP and regular firms. This may mean that financial providers do not currently provide products attractive to high potential start-ups and / or that HP entrepreneurs are not effective at identifying and attracting a diversity of funding sources. Financiers and advisors to start-ups could attempt to close this apparent gap.

HP start-ups regard their use of networks as a strong advantage and tended to actively develop their use of networks over time. Their willingness to seek and use external advice, provides them with access to expertise and knowledge that they actively use and is valuable in the venture creation process. Indeed, start-up founders should be encouraged to actively seek out and listen to other advice, particularly from recognised experts in their industries.

Finally, the presence of a balanced non-family team may be one indicator of a high potential start-up. Solo founders who harbour high growth ambitions would be well advised to seek partners early in the venture development process.

For further information contact:
Paul Steffens Phone: +61 7 3138 2423
Email: p.steffens@qut.edu.au

1 To do so we called approximately 30,000 households to identify individuals involved in an early stage business.

2 For fuller explanation of the data collection methods for the CAUSEE sample and the oversample of HP start-ups refer to Davidsson, P., Steffens, P. R., Gordon, S. R., & Reynolds, P. (2008). Anatomy of New Business Activity in Australia: Some Early Observations from the CAUSEE Project . School of Management, Faculty of Business, QUTand Senyard, J., Davidsson, P. and Steffens, P. Improving Methodologies of High Potential Nascent Entrepreneurship Research. 28th **Babson** Entrepreneur Conference, North Carolina, USA 5–8th June 2008.

3 Reynolds, P. D., & Curtin, R. T. (2008). Business Creation in the United States: Panel Study of Entrepreneurial Dynamics II Initial Assessment. *Foundations and Trends in Entrepreneurship*, 4(3). See **www.psed.isr.umich.edu** for further information on PSED II.

4 Throughout the remainder of this report, differences between groups which are mentioned in the text are statistically significant at the 5 per cent level – that is they are likely to reflect true differences of effects in the entire population of Australian start-ups. If differences between groups are not significant we refer to them as small or non-existent.

The Australian Centre for Entrepreneurship Research

Queensland University of Technology
Phone +61 7 3138 2035
Email ace.business@qut.edu.au
Level 7 Z Block, Gardens Point campus
2 George Street, Brisbane Qld Australia 4001
GPO Box 2434

This report was prepared by
Associate Professor Paul Steffens | Professor Per Davidsson | Mr Scott Gordon | Mr Neil James | Ms Julienne Senyard | Mr Michael Stuetzer

The Australian Centre for Entrepreneurship Research (ACE) aims to be the hub for research knowledge in entrepreneurship, innovation and small business studies.

We aim to be the national leader and an international top player in conducting cutting edge scholarly research on entrepreneurship. We also aim to be a primary link between research and practice in this area through building relationships with business, media and government throughout Australia.

www.bus.qut.edu.au/research/ace