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The Australian Centre for Entrepreneurship Research



BUSINESS CREATION IN AUSTRALIA PAPER #5

New venture internationalisation

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1. KEY POINTS

This paper investigates the international background and international activities of Australian start-up firms. Findings of interest in this paper include:

- Due to their small scale, young age and distant location firm founders then to favour the domestic market rather that engage internationally.
- Firms that do engage internationally tend to do so at the very early stages of venture creation.
- Firms that do engage in exporting activities tend to rely on intermediaries rather than more direct forms of export actions.

2. INTRODUCTION

In this paper, we will provide empirical evidence on the international background and international activities of Australian start-ups, using data from the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE). This longitudinal data set, which was collected in four annual waves 2007-11, uniquely allows the analysis of entrants at two stages of development. These are represented by random samples of Nascent firms (625 cases) – which are in the process of being created but not yet established in the market place – and Young firms (559 cases) – which have been operational for up to four years. To a minor extent we also refer to results concerning the judgment over samples of "high potential" new ventures. Unless otherwise stated, any group differences within the CAUSEE data that we comment on are "statistically significant" at the most conventional risk level applied in academic studies, i.e., there is less than 5 per cent risk that a difference of the observed magnitude (or larger) would appear in samples drawn from a population where no such difference exists. The data set is further explained in the Appendix. For more comprehensive accounts of the CAUSEE data, please refer to Davidsson, Steffens, and Gordon (2011) and/or the CAUSEE User Manual (Australian Centre of Entrepreneurship Research, 2012). Before reporting results we give a brief background on prior, international research in this area.

3. PRIOR RESEARCH ON NEW VENTURE INTERNATIONALISATION

Research on international entrepreneurship has grown to become a rather large subtheme within entrepreneurship studies (Cumming, Sapienza, Siegel, & Wright, 2009; Keupp & Gassmann, 2009). This literature addresses a number of key issues. One major theme is *the proportion* of new ventures that engage in international activities, including *why* and *how* they do so. A dominant debate here is whether and under what conditions firms internationalise gradually as suggested by traditional internationalisation theory (Johanson & Vahlne, 2009) or go for instant internationalsation from conception ("born global" firms), as suggested by works focusing on "international new ventures" (Oviatt & McDougall, 2004). The former perspective – which emphasises the role of knowledge and

learning in the internationalisation process – suggests that firms take their first international steps in their geographic and psychic proximity¹. In the case of Australia this would mean New Zealand and south-east Asia by the first criterion but traditionally include the more gegraphically distant parts of the Anglo-Saxon world by the second. The theory also suggests internationalisation occurs in a progression from simpler forms – such as importing and exporting via a domestic intermediary – towards more advanced forms involving foreign strategic alliances and wholly-owned foreign operations.

While few would completely discard this view of internationalisation, it is generally agreed that an alternative mode of internationalisation has become more prevalent in recent years. Driven by general trends towards globalisation there appears to be an incresed incidence of cases where new firms from their very inception engage in multiple international activities, and not necessarily in their immediate geographic vicinity. Interestingly, an Australian study (Rennie., 1993) was among the first to highlight this phenomenon, coining the now widely used label "Born Globals" for such start-ups. While there is considerable support that this group deviates from some of the predictions of traditional internationalisation theory, some studies take a middle ground, suggesting that the two modes are not entirely distinct. For example, Hashai and Almor (2004) found that their 'born global' firms still engages in a gradual process of increasingly advanced forms of international engagement. Specifically, their sample of knowledge-intensive, 'born global' firms largely conformed to the following sequence of internationalization over time: (1) exports in order to serve customers in psychically close foreign markets; (2) greenfield marketing subsidiaries established in these markets; and (3) engagement in mergers and acquisitions; creation of subsidiaries that incorporate several value-adding activities and penetrate psychically distant foreign markets.

3.1 Internationalisation and Immigration

Another branch of the literature focuses on the international background of the founders. One major aspect of this deals with how immigrant background and status affects the propensity to engage in entrepreneurial endeavours as well as how such experiences shape those activities and contribute to their degree of success. This literature ranges from "low end" studies that focus on how membership of disadvantaged immigrant groups tends to restrict start-ups to a "cramped range of generally marginal activities" (Ram, Smallbone, Deakins, & Jones, 2003) to "high end" studies highlighting the significant role of highly educated immigrant entrepreneurs in the most spectacular and successful entrepreneurial regions and companies (Saxenian, 2002). The more recent literature on "transnational entrepreneurship" slants towards the positive end, accentuating how entrepreneurs connecting knowledge, resources and networks between an original home country and a current home country can carve out unique niches and competitive advantages (Terjesen & Elam, 2009).

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¹ Where close psychic proximity refers to those markets that are more easily understood, for example, in terms of historical links, culture, language or operating environment.

This is in line with the emphasis on knowledge, learning and (more recently) networks in traditional, stage-based international theory. From that perspective, it is the prior knowledge and established networks of transnational entrepreneurs that make it possible for them to overcome liabilities of outsidership and foreignness and hence to leapfrog or speed up the stages predicted by the theory (Johansson & Vahlne, 2009). By the same token, individuals who have international experience through other means than migration should also have a higher propensity to engage and succeed in (some types of) international, entrepreneurial activities. Although less studied than one would expect, this seems to be largely supported by extant research (Reuber & Fischer, 1997). The literature suggests the impact may differ according to the length, scope, diversity and intensity of the international experience. (Clarke, Tamaschke, & Liesch, 2012).

Another major theme in the literature is the relationship between internationalisation and firm performance. Noting that the evidence regarding the size and magnitude of this relationship appeared to be contradictory, Bausch and Krist (2007) carried out a so-called "meta-analysis" of all available research – including firms of all ages and sizes – in order to settle the issue. They found that the overall relationship tended to be positive. More importantly for our context, this positive relationship is stronger for younger firms than for older ones. The study also found systematic differences in the strength of the internationalization \rightarrow firm performance relationship based on other factors. For example, the results suggests firms with higher R&D intensity benefit more from internationalisation, as do firms with a more focused product range (low diversification). Studies carried out in America found stronger or more consistent effects compared to studies carried out in Japan (with European studies seemingly falling in-between). The implications for Australian firms would seem to be uncertain.

The above shows that it is possible to arrive at some generalisations regarding new firm internationalisation. However, a recent, major review of the literature highlighted the lack of consistency of predictions and results in this field (Keupp & Gassmann, 2009). Their solution to this state of affairs is theoretical development. In fact, they go as far as saying that the field of international entrepreneurship is in "desperate need of further theoretical development".

While this may be true, it can be argued that weak theory is not the only reason why a founder of a particular firm, or a policy-maker in a particular country, cannot find many firm and reliable answers to their particular questions in the extant research literature on international entrepreneurship. As a corollary, it can be argued that broadly generalisable theory should perhaps not be expected in this field. This is for the following reasons: Countries — or nations — are not homogenous entities. What it means to "internationalise" — as well as the need for it, and the ease with which it can be achieved — is very different depending on the size of the home market (for example China; US versus Australia or the Scandinavian countries) and the proximity of neighbouring countries (for example Switzerland or the Netherlands versus Australia or Japan). Similarly, the effect of

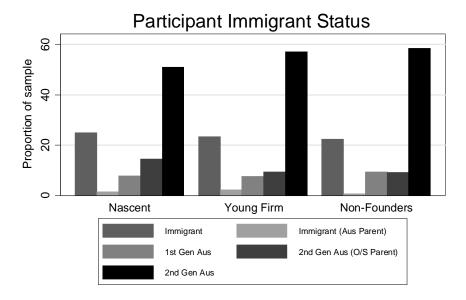
international experience is likely to be strongly dependent on the countries and cultures these experiences are derived from, as well as the countries and cultures in which they are entrepreneurially applied. For these reasons, findings on drivers, content and effects of "internationalisation" are likely to be highly context-specific within the general themes outlined above. As a consequence, a decision-maker in a particular time and place needs to rely on data from that specific context, obtained through sound academic methods. This is what we try to deliver in this paper with respect to present-day internationalisation of Australian new ventures.

4. INTERNATIONAL BACKGROUND

Figure 1 shows that about 25 per cent of Nascent and Young firm founders in the CAUSEE data set were born overseas (blue and brown). The CAUSEE data collection included a brief interview with a sample of the individuals who did not qualify as firm founders. The results show that there is no significant difference between founders and non-founders in terms of immigrant background. The proportion of immigrants found here is also consistent with the official data suggesting 25.6 per cent of Australian residents being born overseas (Davidsson, James & Tonelli, 2011). Thus, Australian immigrants seem neither under- nor over-represented as firm founders.

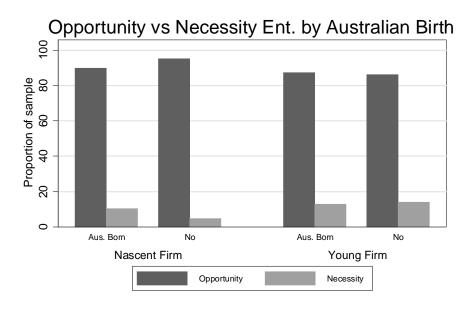
As noted above, international studies alternate between associating immigrant entrepreneurship with a narrow range of simple, subsistence businesses on the one hand, and being at the forefront of commercialisation of frontier technologies on the other. The analysis displayed in Figure 2 gives a hint about qualitative differences (or rather, the lack thereof) between start-ups founded by immigrant versus other Australian entrepreneurs. The graph is based on a question regarding the basic motivation of the start-up as driven by attractive market opportunity versus lack of other alternatives (necessity).

Figure 1



As can be seen, there is no marked difference. The slight tendency is in favour of more positive reasons behind immigrant start-ups. Similarly, there is a slight tendency for immigrants to be over-represented in the over sample of "high potential" new ventures (not displayed; see Appendix and Davidsson et al., 2011). This said, it should be noted that opportunity-based start-ups dominate in both categories and that the small differences noted here are statistically uncertain. Arguably, the important point to take away from the analyses displayed in Figures 1 and 2 is that individuals with an immigrant background are neither under- nor over represented as business founders in Australia, and that the businesses they create do not stand out as having a higher or lower level of sophistication or potential compared to other start-ups.

Figure 2.



Whether they have any family background abroad or not, and whether they are founders of Nascent or Young Firms, overall about 25 per cent of the business founders report that either they or other members of the founding team have spent 5 years or more abroad as adults, i.e., after the age of 18. About a third spent some time abroad albeit less than 5 years, while just over 40 per cent lack overseas experience.

On this issue we have no comparison with non-founders. However, comparisons of sub-groups of founders reveal important differences. Some of these are displayed in Figure 3 (a-d). Here, we do not distinguish between Nascent and Young Firms. As can be seen, there is a clear difference between novice founders – those starting a firm for the first time - and "serial" founders who have started and run independent businesses before (and/or concurrently). The distribution across none-some-substantial international experience is close to even for the serial founders, whereas almost half of the novice founders completely lack international experience (Figure 3a). Ventures started by university graduates can also draw on more international experience (3b). The same is true for ventures started by teams (3c) which is at least in part is due to the simple fact that experience in this case is aggregated across multiple individuals. Further, there is a tendency for founders of firms that mainly sell products (mostly retailers and manufacturers) to have more international experience than those who found service businesses (3d). As we will show later, productbased start-ups are more likely to engage in some international activities. Thus, to a degree this result likely reflects that the founders have acted on opportunities that are open to them thanks to their international experience while individuals lacking such experience would not be able to discover or exploit them (cf. Shane, 2000).

Other analyses (not displayed) focus on the diversity of international experience rather than its mere length (cf. Clarke et al., 2012). These analyses show group differences of the same kind as those displayed in Figure 3. Again, the differences are more pronounced for the "human capital" variables education, experience and team/solo, and somewhat less so for product- versus service-based ventures. Similarly, previously reported analyses show that the founders in the judgement over sample of "High Potential" new ventures have significantly more international experience in their background (Davidsson et al., 2011).

Overall, the results indicate that ventures with international experience constitute a group that is not only favourably equipped for doing business internationally based on that specific experience, but also because they have more of both 'general' and 'domain-specific' human capital more broadly (Davidsson & Honig, 2003).

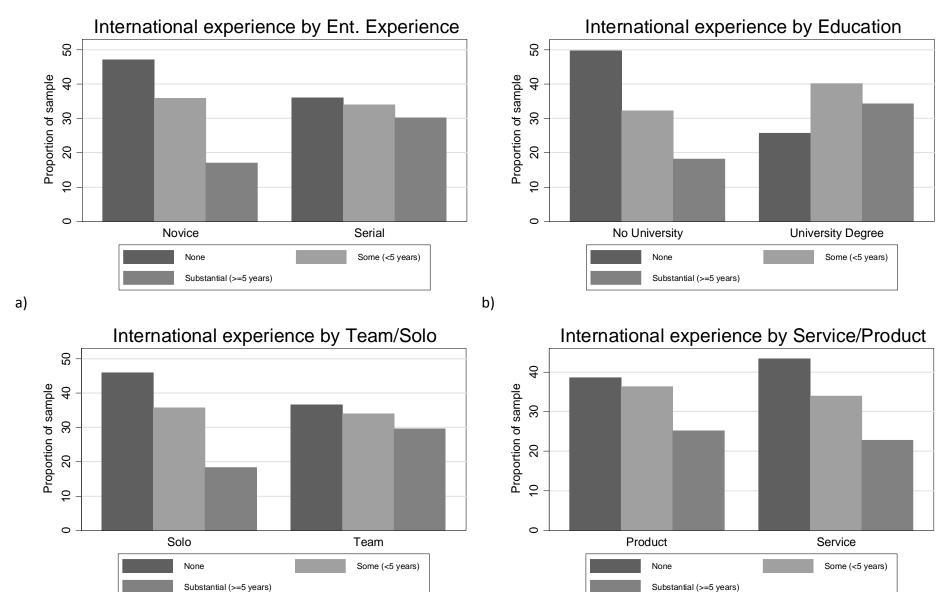


Figure 3.

d)

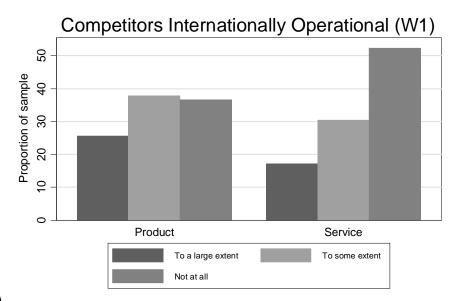
c)

5. INTERNATIONAL PERCEPTIONS AND ACTIVITIES

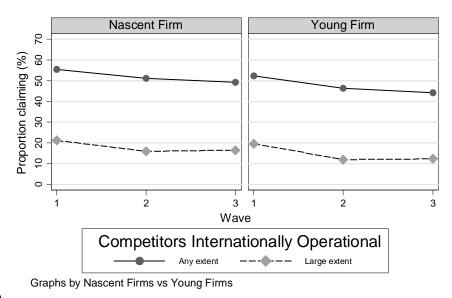
5.1 International market perceptions

A number of questions concern the founders' perceptions of the international market. Figure 4 displays responses regarding whether they see their Australian-based competitors as tending to operate in international markets or not. The biggest group difference here occurs for product- versus service-based firms, which is highlighted in the figure (4a). Overall, roughly half of the start-ups do and do not see themselves as operating in an environment where going international is commonplace, respectively. As shown in the second graph (4b) — which contrasts Nascent and Young Firms — the sense of being in an international context in this regard decreases slightly over time. As we shall see, this is just one example of international perceptions being "reduced" over time.

Figure 4.



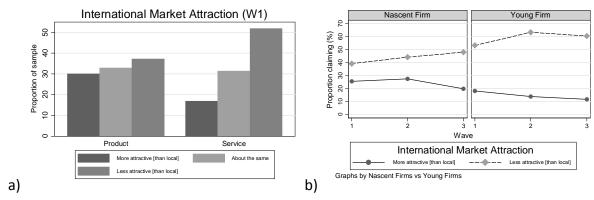
a)



b)

The founders were also asked about the attractiveness of international markets compared to the domestic market. Figure 5 reports some of the results. Overall, a majority regards domestic markets as more attractive. Again, the biggest group difference here occurs for product- versus service-based firms, with the former assessing international markets significantly more favourably. The same is true albeit to a somewhat lesser extent for founders with previous entrepreneurial experience (not displayed). Previously reported analyses show that in the High Potential over sample, a majority see international markets as relatively more attractive than the domestic market (Davidsson et al., 2011).

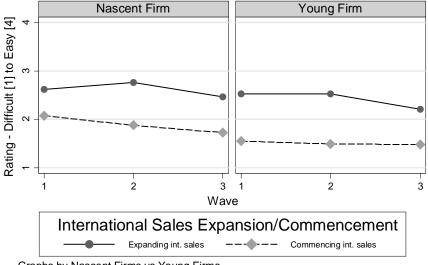
Figure 5.



As shown in the second panel (5b) there is also a marked difference between Nascent and Young firms. At the time of the initial interview (Wave 1) the dominance for "less attractive" over "more attractive" is much more pronounced among Young Firms. Both categories also adjust downward their perceptions of international markets over time (the question was not included in Wave 4). Since Nascent and Young Firms represent similar entities at different stages of development, the graph can arguably be seen as a reflection of how such perceptions develop over the first half a dozen years or so of new ventures' development history. The overall impression is that the attractiveness of international markets is over stated at early stages and that the founders subsequently learn that international success can be more hard-earned than they initially thought. Somewhat surprisingly, this goes also for experienced founders (not displayed). A graph contrasting founders with (left) and without prior start-up experience (right) looks almost identical to Figure 5b, meaning that the gap in perceived attractiveness almost disappears by Wave 3.

Finally, Figure 6 reports answers to a question where the founders were asked about how easy or difficult it would be for them to increase international sales. Those that were not yet active exporters were asked about the ease/difficulty of *commencing* international sales, whereas already active exporters were asked instead about the ease/difficulty of *expanding* their international sales. A higher number reflects a more favourable assessment, i.e., that internationalising is regarded relatively easy.

Figure 6.



Graphs by Nascent Firms vs Young Firms

The results suggest that those not already engaging in international sales see it as relatively hard to start doing so. For Nascent Firms this "negative" assessment increases over time, while for Young Firms it flattens out at a level suggesting internationalisation would be hard to achieve. In other words, they may not see this as a realistic option for their venture. Those already active in international sales are initially (on average) close to the midpoint of the scale, suggesting many see realistic prospects for further international expansion. However, over time there is again a negative adjustment. Presumably, this is in part because the most attractive international opportunities have already been utilised, and in part because the attractiveness of the remaining opportunities have been reassessed in a slightly less optimistic fashion.

5.2 International activities

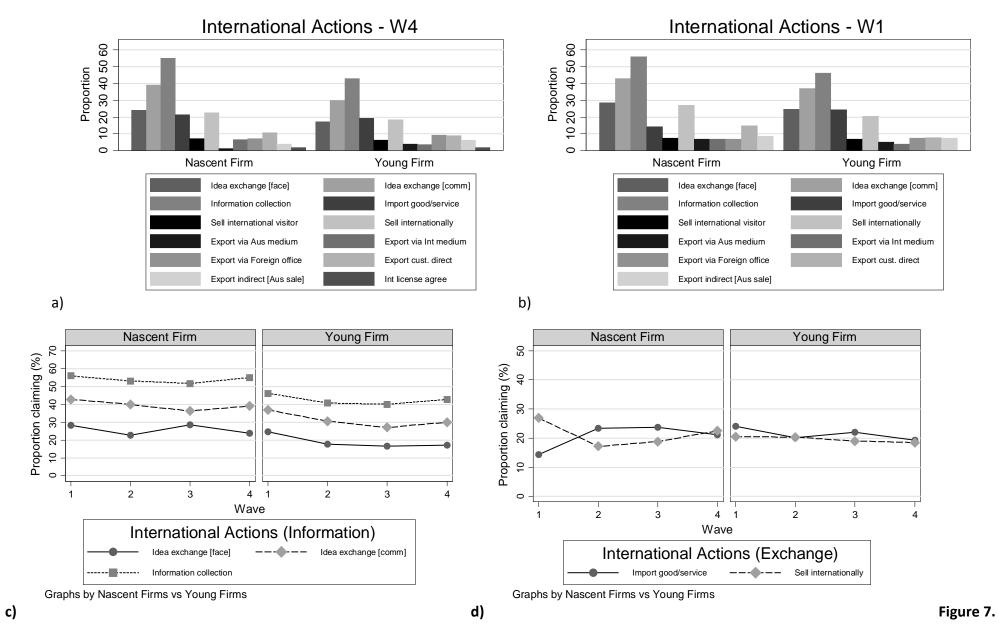
In each interview wave the respondents were asked about their involvement in a range of international activities. The proportion affirming such engagement for each activity is displayed in Figure 7 (a-d). Because the legend to this figure is not fully self-explanatory it may be useful first introduce the underlying questions verbatim, in the same order as they appear in the bar chart:

 ${\it Please indicate which of the following international activities your business is involved in, yes or no?}$

- a. Exchange of ideas or information with individual colleagues abroad who you meet in person, for example at trade fairs?
- b. Exchange of ideas or information with individual colleagues abroad via phone, email or Internet?
- c. Collection of written or electronic information from abroad about developments relevant to your industry?
- d. Imports of goods or services from abroad.
- e. Selling more than 10% of your total sales to tourists or other temporary visitors to Australia?
- f. Selling any products or services to customers in other countries, either directly or indirectly?
- q. Export of products [services] through an Australian-based intermediary like an agent or distributor?
- h. Export of products [services] through a foreign-based intermediary like an agent or distributor?
- IF PRODUCT: i. Export of products through your own foreign office?
- IF SERVICE: i. Export by selling services produced in Australia directly to customers located abroad?
- IF PRODUCT: j. Export of products directly to customers abroad?
- IF SERVICE: j. Selling directly to customers abroad by producing and selling services in their countries?
- k. Indirect exports because your products [services] form part of what your Australian-based customers sell abroad?

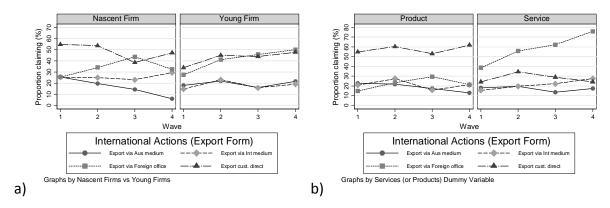
The results reveal a number of interesting patterns. First, the most common international activities are those that require neither goods nor people to cross borders – that is, collection of information and exchange of ideas. However, face-to-face exchange of ideas and information is also relatively common. Second, nascent firms are involved in international "informational" activities to a greater extent than Young Firms. In part, this is likely to reflect the earlier stage of development they are in, still working out their business model and their key business partners. However, to some extent it may also represent a cohort effect (Menard, 2002). That is, there may be a permanent difference between firms initiated around 2004 versus around 2007. Technological developments have been fast, and turning to Internet communities and the like at an early stage may "imprint" the business towards higher use of this type of tool throughout its existence.

Third, selling to visitors in Australia is only significant for a small minority. Thus, relatively few consider themselves to be wholly or partly in the tourist industry. Fourth, and importantly, considering the low age and small size of these ventures the proportion being involved in import and export is fairly high; around 20 per cent. For product-based start-ups the figure is even higher, around 30 per cent, while between 15 and 20 per cent of services firms are engaged in exports or imports. Fifth, while Nascent Firms initially report more outbound than inbound exchange the levels reporting imports and exports are overall fairly similar. Finally, and very importantly, there is no marked tendency towards increased internationalisation over time. Thus, this first analysis is more in line with the "born global" argument. Those firms that are internationally active tend to be so from the very start. As we have seen above, those who are not, rate internationalisation as difficult to achieve and may not see it as a realistic option for them to pursue. Thus, our analysis thus far does little to support to the idea of gradually developing internationalisation.



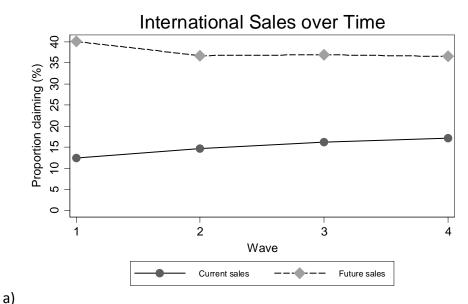
However, an analysis of the modes of international activity among firms reporting to be active exporters show development over time. This development is more in line with the gradual internationalisation argument. This is displayed in Figure 8 (a-b). The reliable patterns revealed in Figure 8a appear to follow three patterns. First, among Nascent Firms there is a clear decline over time in the use of export via an Australian intermediary in favour of other modes. Other than that the pattern is not very clear in this early and experimental stage, so it not entirely certain what mode they predominantly switch to. Second, among exporting Young Firms, there seems to be a clear trend towards increased use of direct exports and establishing of one's own foreign office, while the use of other modes largely remains stable. Third, Figure 8b reveals different preferences for productand service-based firms. In particular, this goes for direct exports. This is to a considerable extent driven by wording differences in the questions (cf. above). A clear pattern is the increased use of "foreign office" among services firms. However, for service firms this response category actually represents "Export by selling services produced in Australia directly to customers located abroad". When interpreting the results it should also be kept in mind that relatively fewer service firms engage in exports at all.

Figure 8.

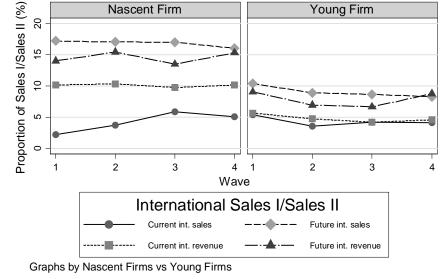


Arguably, one of the most interesting and important aspects of internationalisation is the *level* or magnitude of international sales. Figure 9 displays data on this in a variety of ways. The first panel (9a) displays the proportion of sales that are international among those (both Nascent and Young Firms) that claim any international sales at all over the past 12 months (blue) and intended 5 years into the future (red). Here we find some more evidence in favour of gradually increasing internationalisation insofar as the average share of international sales among active exporters increases from about 12 to about 17 per cent over time. However, the limited slope of the blue curve in Figure 9a is but one of several indications in the data that they are unlikely to reach the 5-year target of more than 35 per cent international sales.

Figure 9.



uj



b)

The entries in Figure 9b require some explanation. The reason why percentages are lower here is that they are calculated across all cases. That is, they include a substantial number having/intending zero per cent international sales. Further, the data are derived from two sets of questions about current and future sales. The first – Sales I – was an open ended question about what per cent was international over the past 12 months/projected for 5 years later, respectively. The second – Sales II – required the respondents to divide 100 per cent into local, regional, national and international sales, respectively. The times referred to were "currently" and "five years from now". However, for those Nascent firms that do not yet have sales, "current" here actually means "expected" for the first couple of years in operation. All in all, "Sales I" is the most direct measure of actual, international sales achieved.

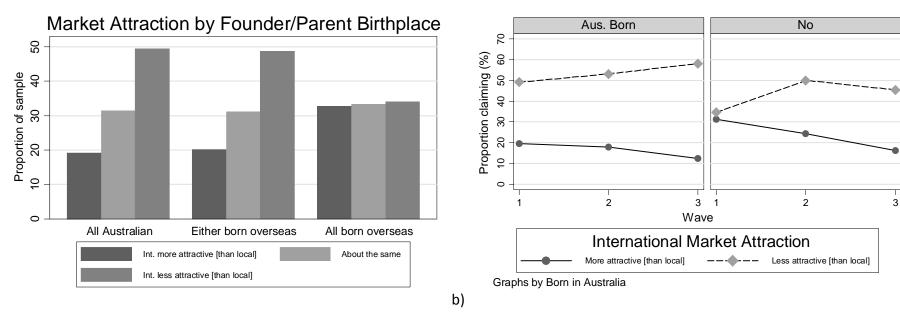
A few observations can be made. There is no clear trend towards increasing shares over time among the Young Firms. Further, estimates seem more consistent across the two measures – and are therefore arguably more reliable – for Young Firms. This indicates that the lower levels for future sales observed for Young Firms may have more to do with greater realism than with any real difference that will materialise in the future. However, there are also patterns that speak against such an interpretation. It may be noted that by Wave 4, the Nascent Firms (still including cases that have no sales at all) have essentially caught up with the level of sales Young Firms had in Wave 1. At the same time, there is no strong tendency for Nascent Firms' future projected sales to decline over time, and their Wave 4 expected future international sales is much higher than the level Young Firms attained at Wave 1. This may mean that there is a cohort effect. If so, when reaching the equivalent stage of development, the more recently initiated Nascent Firms will have higher international sales than the Young Firms currently have. What runs counter to this interpretation is that there is no increase in the international share of sales for Nascent Firms between waves 3 and 4.

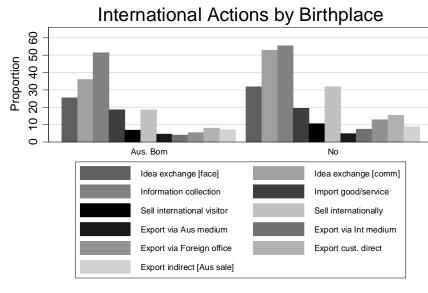
A graph contrasting product- versus service-based firms looks similar to Figure 9b, but the curves remain at higher levels for product-based firms throughout all four waves.

5.3 International experience as driver of international perceptions and activities

Does the international background and experience of founders make them perceive international markets more favourably and engage more in international business activities? Prior research suggests that by and large it would, but as already noted this is likely to depend on the specific context. Figure 10 displays some key insights about present-day Australian founders with immigrant background in this regard. As can be seen (10a) there is a marked difference initially in the perception of the attractiveness of international markets. However, this goes only for more recent immigrants, where the respondent and both parents were born overseas. Interestingly, this difference tends to disappear over time (10b). Both Australian-born and overseas-born founders adjust downward the perceived attractiveness of international markets over time. However, this downward adjustment is more pronounced for the immigrant founders, so that by Wave 3 the difference between them and their Australian-born counterparts is rather small as regards the proportion judging international markets to be more attractive than the domestic market.

Importantly, this is also reflected in international activities. Panel 4c reveals differences at the start of the study. Some of these differences are "statistically significant". Specifically, in Wave 1 the overseas-born founders report higher incidence of international idea exchange as well as of selling internationally. By wave 4 there are no significant differences between the two groups.





a)

c)

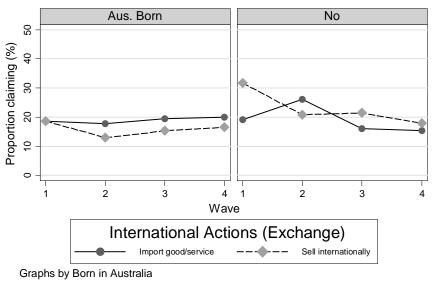


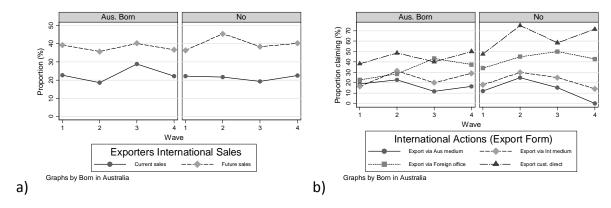
Figure 10.

d)

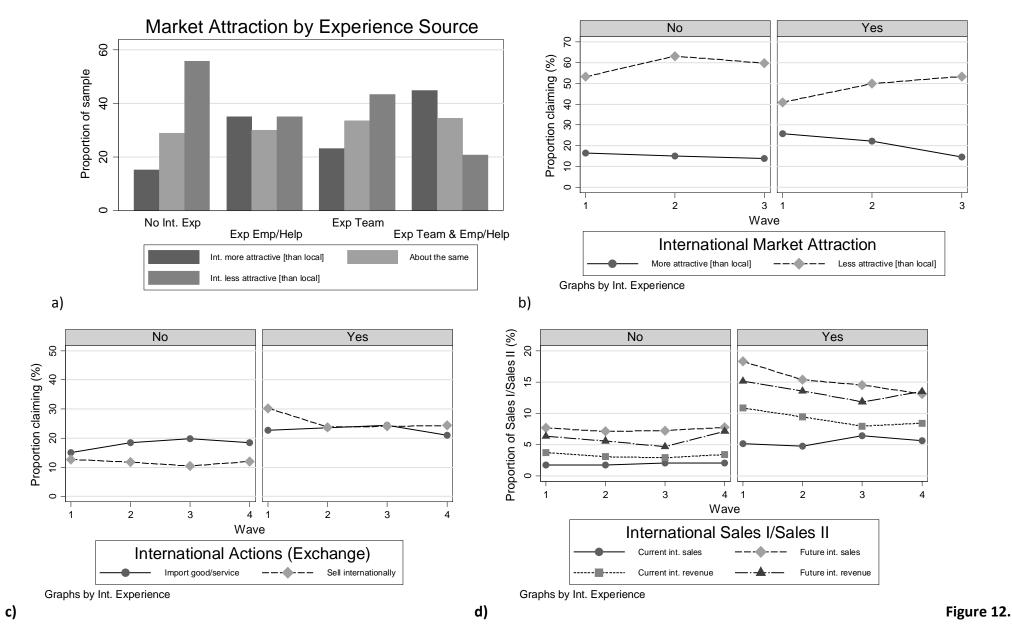
In panel 10d this is reflected in decreasing proportions of immigrant founders claiming to engage in exports and imports over time, whereas for Australian-born founders there is little change over time.

Figure 11a shows that among active exporters, the (average) *proportion* of sales that is currently generated overseas, or the proportion aimed for in the future, is not markedly different for immigrant founders compared to their Australian-born counterparts. Interestingly, however, differences in the *mode* of exporting are accentuated over time. This is displayed in Figure 11b. Specifically, over time immigrant founders increasingly favour more direct forms of export – either from Australia or via their own presence abroad – over exporting via domestic or foreign intermediaries.

Figure 11.



Let us now turn to international experience rather than international heritage. Figure 12 displays some representative analyses comparing ventures with and without founders who have spent at least one year living abroad at adult age.



Panel 12a reveals an interesting pattern. Ventures with no international experience view domestic opportunities as far more attractive than international ones. International markets are also less attractive to internationally experienced founders/founding teams without employees or unpaid helpers who provide international experience. Conversely, ventures where both the founders themselves and employees/helpers have international experience have the most favourable views of international markets, constituting the only group where these are (on average) regarded more attractive than the domestic market. Lastly, ventures where employees/helpers provide international experience that the founders are lacking have a more balanced view of the relative attractiveness of international versus domestic markets (however, this is a small group comprising only 20 cases).

This would seem to reflect an intricate pattern of cause and effect, where the perception of the attractiveness of markets influences whom you involve in the venture, but where who you involve can also affect the perceptions of domestic versus international market opportunities. The low estimated attractiveness for "Experienced Team" should definitely not be interpreted as international experience generally working as a deterrent to engaging in international markets. Rather, it indicates that there exists a subgroup for which this may be true. Alternatively, this subgroup are founding ventures for which internationalisation is not a realistic option. Either way, this subgroup does not take onboard international experience via employees or helpers, either.

Unfortunately, it is not possible to examine the remaining charts in the same level of detail. Here, we instead consider only whether the founders themselves have or lack international experience and how this relates to international perceptions and actions. Panel 12b shows that initially, internationally experienced founders have a much more positive image of international markets compared to other founders. Somewhat surprisingly, it is the experienced founders who adjust their perceptions the most over time. As a result, the difference in assessment of international markets' attractiveness is rather small by Wave 4.

Panel 12c demonstrates behavioural effects of experience. Internationally experienced founders are more likely to engage in imports and exports, although the difference in imports is nearly wiped out by Wave 4. Panel 12d shows that the difference in prevalence in exports translates into a difference in the share of exports that is generated from international markets. Internationally experienced founders also plan much higher levels of international sales in the future. The group differences in this chart are quite substantial, although the gap in future international sales targets is reduced to some extent over time.

6. DREAM AND REALITY

It is worth repeating that considering their youth and small size — as well as the location in a country without geographically close neighbours — the level of

internationalisation of Australian start-ups is not unimpressive. However, there are also many signs in the above analyses that early on, they may be somewhat over-optimistic about the relative attractiveness of international markets, and that they may not be able to reach the ambitious international targets they are aiming for. In order to further underscore this point we will here repeat an analysis that was first published in Davidsson et al. (2011). This analysis, displayed in Table 1, compares the 5-year future outlook of Nascent Firms (that is, Nascent Firm founders responses about future plans and ambitions given in the first wave of interviewing) with what founders of surviving Young Firms actually have achieved by the time they have operated in the market for about 5 years (that is, Young Firm founders responses about actual results in the third wave interview).

While this is *not* a truly longitudinal analysis – one following the same cases over time – it is not far-fetched to suggest that the results should be quite similar to what a truly longitudinal analysis would have yielded. Thus, the analysis compares the 'dream' at an early stage with the 'reality' experienced after having operated in the market for a few years.

These results very clearly indicate relatively high aspirations for international activity early on for both 'Regular' and "High Potential" start-ups (see Appendix), which are not being realized as quickly or to the extent expected. It is important to note that these results do not reveal whether the internationally active firms are more or less financially successful than others, or whether due to their lower-than-expected international sales the Young Firms in the third wave are doing worse financially than they expected. In other words, the results as such cannot determine whether the lower than expected international activity is "good" or "bad" for these start-ups.

Table 1. Dream and reality in the internationalization of new ventures

Regular firms	"Dream"	"Reality"
any international sales:	37.9%	17.2%
at least 25% international sales:	12.2%	4.7%
at least 50% international sales:	6.8%	2.4%
'High potential' firms		
any international sales:	88.7%	46.4%
at least 25% international sales:	63.5%	18.8%
at least 50% international sales:	46.1%	13.0%

Note: "Dream" is percentage of early stage Nascent Firms that aspire to have...; "Reality" is percentage of surviving Young Firms that are about 5 years old that over the last 12 months actually had...

7. CONCLUSIONS

To sum up this analysis of the international aspects of Australian business start-ups, we note that:

- Considering their small scale, very young age and rather distant location from international markets, Australian start-ups show a rather high level of international engagement.
- Overall, however, relatively more founders view international markets as less attractive than the domestic market, than the other way round. There is also a tendency for the perceived attractiveness of international markets to decrease over time.
- It is a significant minority that engages in international exchange, and there is little increase in this proportion over time. Those that internationalise tend to start doing so at very early stages rather than going international after reaching a stable position in the domestic market. Many of those who do not internationalise early see international sales as difficult (or perhaps not realistic) to achieve.
- It is also clear that international sales fail to reach the levels the founders' have in mind at very early stages of the start-ups' development. By and large, fewer become exporters, and the export less, than they initially aim for. Perceptions of international markets also turn down over time.
- The tendency towards downwards revision of "the international markets" seems no less pronounced among experienced founders or those starting "high potential" ventures.
- Firms in the "high potential" over sample show considerably higher levels of planned and actual international sales than do firms in the main, random sample.
- There is some but rather limited growth in the proportion of international exchange over time among those start-ups that engage at all in such activities.
 The mode of internationalisation tends to develop towards more direct forms over time, though.
- Immigrants are neither under- nor over-represented as business founders compared to Australian-born individuals. Neither is there any tendency for their businesses to be of higher or lesser potential compared to other start-ups.
- Immigrant founders have more favourable perceptions of international markets and engage more in international activities – including imports and exports – over time. These differences tend to disappear over time though, except for a tendency towards more direct forms of international sales (rather than using intermediaries).
- Founders with other forms of international experience show a similar pattern.
 They initially assess international markets more favourably and engage in more international activities, but these differences are reduced over time. However, the proportion engaging in exports, and exports as proportion of total sales, remain higher for ventures with internationally experienced founders.
- Founders with adult age international experience also tend to have higher education and more prior entrepreneurial experience; be more likely to work in teams, and more prone to found product-based businesses. Therefore, it is not

entirely clear that an association between personal international experience and internationalisation of the venture is the result specifically of the international experience or of these other factors.

• The assessed attractiveness of international markets and the level of engagement in international activities are higher for founders of product-based firms compared to firms mostly selling services.

The overall picture is that a significant proportion of Australian start-ups engage in international activities. However, there are also clear signs that the perceptions of the favourableness of international opportunities and the ease with which they can be seized are somewhat inflated at early stages. International connectedness — whether through heritage or otherwise — influences the level and form of internationalisation of the venture. Internationalisation patterns also vary by development stage and by type of venture in terms of product- versus service-based, and "high potential" versus "regular" start-ups.

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APPENDIX

About CAUSEE

The Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) is a research program that aims to uncover the factors that initiate, hinder and facilitate the process of creation of new businesses in Australia. CAUSEE employs and extends in the Australian context the approach to studying 'nascent entrepreneurs' and 'firms in gestation' that was first developed for the Panel Study of Entrepreneurial Dynamics (PSED) (Gartner, Shaver, Carter, & Reynolds, 2004) and is partly harmonised with the PSED II study undertaken in the US 2005-2010 (Reynolds & Curtin, 2008). The CAUSEE data collection was funded by the Australian Research Council with contributions also from industry partners BDO and National Australia Bank. More comprehensive accounts of the CAUSEE data collection can be found in (Davidsson et al., 2011) and in the CAUSEE user manual (Australian Centre for Entrepreneurship Research, 2012).

The major purpose of the research is to identify representative samples of on-going venture start-up efforts and follow their development over time. This approach addresses the under coverage of, and/or sparseness of data about the smallest and youngest entities that typically signify available business data bases. It also overcomes the selection bias resulting from including only start-up efforts that actually resulted in up-and-running businesses. Further, the approach largely overcomes hindsight bias and memory decay resulting from asking survey questions about the start-up process retrospectively, and gets the temporal order of assessment right for cause-and-effect analysis.

The primary data set for CAUSEE comprises of random samples of Nascent firms (N = 625) and Young firms (N = 559). While the main level of analysis in CAUSEE is the (emerging) venture or firm, sampling necessarily starts with the individuals behind the start-ups. Thus, the samples were obtained by screening adults in 30,105 randomly sampled households. Qualified individuals were retained as the sole spokesperson on behalf of the firm whether or not it had additional owners; however questions were asked about the contributions of all owners.

In order to qualify in the Nascent firm category, the respondent had to report concrete (and continuing) actions towards starting a new business within the past 12 months, be a part owner of this business, and not yet having experienced a period where revenues exceeded costs for at least 6 of the past 12 months. In the latter case, the respondent was instead included in the Young firms category provided the firm had not been operational for more than four years. Among the non-eligible cases every 50th respondent was selected for inclusion in a Control Group (n=506) to allow for basic sociodemographic comparisons between business founders and the general population. The Control Group was not followed over time.

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² Hindsight bias refers to the tendency for people to re-interpret past events based on current circumstances and this can bias retrospective research. Memory decay refers to the fact that events further in the past are more difficult to recall, and this effect can bias research which requires the recollection of the past.

Supplementary, non-random samples of "High Potential" Nascent firms (N = 102) and Young firms (N = 113) were also generated. These cases were sourced from a broad array of individuals and organizations likely to be in contact with such start-ups at an early stage. Apart from the criteria described above the High Potential ventures had to reach a certain minimum score across criteria based on the education and experience of the founders, their aspirations for the venture, and its level of technological sophistication (it should be noted that a distinct minority of the random samples also meet these criteria).

Eligible cases that agreed to participate proceeded through a 40-55 minute long telephone interview. They were subsequently re-contacted for follow-up interviews of approximately the same length every 12 months over three years. Hence, the data base consists of four waves of interviews undertaken in 2007/8 to 2010/11. In each wave, about 85 per cent of eligible cases agreed to participate. The fact that some start-ups cease to operate during the study further reduces the number of cases over time. It may be noted that this affects more the Nascent firm category compared to Young firms. Therefore, the maximum numbers of cases available for analysis in each sample category and data collection wave are as follows.

Table A1. CAUSEE samples and response rates across waves

		-			
	Random	Random	High	High	Non-
	sample	sample	Potential	Potential	entrepreneur
	Nascent	Young Firms	Nascent	Young Firms	Control
	Firms		Firms		Group
Wave 1	625	559	106	120	506
Wave 2	493	472	91	98	n/a
Wave 3	281	353	71	81	n/a
Wave 4	183	263	59	64	n/a

The design allows for two types of analyses of development over time. First, individual cases can be followed across the waves of data collection, i.e., for a maximum of three years. Second, comparisons between Nascent firms and Young firms also indicate development over time, extending the total window through which the study captures start-up processes to at least 6-7 years. However, the latter type of comparison must be interpreted with caution as it confounds changes in the composition of different start-up populations (cohorts) over time at the first point of entry, and what happens over time to the members of a given cohort.

In each wave of data collection a large amount of information was collected about the characteristics of the venture; the resources available to or invested in it; its strategies, actions and aspirations, and the outcomes it had achieved. When a venture had been terminated an 'exit interview' was performed and the case was dropped from subsequent waves. Different reports in this series will focus on different parts of these contents, and to some degree on different sub-samples.