





GLOBAL ENTREPRENEURSHIP MONITOR (GEM) 2017/18 AUSTRALIAN NATIONAL REPORT

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ABOUT GEM



GEM is the world's largest study of entrepreneurship.



GEM is different from other studies in that by surveying the adult population it identifies entrepreneurs at the very earliest stages of new business creation.



GEM measures annually the levels and characteristics of entrepreneurial activity, social attitudes, aspirations and framework conditions for entrepreneurship in each economy.



The GEM study has been conducted annually since 1999 and has collected data from across 100 countries, with over 2.8 million observations.



Adults interviewed by GEM Australia in 2017

200,000

Adults interviewed globally by GEM every year

54

economies GEM was conducted in 2017.

KEY FINDINGS

Overall, the 2017 Global Entrepreneurship Monitor (GEM) data provides a positive picture of the entrepreneurial activity and climate in Australia:

- It was estimated that 12.2 percent of the Australian adult population (18–64 years old)¹ were actively engaged in starting and running new businesses in 2017. This equates to 1.8 million early-stage entrepreneurs.
- With a Total Early-stage Entrepreneurial Activity (TEA) of 12.2 percent, Australia ranks #6 of 24 developed economies² in terms of level of entrepreneurial activity: well above the average (9.2 percent) and benchmarks such as the UK (8.4 percent), similar to the USA (13.6 percent) and Israel (12.8 percent), but substantially below Canada (18.8 percent) and Estonia (19.4 percent).
- Australia ranks #7 amongst 24 developed economies for Entrepreneurial Employee Activity (EEA) in established firms, with an estimated 7.8 percent of the adult population engaged in developing or launching new products, a new business unit or subsidiary for their employer. This equates to about 1.2 million Australians involved in EEA. Australia's EEA of 7.8 percent is comparable with countries like the USA (7.6 percent), the UK and Luxemburg (8.0 percent), Taiwan (8.1 percent) and Canada (8.2 percent). It is below Israel (8.6 percent) and Estonia (9.1 percent), however, it is well above and the average of developed economies (5.1 percent).
- Australia's profile of start-up activity (TEA) is particularly strong in the senior age groups. With 9.3 percent of 55–64 year olds engaged in early stage entrepreneurship, Australia ranked #3 amongst developed economies, lower than South Korea (14.2 percent) and Israel (12.5 percent), but higher than Canada (8.1 percent), the USA (7.6 percent), the UK (5.0 percent) and the developed economies average (5.9 percent).
- Informal investment is strong in Australia, with the prevalence of business angels at 3.8 percent of the population. This equates to about 0.6 million informal investors financing entrepreneurial ventures in Australia. This level is on par with the USA (5.2 percent) and Canada (4.6 percent) but above the UK (1.5 percent) and the GEM average for developed economies of 3.6 percent. However, at AU\$57,000, the average amount invested is well above the USA (AU\$26,000), Canada (AU\$41,000), UK (AU\$41,000) and the developed country average (AU\$42,000).
- Female TEA is comparatively high. At 9.2 percent, it is #7 amongst 24 developed economies: similar to the Netherlands (9.4 percent), South Korea (10.3 percent), the USA and Israel (10.7 percent), but well below Estonia (14.47 percent) and Canada (15.0 percent). Of the 1.8 million Australians engaged in starting new businesses, 38 percent or 690,000 were women.



- Australia outperforms most other developed economies on most indicators that represent the quality and economic impact of its business start-ups, including growth aspirations, number of opportunitydriven start-ups and innovativeness:
 - Some 3.4 percent of adults, or 510,000 new businesses, expect to create at least six new jobs in the next five years. This places us #5 of the 24 developed economies. It compares favourably to the developed economies' average (2.0 percent) or benchmarks like the UK (2.0 percent) but less than the USA (5.3 percent) and Canada (3.8 percent).
 - Similarly, the prevalence of innovative start-ups is relatively high in Australia. In Australia 3.5 percent of adults report that they are starting businesses selling products or services that no or few other businesses sell. This is almost 1.2 times the developed economies' average (2.9 percent) and compares favourably with benchmarks like the UK (2.3 percent). However, Australia's prevalence of innovative start-ups falls behind those of the USA (4.9 percent), Luxemburg (5.2 percent), Estonia (5.9 percent) and Canada (8.1 percent).
 - Similar to other developed economies, the vast majority of new ventures are based on the desire to take advantage of

² Throughout this report use of the term "developed economies" (or countries) refers to innovation-driven economies (rather than factor-driven or efficiency-driven economies) according to the World Economic Forum's Global Competitiveness Index classification for economic development levels.

¹ GEM statistics are reported for "working-age" adults aged 18–64 unless otherwise stated. While some entrepreneurial activity is present for youth under 18 and seniors over 65, the prevalence is substantially lower.



perceived opportunities, with only 16.8 percent of new ventures in Australia started through necessity.

- Perceived opportunities and capabilities for new business start-ups remain strong in Australia. Some 51.4 percent of Australians perceive that there are good opportunities to start a business and about 49.3 percent believe they possess the skills to do so. This is considerably above the average for developed economies (43.4 percent and 43.0 percent respectively) and benchmarks such as the UK (43.0 percent and 48.2 percent), but are slightly lower than in the USA (63.6 percent and 54.3 percent) and Canada (60.2 percent and 55.6 percent).
- Despite the positive features of Australia's entrepreneurship profile several aspects of the 2017 GEM findings raise particular concerns:
 - While female participation in entrepreneurship is comparatively high and ranked fourth across developed economies, the Female TEA of 9.2 percent is substantially lower than the Male TEA of 15.3 percent.

- Fear of failure in Australia remains slightly above the average of developed economies. Some 41.4 percent of Australians who report good opportunities to start a business also report that fear of failure would prevent them from doing so. This is slightly above the developed economies average of 40.3 percent and well above countries such as the USA (33.4 percent) and UK (35.9 percent), but lower than in Canada (43.8 percent).
- Our relatively high rates of entrepreneurship do not translate to youth entrepreneurship. Although Youth TEA (18–24 year olds) at 7.6 percent is on par with the average of developed nations (7.6 percent), it is nonetheless well behind other nations such as the Netherlands (11.2 percent), the USA (11.4 percent), Canada (17.2 percent) and Estonia (24.6 percent).
- The discontinuation rate, those who have terminated a business, raised from 3.5 percent in 2016 to 3.8 percent in 2017. While the rate of business discontinuation ranks Australia somewhat high at #9 amongst the 24 developed economies,

this is not surprising given our relatively high level of TEA (ranked #6) and business ownership (also ranked #6). Together these indicate a natural churn of a relatively high rate of small businesses in the economy. Moreover, research from the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE) conducted by the Australian Centre for Entrepreneurship Research (ACE) at the Queensland University of Technology (QUT) indicates that disastrous failures are minimal.³

- International orientation is below average for Australian early-stage entrepreneurs, most likely due to the geographic distance to international markets. About 7.7 percent of early-stage Australian entrepreneurs expect to generate more than a quarter of their revenue from international markets, compared to 25.9 percent as the average for developed economies. However, this group is dominated by European countries that have easy access to international markets.

³ Davidsson, P, Gordon, SR & Steffens, PR (2012). Early stage start-ups: evidence from the Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE). Chapter 1 in: Australian Government: Australian Small Business: Key Statistics and Analysis, pp. 4-17.



1. INTRODUCTION AND BACKGROUND

Most policymakers and academics agree that entrepreneurship is critical to the development and wellbeing of society.

Entrepreneurs create jobs. They drive and shape innovation, thereby speeding up structural changes in the economy, and by introducing new competition they contribute indirectly to increased productivity and overall economic activity. Entrepreneurship is thus a catalyst for economic growth and national competitiveness.

In 2017 GEM conducted its 19th annual survey of the rate and profile of entrepreneurial activity around the globe. GEM interviewed over 200,000 adults aged 18–64 in 54 economies, spanning diverse geographies and a range of development levels. ACE participated as the Australian GEM partner, surveying 2,000 Australian adults.⁴

This report provides a summary of entrepreneurship in Australia as measured by GEM, and benchmarks this against other countries. We compare the level of entrepreneurship in the population across different phases of the entrepreneurial process, and provide a profile of some key characteristics of entrepreneurs and the businesses they are starting. We also report on some of the institutional and framework conditions that support entrepreneurship.

1.1 The Australian GEM Study

The Australian GEM study was conducted by Q&A Market Research on behalf of The University of Adelaide and Queensland University of Technology. A total of 2,000 phone interviews were conducted with adults aged 18–99 (1,813 mobile phone and 187 landline), all by random digit dialling.

This report is harmonised with the global GEM report, which reports on the working age population 18–64. The Australian sample consists of 1,607 respondents.

1.2 The GEM research approach⁵

Specific contextual factors (social, political, and economic) are influential in creating unique business and entrepreneurial contexts. The relationships among the various key determinants of the entrepreneurial framework conditions – including the processes by which entrepreneurship, disruptive innovation in products and services, business renewal, job creation, economic expansion, and social wellbeing, among others – are depicted by the GEM's conceptual framework (see Figure 2). The GEM conceptual framework (Figure 1) is based on the assumption that national economic growth is the result of the interdependencies between the entrepreneurial framework conditions and the personal traits and capabilities of individuals to identify and seize opportunities. The GEM survey assists in identifying factors that encourage or limit entrepreneurial activity, measuring the extent of a variety of entrepreneurial activities and offering policy implications in order to enhance entrepreneurial capacity in local, regional and national economies.

1.3 Dashboard of GEM Indicators

The dashboard of GEM indicators is based on the GEM conceptual framework featuring, on the one hand, the entrepreneurial framework conditions and, on the other hand, detailed key entrepreneurship measures. Overall, this group of measures provides a comprehensive set of variables that contribute toward the impact entrepreneurship has on a society and the extent to which society supports this activity. The following is a list of these measures.

⁴ Note this is a relatively small survey sample, and thus the results may be associated with large standard errors.

⁵ This section is reproduced from Global Entrepreneurship Monitor: Global Report 2017/18. Global Entrepreneurship Research Association (GERA), 2018.

FIGURE 1 The GEM conceptual model



Source: GEM Global Entrepreneurship Monitor: Global Report 2017/18, London, Global Entrepreneurship Research Association.

FIGURE 2 GEM model of business phases and entrepreneurship characteristics



1.3.1 Societal values and perceptions

Good career choice. The percentage of the adult population aged 18–64 years who believe that entrepreneurship is a good career choice.

High status of successful entrepreneurs. The percentage of the adult population aged 18–64 years who believe that high status is afforded to successful entrepreneurs.

Media attention for entrepreneurship. The percentage of the adult population aged 18–64 years who believe that there is a lot of positive media attention for entrepreneurship in their country.

1.3.2 Individual attributes of a potential entrepreneur

Perceived opportunities. The percentage of the population aged 18–64 years who see good opportunities to start a business in the area where they live.

Perceived capabilities. The percentage of the population aged 18–64 years who believe they have the required skills and knowledge to start a business.

Entrepreneurial intention. The percentage of the population aged 18–64 years (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and intend to start a business within three years).

Rate of fear of failure. The percentage of the population aged 18–64 years perceiving good opportunities who indicate that fear of failure would prevent them from starting up a business.

1.3.3 Entrepreneurial activity indicators

Total Early-stage Entrepreneurial Activity (TEA). The percentage of the adult population aged 18–64 years who are in the process of starting a business (a nascent entrepreneur) or started a business less than 42 months old before the survey took place (owner-manager of a new business). This indicator can be enriched by providing information related to motivation (opportunity vs. necessity), inclusiveness (gender, age), and impact (business growth in terms of expected job creation, innovation, and industry sectors).

Established business ownership rate. The percentage of the adult population aged 18–64 years who are currently an ownermanager of an established business, i.e., owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than 42 months.

Business discontinuation rate. The percentage of the adult population aged 18– 64 years that have discontinued a business in the past 12 months, either by selling, shutting down, or otherwise discontinuing an owner/management relationship with the business.

Entrepreneurial Employee Activity (EEA). The percentage of the adult population aged 18–64 years who, as employees, have been involved in entrepreneurial activities such as developing or launching new goods or services, or setting up a new business unit, a new establishment, or a subsidiary.

1.3.4 Entrepreneurial framework conditions

The quality of the entrepreneurial framework conditions is based on the average value of experts' perceptions, using a Likert scale of one (highly insufficient) to nine (highly sufficient), for the following entrepreneurial framework components:

- entrepreneurial financing
- government policies: support and relevance, government policies regarding taxes and bureaucracy
- government entrepreneurship programs
- entrepreneurship education at school stage
- entrepreneurship education at post school stage and entrepreneurship training
- Research & Development (R&D) transfer
- commercial and legal infrastructure
- internal market dynamics, internal market burdens or entry regulations
- physical infrastructure
- cultural and social norms.



2. GLOBAL SNAPSHOT OF ENTREPRENEURSHIP

The 2017 GEM study interviewed over 200,000 adults aged 18–64 years in 54 economies. The interviewees spanned a broad range of diverse geographies and development levels.

TEA is the primary barometer of the level of entrepreneurial activity assessed by the GEM study. Based on this study the scale of global entrepreneurship is clearly evident. GEM estimates that 12.5 percent of the adult population, averaged across the 54 participating countries, were early-stage entrepreneurs actively engaged in starting and running new businesses in 2017. Of these, it is estimated that:

- 41 percent of early-stage entrepreneurs are female
- 54 percent of early-stage entrepreneurs expect to create at least one new job in the next five years
- 20 percent of early-stage entrepreneurs expect to create six or more new jobs in the next five years.

In Australia we estimate that there were 1.8 million early-stage entrepreneurs actively engaged in starting and running new businesses in 2017. This represents 12.2 percent of the adult population aged 18–64. Of these, it is estimated that:

- 37 percent of early-stage entrepreneurs are female
- 65 percent of early-stage entrepreneurs expect to create at least one new job in the next five years
- 28 percent of early-stage entrepreneurs expect to create six or more new jobs in the next five years.

2.1 Entrepreneurship and stage of economic development

Since entrepreneurship tends to play a different role in each individual economy depending on the stage of economic development that each economy is at, GEM groups the participating economies into three groups based on the WEF's *Global Competitiveness Report.*⁶ This classification is based on, and takes into account, important economic characteristics, such as Gross Domestic Product (GDP) per capita and the share of exports comprising primary goods. The three groups are:

- Factor-driven economies: These are the least developed economies dominated by subsistence agriculture and extraction businesses, with a heavy reliance on labour and natural resources. In this report we refer to these as less developed economies.
- Efficiency-driven economies: These are developing economies accompanied by industrialisation and an increased reliance on economies of scale, with capitalintensive, large organisations being more dominant. In this report we refer to these as developing economies.
- Innovation-driven economies: These are more advanced economies in which businesses are increasingly knowledgeintensive, with an expanding service sector. In this report we refer to these as developed economies.

Figure 3 compares the TEA for all 54 countries that participated in the GEM study in 2017. It is clear that TEA rates vary between the three categories of economies,

with higher average levels of entrepreneurial activity observed in less developed and developing economies than for developed economies.

A key difference in the characteristics of entrepreneurship between economies with different levels of development can be observed by comparing the primary motivations of the entrepreneurs. Entrepreneurs may be pushed into starting a business out of necessity because they have no other work options and need a source of income (necessity-driven entrepreneurship). On the other hand, they may be pulled into starting businesses because they recognise opportunities and choose to pursue them (opportunity-driven entrepreneurship). GEM also refers to improvement-driven opportunity entrepreneurship, which is when individuals start businesses to improve their incomes or independence in their work.

Figure 4 clearly illustrates the differences in the motivations typically driving entrepreneurship at different levels of economic development. Entrepreneurs in less developed economies tend to be driven equally by necessity and opportunities for improvement. With greater economic development levels necessity decreases as a motivator, while improvement-driven opportunity motives increase.

Developed economies such as Canada, the UK and the USA provide the most relevant group of countries against which to benchmark Australia. Throughout this report we will mainly compare Australia with the other developed economies.

⁶ Schwab, K (ed 2011) The Global Competitiveness Report 2011–2012, World Economic Forum, Geneva.



FIGURE 3 Total TEA in 54 participating economies



FIGURE 4 Percentage of necessity-driven vs. improvement-driven entrepreneurship by level of economic development



3 AUSTRALIA'S LEVEL OF ENTREPRENEURIAL ACTIVITY: PHASES

In this section we compare the rate of individual participation in entrepreneurship in Australia with that in other developed economies.

We therefore present the findings for various phases of entrepreneurship: Potential entrepreneurs who have intentions to found a business, those early-stage entrepreneurs who are actually starting and running a new business, owners of established businesses, individuals who disengaged from their businesses, and informal investment by business angels.

3.1 Total Early-Stage Entrepreneurial Activity

Table 1 shows the percentage of individuals in the adult population of each economy who are engaged in the various phases of entrepreneurship. We have distinguished between individuals who are in the process of starting a business (nascent entrepreneurship), those operating a new business which is up to three and a half years old (baby business ownership), those operating an established business, and individuals with discontinued businesses. The nascent entrepreneurship rate combined with the new business ownership rate forms the TEA within an economy.

Figure 5 compares the TEA for all 24 developed economies. With 12.2 percent of the adult population in 2017 involved in the process of setting up a business or owning a newly-founded business (TEA rate), Australia ranks #6 (behind Israel, South Korea, the USA, Canada and Estonia) among the developed economies. Compared with 2016, the Australian TEA rate has decreased by 2.4 percent.

Figure 6 compares Australia with the USA, UK and Canada more fully, along with the averages for developed economies in regards to nascent, baby businesses, established businesses and discontinuance rates. We see that in terms of nascent ventures (i.e., firms in the start-up phase) Australia (6.4 percent) is ahead of the average of developed economies (5.5 percent) and benchmarks such as the UK (4.4 percent), but below the USA (9.4 percent), and Canada (11.3 percent).

By contrast, Australia (5.9 percent) is comparatively stronger in terms of new businesses (operational businesses 0–3 years old). This rate is substantially higher than the average of developed economies (3.8 percent) and benchmarks such as the UK (4.2 percent) and the USA (4.6 percent). However, we sit substantially below Canada (8.1 percent).

Compared with the USA, Australia sits lower in term of nascent (start-up) businesses, but is higher for both new business ownership rate (i.e., operational businesses 0-3 years old) and established business prevalence (3+ years old) at (9.0 versus 7.8 percent). One explanation is that while more Americans are attempting to start new businesses than Australians, they are less successful on average in getting these businesses up and running. This suggests that Australian nascent entrepreneurs may be more effective at establishing a new firm during the start-up process than USA nascent entrepreneurs, or more committed to doing so. In fact, in the group of developed economies, our new business ownership rate is ranked #4 after Estonia (6.2 percent), South Korea (6.9 percent) and Canada, (8.1 percent), and well ahead of the average of 3.8 percent.

3.2 Established business ownership and discontinuance

Australia's rate of established business ownership is estimated to be 9.0 percent,

about 1.3 times higher than the international average for advanced economies of 5.1 percent. Within the last year, the established business ownership rate in Australia has decreased from 11.3 percent in 2016.

Starting or running a business is risky and it is inevitable that some firms will go out of business. In 2017 the rate of discontinued businesses in Australia was 4.0 percent of the adult population. As a percentage of both established and new businesses ownership this was 26 percent, well below the average of developed economies at about 33 percent (see Table 1). In that sense the relatively high rate of discontinuances simply reflects the healthy renewal or churn of the business population in Australia. Indeed, many business closures are not failures but successful business exits or result from better alternative opportunities for the founders. Other research conducted in Australia by ACE has identified that Australia has very few closures that could be considered to be disastrous.

The estimated Australian discontinuation rate appears to have slightly increased from 3.5 percent in 2016 to 3.8 percent in 2017.

3.3 Informal investment

In order for venturing activity to thrive there must be sufficient money available to finance new businesses. Most of the initial money usually comes from the founders of the businesses themselves, or other informal investors including family, friends, neighbours, work colleagues and strangers; some comes from lending institutions, primarily banks; and in very rare instances from formal investment by venture capitalists. GEM specifically examines funding from informal investors.

⁷ Davidsson, P Steffens, PR Gordon, SR and Reynolds, P (2008) Anatomy of New Business Activity in Australia: Some Early Observations from the CAUSEE Project, QUT working paper, Brisbane, http://eprints.qut.edu.au/13613/

Economy	Nascent entrepreneurship rate		New business ownership rate		Early-stage entrepre- neurial activity (TEA)		Established business ownership rate		Discontinuation of businesses	
	Score	Rank/24	Score	Rank/24	Score	Rank/24	Score	Rank/24	Score	Rank/24
Australia	6.4	7	5.9	4	12.2	6	9.0	5	3.8	9
Canada	11.3	2	8.1	1	18.8	2	6.2	13	6.9	2
Cyprus	3.6	14T	3.8	11	7.3	16T	8.9	6	4.3	7
Estonia	13.4	1	6.2	3	19.4	1	11.4	3T	4.4	6
France	2.9	17	1.1	22	3.9	23	3.6	19	3.3	10T
Germany	3.4	15	2.0	18	5.3	19	6.1	14	1.6	19
Greece	2.3	20	2.6	16T	4.8	20	12.4	1	5.1	4
Ireland	5.8	9	3.3	13	8.9	11	4.4	17	3.3	10T
Israel	8.4	5	5.1	6T	12.8	5	3.3	20T	4.8	5
Italy	2.7	19	1.7	19	4.3	22	6.0	15	2.1	17
Japan	3.2	16	1.6	20	4.7	21	6.3	12	1.5	20
Korea	6.2	8	6.9	2	13.0	4	11.4	3T	2.7	13T
Luxembourg	6.7	6	2.6	16T	9.1	9	3.3	20T	3.2	11
Netherlands	4.7	11T	5.4	5	9.9	8	8.6	7	3.1	12
Puerto Rico	9.5	3	1.4	21	10.6	7	1.6	21	2.7	13T
Qatar	4.7	11T	2.8	15	7.4	15	1.3	22	5.8	3
Slovenia	4.0	13T	3.0	14	6.9	17	6.8	10	2.3	16
Spain	2.8	18	3.5	12	6.2	18	7.1	9	1.9	18
Sweden	5.3	10	2.1	17	7.3	16T	4.2	18	2.5	15
Switzerland	4.7	11T	3.9	10	8.5	13	10.5	4	1.1	21
Taiwan	3.6	14T	5.0	7	8.6	12	12.1	2	4.0	8T
United Arab Emirates	4.0	13T	5.1	6T	9.0	10	5.6	16	9.2	1
UK	4.4	12	4.2	9	8.4	14	6.7	11	2.6	14
USA	9.4	4	4.6	8	13.6	3	7.8	8	4.0	8T
Total	5.5		3.8		9.2		6.9		3.6	

TABLE 1 Entrepreneurial activity across the entrepreneurial process (percentage of Population Aged 18-64)

Source: GEM Global Entrepreneurship Monitor: Global Report 2017/18, London, Global Entrepreneurship Research Association.

FIGURE 5 Total Early-Stage Entrepreneurial Activity (TEA) in 24 developed economies



Source: SA 2017/18 GEM study and GEM Global Entrepreneurship Monitor: Global Report 2017/18, London, Global Entrepreneurship Research Association.



FIGURE 6 Different phases of entrepreneurial activity

Nascent entrepreneurship rate

** Discontinuation of businesses as percentage of adult population 18-64

Source: GEM Global Entrepreneurship Monitor: Global Report 2017/18, London, Global Entrepreneurship Research Association.



FIGURE 7 Prevalence and average amount of informal investment

Economy	Perceived or	oportunities	Perceived co	pabilities	Fear of failure*		Entrepreneurial intentions**	
	Score	Rank/24	Score	Rank/24	Score	Rank/24	Score	Rank/24
Australia	51.4	8	49.3	6	41.4	9	13.2	13
Canada	60.2	5	55.6	2	43.8	7	14.1	12
Cyprus	51.0	9	46.4	9	55.9	2	16.7	8
Estonia	61.0	4	49.7	5	31.8	18T	18.1	6
France	34.1	18	36.3	20	39.1	12	17.6	7
Germany	42.0	14	37.5	19	36.3	14	7.2	20
Greece	13.7	23	43.4	14	55.5	3	7.1	21
Ireland	44.5	12	42.2	15	39.2	11T	11.9	14
Israel	58.3	6	44.1	13	48.0	5	26.4	2
Italy	28.8	20	30.4	22	49.4	4	10.3	17
Japan	7.4	24	10.8	24	41.2	10	3.7	23
Korea	35.3	16	45.7	10	32.2	17	22.8	4
Luxembourg	54.8	7	40.9	18	47.0	6	11.0	15
Netherlands	64.1	2	44.6	12	29.7	19	8.1	18T
Puerto Rico	28.0	21	46.7	8	28.6	21	18.3	5
Qatar	45.6	11	41.1	17	41.9	8	15.7	9
Slovenia	34.6	14	53.3	4	31.8	18T	14.2	11
Spain	31.9	19	44.8	11	39.2	11T	5.6	22
Sweden	79.5	1	34.5	21	36.7	13	8.1	18T
Switzerland	47.2	10	42.1	16	29.5	20	10.5	16
Taiwan	26.6	22	25.9	23	39.2	11T	25.7	3
United Arab Emirates	35.5	15	64.8	1	61.1	1	56.3	1
UK	43.0	13	48.2	7	35.9	15	7.3	19
USA	63.6	3	54.3	3	33.4	16	14.5	10
Average	43.4		43.0		40.3		15.2	

TABLE 2 Perceptions of entrepreneurial opportunities, abilities and intentions across developed economies (percentage of Population Aged 18-64)

*As percentage of population aged 18-64 that perceive good opportunities to start a business. **As percentage of population aged 18-64 that is not currently involved in entrepreneurial activity.

The prevalence rate of informal investors among the adult population of the developed economies in 2017 is about 3.6 percent, with an average investment of US\$32,103 (approx. AU\$42,000) (see Figure 7). Australia's rate of informal investment is about 3.8 percent, a little behind the USA and Canada (5.2 percent and 4.6 percent respectively), and considerably ahead of the UK at 1.5 percent. However, the average amount invested by Australian informal investors (US\$43,108) is above that of both the USA (US\$20,243), Canada (US\$30,979) and the UK (US\$36,200).

3.4 Potential entrepreneurs

Arguably, every individual has the potential to become an entrepreneur. Some of them will venture into entrepreneurship while others, for various reasons, will not. It is therefore important to understand the influence of an individual's perception of abilities as well as the perception of societal attitudes towards entrepreneurship, which together impact an individual's vocational choice. **Table 2** shows that the percentage of individuals in the adult population of each economy differs in terms of individual intentions, abilities and beliefs about entrepreneurship.

Entrepreneurial intentions are defined by the percentage of individuals who expect to start a business within the next three years (those already entrepreneurially active are excluded from this measure). Perceived opportunities reflect the percentage of individuals who believe there is occasion to start a venture in the next six months in their immediate environment. Perceived capabilities reflect the percentage of individuals who believe they have the required skills, knowledge and experience to start a new venture. The measure of fear of failure (when it comes to starting one's own venture) only applies to those who perceive opportunities.

Social values play a key role in determining whether individuals are behaving entrepreneurially or not.⁸ In GEM, social values are captured through three dimensions:

- if most people consider starting a new business a desirable career choice
- if those individuals who are successful at starting a new business enjoy a high level of status and respect in society
- if media attention to entrepreneurship (by promoting successful ventures) contributes or not to developing an entrepreneurial culture in a country.

3.4.1 Intentions, abilities, and beliefs

Entrepreneurial intentions represent the percentage of individuals who expect to start a business within the next three years. Given that intentions generally precede behaviour, entrepreneurial intentions are an important measure of potential entrepreneurship in a society. Figure 8 (rightmost bar) presents the percentage of those currently not engaged in early-stage entrepreneurial activities who expect to found a business in the next three years. With 13.2 percent of the non-entrepreneurial adult population expressing such an intention, Australia is slightly lower than the average of 15.2 percent for all developed economies.

Figure 8 also gives an overview of individual perceptions of opportunities, abilities and beliefs related to entrepreneurship among the general population. Approximately 51.4 percent of Australians perceive good founding opportunities exist for a start-up venture and 49.3 percent believe that they have the necessary skills to start a business. Both measures are above the average of comparative developed economies (43.4 percent and 43.0 percent respectively) including the UK (43.0 percent and 48.2 percent), but lower than the USA (63.6 percent and 54.3 percent) and Canada (60.2 percent and 55.6 percent).

One point of concern is that 41.4 percent of non-entrepreneurial Australians reported perceived fear of failure as a reason that they wouldn't start their own firm. This is higher than the USA and UK (33.4 percent and 35.9 percent respectively) as well as the developed average (40.3 percent), but slightly lower than in Canada (43.8 percent).

3.4.2 Social perceptions

Apart from the perception of skills and founding opportunities, individual perceptions of societal attitudes can greatly influence entrepreneurial activity. Australia ranks approximately equal to the average of developed economies in terms of social perceptions of entrepreneurship as a good career choice, and that successful entrepreneurs attain high status in society. However, it appears that entrepreneurs in Australia receive considerably more positive media attention than the average of developed economies or the UK (see Figure 9).

9 See Slavica, S Amorós, J & Moska, D (2014) Global Entrepreneurship Monitor 2014 Global Report (GEM). http://www.gemconsortium.org/report/49079

⁸ Kwon, SW, & Arenius, P (2010), Nations of entrepreneurs: A social capital perspective. Journal of Business Venturing, 25(3), 315-330.



FIGURE 8 Entrepreneurial perceptions and intentions

*As percentage of population aged 18-64 that perceive good opportunities to start a business. **As percentage of population aged 18-64 that is not currently involved in entrepreneurial activity Source: GEM Global Entrepreneurship Monitor: Global Report 2017/18, London, Global Entrepreneurship Research Association.



FIGURE 9 Entrepreneurial societal attitudes



4. ENTREPRENEURIAL EMPLOYEE ACTIVITY

The GEM consortium has also measured Entrepreneurial Employee Activity (EEA) since 2011.¹⁰ This choice acknowledges the fact that entrepreneurial activity is not restricted to new firms but can also take place in already established firms and organisations. Within these established organisations GEM identifies employees who play a leading role in the creation of new business activities in their firm. This includes a broad range of activities, such as developing or launching new goods or services, or setting up a new business unit, a new establishment or a subsidiary for their main employer.

Figure 10 shows the percentage of the adult population engaged in entrepreneurial activities as employees. Australia's prevalence of employee entrepreneurship of 7.8 percent

places us seventh amongst developed economies and is 1.5 times higher than the average for developed economies.

What is even more revealing is a joint comparison of entrepreneurial activity in established organisations (the EEA rate) and new firms (the TEA rate) as displayed in Figure 11. This figure illustrates that Australia, which has the highest EEA rate, also has the third highest TEA rate. Hence, Australia exhibits a relatively high level of entrepreneurial activity of various types.

¹⁰ For a detailed account of this topic, see Bosma, NWennekers, S and Amorós, JE (2011), Global Entrepreneurship Monitor 2011 Extended Report: Entrepreneurs and Entrepreneurial Employees Across the Globe, http://www.gemconsortium.org/report/48326.



FIGURE 10 Entrepreneurial Employee Activity (EEA)

FIGURE 11 EEA and TEA in developed economies



5. INDICATORS OF THE IMPACT OF ENTREPRENEURIAL ACTIVITY

Businesses are different and so too is their impact on the national economy. This section profiles the potential impact of entrepreneurship in Australia by exploring several indicators on the size and quality of business ventures being started by Australian entrepreneurs, namely:

- the perceived job-creation potential of their businesses
- the perceived innovativeness of their business ideas
- the motivation of the entrepreneur for starting a new business
- the entrepreneur's ambition to serve international markets.

5.1 Job growth expectations

Growth expectations measure how many employees the entrepreneurs expect to employ in five years. Research has shown that growth expectations are indeed a good indicator of later actual firm growth.¹¹ This measure can be interpreted as the expected direct contribution of new firms to job growth in Australia.

Figure 12 presents the TEA rate at three levels of growth expectations: 0 (no employment expectations), 1–5 (low growth expectations), and 6 or more employees (medium to high growth expectations).

Australia is generally well placed compared with other developed economies. Approximately 4.5 percent of the adult population start businesses in which they expect to employ 1-5 employees - this is 1.5 times higher than the developed economies' average and substantially higher than the UK (2.5 percent), comparable with the USA (4.4 percent) and Canada (5.0 percent). Furthermore, 3.4 percent expect mediumhigh growth (larger than 6 employees), which is higher than the UK (2.0 percent) and the developed economies' average (2.0 percent). However, this is substantially less that the USA (5.3 percent) and slightly less than Canada (3.8 percent).

Importantly, at 3.4 percent of the adult population, Australia is ranked #5 amongst the 24 developed economies for the more ambitious category of new ventures creating 6 or more jobs. We are placed well behind Estonia and USA (both 5.3 percent) and a little behind Canada (3.8 percent) and Taiwan (3.7 percent). However, we are well ahead of the UK (2.0 percent), The Netherlands (1.5 percent), Germany (1.2 percent), France (1.1 percent) and Sweden (0.5 percent).

5.2 Innovativeness

Innovative businesses are regarded as agents of change as they introduce new products or services into the market, thereby fostering product variety for customers and contributing to national competitiveness. Therefore, an important dimension of innovativeness is the level of novelty from the perspective of the market and the industry. As such, GEM adopts a relative and contextdependent assessment of the innovativeness of the new business opportunity. GEM asks entrepreneurs whether their product or service is new to some or all customers and whether few or no other businesses offer the same product.

Figure 13 presents the rate of innovative early-stage entrepreneurial activity. With 3.5 percent of the adult population starting firms with innovative products that are new to some or all customers, Australia is about 1.2 times higher on average on this metric when compared to the average for developed economies (2.9 percent) and the UK (2.3 percent). However, as shown, Australia lags behind the USA (4.9 percent) and substantially behind the international leader Canada (8.1 percent).

5.3 Motivation

Entrepreneurs have different motives for entering entrepreneurship. An important distinction is made between individuals who are pushed into entrepreneurship because they lack other job alternatives and individuals who are pulled into entrepreneurship because of lucrative business opportunities.

Exploring this distinction, Figure 14 shows the distribution of necessity-driven entrepreneurship (no better choices for work), opportunity-driven entrepreneurship (taking advantage of a business opportunity) or improvement-driven opportunity (seeking greater independence or income by taking advantage of a business opportunity). On average, for each business started in Australia out of the necessity to earn a living due to a lack of alternatives for the founder, there are about five other businesses started where the founders specifically want to take advantage of a business opportunity in order to increase their personal income or enjoy greater independence. While this ratio is lower than in the USA and UK (12:1 and 7:1 respectively) but it is the same as in Canada (5:1) and higher than the average of other developed economies (7:2).

5.4 Internationalisation

Internationalisation measures the extent to which early-stage entrepreneurs sell to customers outside their domestic market. In general, serving international markets signals both high ambitions and international competitiveness of a country's early-stage entrepreneurs.

Unlike the other dimensions of the impact of our early-stage entrepreneurs, Australian entrepreneurs rank below average with respect to international orientation. As illustrated in Figure 15, just 8 percent aim for a substantial share of revenue (>25 percent) from international markets, compared with an average of 26 percent for other developed economies. This is much lower than in the USA, UK and Canada (17 percent, 15 percent and 37 percent respectively). However, we must keep in mind that developed economies in GEM are dominated by European countries.

¹¹ For example: Baum, R, Locke, E, and Smith, K (2001) Multidimensional Model of Venture Growth, in The Academy of Management Journal, 44(2), pp. 292–303; Wiklund, J and Shepherd, D (2003), Aspiring for, and Achieving Growth: The Moderating Role of Resources and Opportunities, Journal of Management Studies 40(8), pp. 1919–1941.



FIGURE 12 Growth expectations of early-stage entrepreneurs

Source: GEM Global Entrepreneurship Monitor: Global Report 2017/18, London, Global Entrepreneurship Research Association.



FIGURE 13 Innovative early-stage entrepreneurial activity



FIGURE 14 Motives of early-stage entrepreneurs

Source: GEM Global Entrepreneurship Monitor: Global Report 2017/18, London, Global Entrepreneurship Research Association.



FIGURE 15 Percentage of early-stage entrepreneurs (TEA) by international orientation

6. ENTREPRENEURSHIP TRENDS: STABLE SINCE RECOVERY FROM THE GFC

To examine the impact of economic cycles on entrepreneurship rates we examined trends over the period 2006 to 2017.

Figure 16 illustrates the trends in overall TEA for Australia¹² and counterpart developed economies from 2006 to 2017. The innovation average is calculated for developed countries that have regularly participated in GEM over this period (six or more of the ten years¹³) and are dominated by European nations.

It is clear that entrepreneurship rates vary differently over time in different parts of the world. These changes are largely driven by changing economic conditions. In the years for which data are available, it can be seen that overall Australia follows similar trends to the USA. The USA had a sharp drop in TEA in 2009 and 2010. This clearly reflects the effects of the global financial crisis (GFC) at this time.¹⁴ By 2011, however, entrepreneurial rates in the USA had recovered; Australia exhibits a similar trend. Although it seems that the GFC had a substantial impact on new business entry we know from the CAUSEE research project¹⁵ that the GFC had little effect on those already engaged in early-stage entrepreneurial activity.

The trends since recovery from the GFC (in 2011) have been relatively stable for both the USA and Australia. This said, entrepreneurship participation appears to have dropped in Australia since last year by approximately 2 percentage points. Also notable is that Canada's recent upward trajectory is quite distinct from other

economies shown. We analyse these divergent trends further below.

To provide further insight into the variations in entrepreneurial activities with changes in economic conditions, we investigated trends in TEA for opportunity-driven versus necessity-driven motivated business from 2006 to 2017 (see Figures 17 and 18). Economic downturn generally impacts on entrepreneurial activity in two ways. Firstly, there may be fewer attractive business opportunities for potential entrepreneurs to exploit, so we can expect opportunitymotivated entrepreneurial activity to decline. Secondly, softer economic conditions lead to higher unemployment and fewer possibilities for paid employment. As a result, we can expect necessity-motivated entrepreneurship rates to increase as more individuals are pushed towards starting new businesses and self-employment as a way to generate sufficient income.

With respect to opportunity-driven entrepreneurship, it dropped sharply in the USA in 2009 and 2010, but rebounded strongly in 2011. This drop was extreme, falling to 4.8 percent in 2010 – approximately half of the 2008 level of 9.5 percent. This effect was not seen strongly in the UK and Europe (who dominate the developed economies). From the available data, the impact in Australia seems to be similar to the USA. The impact of the GFC for necessity-driven entrepreneurship was entirely different (see Figure 18). In the USA, the prevalence of necessity-driven entrepreneurship rose dramatically in 2009 and 2010. The level of necessity entrepreneurship remained relatively high in the USA through 2013, with a strong recovery in 2014. This negative impact of the GFC appears to be much less severe in Australia, the UK and other developed economies.

Since recovery from the GFC in 2014, entrepreneurship rates in Australia have been relatively stable. An increase in 2016 of approximately 2 percentage points has reversed in 2017 (Figure 16). This represents an even decline in both opportunity-driven and necessity-driven entrepreneurship (Figures 17 & 18). This stability is similar to other benchmarks, with the exception of Canada that has seen a strong upward shift over recent years. We observed in the previous section that the majority of this increase is due to selfemployment (see Figure 12). Also, we see that necessity entrepreneurship has increased strongly in Canada in 2017 (Figure 18).

¹² ACE joined the GEM consortium as the Australian partner in 2010. Australia did not participate in GEM over the period 2007 to 2009. Australian data are only available for 2006 (data collected by Swinburne University of Technology), 2010 and 2011, 2014 and now 2015-2017.

¹³ Specifically, the countries include Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Israel, Italy, Japan, Korea (South), Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, the UK and USA.

¹⁴ GEM data are collected in May and June, so the 2006 to 2008 figures represent the situation prior to the Lehman Brothers' collapse (September 2008), which signalled the beginning of the GFC.

¹⁵ Davidsson, P and Gordon, S (2016). "Much Ado about Nothing? The Surprising Persistence of Nascent Ventures through the Global Financial Crisis" Entrepreneurship Theory and Practice, 40(4), 915–94. 1.



FIGURE 16 Early-stage entrepreneurial activity (TEA) 2006-2017

FIGURE 17 Opportunity-driven motive TEA 2006-2017



Source: GEM Global Entrepreneurship Monitor: Global Report 2017/18, London, Global Entrepreneurship Research Association.



FIGURE 18 Necessity-driven motive for TEA, 2006–2017



7. AUSTRALIA'S ENTREPRENEURSHIP PROFILE

Entrepreneurs do not form a homogeneous group, differing between each other in many respects.

Therefore, a simple count of entrepreneurs does not fully describe the diverse profile of entrepreneurship and its impact on the Australian economy. This section looks at two characteristics of Australia's entrepreneurship profile:

1. Industry: The distribution of entrepreneurial activity across key economic sectors

2. Inclusiveness: The distribution of entrepreneurs by gender and age.

7.1 Industry sector

The distribution of early-stage entrepreneurs by industry is shown in Figure 19. In general, the sectorial distribution of Australian businesses is comparable with other developed economies. Most new Australian firms are professional services, information communications and technology (ICT) or finance (34 percent), retail-wholesaletransport (31 percent), or consumer-oriented (17 percent). This profile is similar to other developed economies. As Australia is rich in natural resources and agriculture, new primary production businesses (12 percent) are relatively common when compared to other developed economies (average 10 percent). However, Australia, at 5.5 percent, lags slightly behind other developed economies in terms of the percentage of manufacturing start-ups (7.1 percent). That said, our start-up rate in manufacturing in relation to the size of the adult population is on par with the average for developed economies (0.67 vs. 0.65 percent) due to our relatively high TEA rate.

7.2 Inclusiveness

Inclusiveness refers to access to entrepreneurial opportunities within a society. If two individuals have equal skills and resources then access to entrepreneurial opportunities should ideally not be discriminated by individual characteristics such as gender and age.

7.2.1 Women's participation in entrepreneurship

Figure 20 presents the TEA rate for the male and female adult population across the developed economies. Approximately 9.2 percent of adult females are involved in setting up a business or have recently done so. In absolute terms, Australia ranks seventh behind the Netherlands (9.4 percent), South Korea (10.3 percent), the USA and Israel (10.7 percent), Estonia (14.4 percent) and Canada (15.0 percent) in terms of female entrepreneurship among the developed economies. Although such a gender gap is commonly observed around the globe, we also observe countries such as Spain, Qatar, UAE and the Netherlands, where male and female entrepreneurial participation is approximately equal (albeit at a substantially lower level than in Australia, except for the Netherlands).

7.2.2 Age distribution of early-stage entrepreneurship

As Figure 21 reveals, early-stage entrepreneurship is more common in the mid-career ages of 25–54 years than in either the younger or older age groups. This pattern is consistent across all parts of the globe. Australia's profile of start-up activity (TEA) is particularly strong in the older age groups. With 9.3 percent of 55–64 year olds engaged in early stage entrepreneurship, Australia ranked #3 amongst developed economies, just behind Israel (12.5 percent) and South Korea (14.2 percent). However, it is substantially higher than Canada (8.1 percent), the USA (7.6 percent), UK (5.0 percent) and the developed economies average (5.9 percent). We also rank third in the 35–44 age bracket (16.5 percent), narrowly behind Canada (21.5 percent) and Estonia (23.5 percent).

While entrepreneurial participation for older Australians is very strong, the same is not true for Australian youth. Comparing our TEA age profile with that of the USA, we see that entrepreneurial prevalence is substantially higher in Australia for the older age categories (55-64), similar or lower than the USA for the mid age groups but substantially lower for the lower age groups. In the youngest age bracket (18-24) at 7.6 percent, Australia's entrepreneurial participation is substantially lower than many other countries including the Netherlands (11.2 percent), the USA (11.4 percent), Canada (17.2 percent) and Estonia (24.6 percent).



FIGURE 19 Sector distribution of TEA





$FIGURE\ 20\ Comparison\ of\ female\ and\ male\ TEA\ rates$

Source: GEM Global Entrepreneurship Monitor: Global Report 2017/18, London, Global Entrepreneurship Research Association.



FIGURE 21 Age distribution of TEA



8. AUSTRALIA'S ENTREPRENEURIAL ECOSYSTEM (ENTREPRENEURSHIP FRAMEWORK CONDITIONS)

The GEM conceptual model presented in Section 1 identifies nine institutional or framework conditions, such as education and cultural support, which in turn impact the quantity and quality of entrepreneurial activity in each country.

In order to assess these framework conditions, each GEM national team interviewed four experts for each topic -36experts in total (see Table 3 for those who opted to be named in this report). Please note that the following analysis is based on a small and non-random sample, therefore the results are not representative and must be interpreted with care. Figure 22 illustrates the following framework conditions: a) finance and entrepreneurship, b) general entrepreneurship policies, c) national regulation policies, d) government entrepreneurship programs, e) entrepreneurship education in primary and secondary schools, f) post-school entrepreneurship education, g) research and development (R&D) transfer, h) professional and commercial support



for entrepreneurship, i) internal market dynamics (the level of change in markets from year to year), j) internal market burdens or entry regulation (the extent to which new firms are free to enter existing markets), k) access to physical infrastructure, and l) cultural support for entrepreneurship.

Compared with the average for the various framework conditions among developed economies, Australia scores relatively similarly on most dimensions. Australia scores relatively highly in entrepreneurship education at school stage. Australia scores relatively lower with respect to government policies (support and relevance), entrepreneurial education post school and R&D transfer.

$FIGURE~22 \hspace{0.1 cm} \text{Expert ratings on entrepreneurship framework conditions}$



TABLE 3 National Expert Survey participants

Doron Ben-Meir

Vice Principal Enterprise, University of Melbourne; Chair, University of Melbourne Commercial Ltd and Director, BioCurate Pty Ltd.

Sandy Blackburn-Wright Managing Director, Social Outcomes

Martin Bliemel Senior Lecturer, Faculty of Transdisciplinary Innovation (FTDI) at the University of Technology Sydney (UTS)

Monica Bradley Director, Purposeful Capital

Winna Brown Partner, Ernst & Young

Daryl Connelly Executive Officer, Switch Tasmania

Tony Dormer Consultant, Director and provider of multidisciplined business services.

Jude Ellen Chief Executive and Activist, Rust490 and Dolphin Software

Andrew Fraser Network Innovation Leader TasNetworks, Startup Tasmania board member

Mark Gustowski Acting CEO, QUT Creative Enterprise Australia

Rod Holden Executive Director, Natural Impact Group Alan Jones

Angel investor, Entrepreneur in Residence at BlueChilli

Phillip Kemp Chief Executive, Business Foundations Inc

Craig Lambert Founder

Craig Latham Deputy, Office of the Australian Small Business and Family Enterprise Ombudsman

Arthur Lau Senior Policy Officer, Commercialisation and Entrepreneurship

Margaret Ledwith Associate Professor of Practice and Program Director, Innovation & Enterprise, New Venture Institute, Flinders University

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John Mackenzie AusIndustry Entrepreneurs Programme Business Advisor

David Masefield Founder - StartupToowoomba & Canvas Coworking Inc. Polly McGee Digital Strategist and Entrepreneur Educator

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Managing Director, MPT Innovation Group. Expert-in-Residence UNE. Adjunct Professor QUT. Honorary Professor Chinese Academy of Sciences.

Phil Morle Partner - Main Sequence Ventures

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Ms Anna Rooke Anna Rooke, CEO, QUT Creative Enterprise Australia

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Jo Ucukalo

Claire Louise Smith Consultant

Innovation

CEO Handle My Complaint

Doron Ben-Meir Director, MSAJ Pty Ltd

Sandy Blackburn-Wright Executive Manager, Policy & Projects - Australian Academy of Technology & Engineering (ATSE)

9. CONCLUSIONS AND POLICY IMPLICATIONS

Overall, this report paints a positive picture of entrepreneurial conditions and activity in Australia, albeit less so than 12 months ago.

With 12.2 percent of the adult population involved in setting up a new business or owning a newly-founded business (TEA rate) in 2017, Australia has a healthy rate of start-up activity: we are ranked #6 of 24 developed economies, well above the average of developed economies (9.2 percent) and benchmark economies like the UK (8.4 percent), and at a similar level to Israel (12.8 percent) and the USA (13.6 percent). However, Australia is tracking lower than other benchmark economies such as Canada (18.8 percent) and Estonia (19.4 percent). The Australian prevalence of entrepreneurial activity is also lower than the 2016 level (14.6 percent).

The findings also indicate that it is not only independent entrepreneurship that is strong in Australia. The rate of EEA – the number of employees leading innovative efforts for their employers – was also comparatively high. With an EEA prevalence of 7.8 percent of the adult population, Australia is ranked #7 amongst all 24 developed economies in the GEM study, and is comparable with the USA, UK and Canada (7.6 percent, 8.0 percent and 8.2 percent respectively).

The findings also suggest that not only is the quantity of entrepreneurial activity in Australia comparatively high, but the quality is also strong by world standards. Compared with the average of developed economies, Australia has high levels of both innovative start-ups and high ambition business startups in terms of expected employees.

What drives this high quantity and quality of entrepreneurship in Australia? The GEM findings suggest that it is a combination of both business opportunities and entrepreneurial skills. Approximately 51 percent of the Australian population identify opportunities for a start-up venture and 49 percent believe that they have the necessary skills to start a business – well above the average of other developed economies. The visibility and desirability of entrepreneurship also appears to be positive in Australia, is comparable to and is likely to serve as a catalyst for the strong rates of entrepreneurial activity reported. A large majority (74 percent) of respondents reported positive media attention and a high status of entrepreneurship, which serve to provide successful role models for prospective entrepreneurs.

In 2016 we reported that necessity-driven entrepreneurship (2.4 percent necessity-based TEA) had risen from historic-average levels (approximately 1.7 percent). However, this number has slightly dropped to 2.1 percent in 2017.

Despite these positive features of Australia's entrepreneurship profile, several aspects of the 2017 GEM findings raise particular concerns.

First, while Australia's female participation in entrepreneurship is comparatively high and ranked #7 across the 24 developed economies, the Female TEA of 9.2 percent remains considerably less than the Male TEA of 15.3 percent. This discrepancy is somewhat high, particularly in light of countries such as Spain, Qatar, UAE and the Netherlands that have almost equal male and female entrepreneurial participation (albeit at lower levels than Australia with the exception of the Netherlands). It is important that the institutional environment in Australia continues to support and encourage female entrepreneurship, and works towards decreasing gender imbalance.

Second, fear of failure as a reason for not planning to start a business remains comparatively high in Australia, at 41.4 percent, compared with the average of other developed economies of 40.3 percent and benchmarks such as the USA at 33.4 percent and UK at 35.9 percent. While entrepreneurship prevalence continues to be comparatively strong in Australia, there may be opportunities to improve entrepreneurial participation. It is vital to ensure that the strong level of perceived entrepreneurial opportunities and capabilities of Australians continues to be successfully translated into new ventures. This presents policymakers, support agencies and educators with opportunities to provide skill and knowledge development that is specifically directed towards new venture start-ups.

Third, our generally high levels of entrepreneurial activity relative to benchmark economies do not seem to translate to youth entrepreneurship. For example, while TEA age is substantially higher in Australia compared to the USA for the older age categories, at 9.3 percent it is lower than the USA (11.4 percent) for the younger 18-24 age group. This is substantially lower than some other economies such as Estonia (24.6 percent), The Netherlands (11.2 percent) and Canada (17.2 percent). An earlier GEM report¹⁶ revealed that school-aged entrepreneurial education in Australia, although increasing, lags behind the global average and that this is likely to be a contributing factor to lower youth entrepreneurship rates in Australia.

Fourth, Australian entrepreneurship appears to compare poorly to other developed nations with respect to the level of

¹⁶ Steffens, P. & Hechavarria (2015). Global Entrepreneurship Monitor: GEM Australia – 2014 National Report. Australian Centre of Entrepreneurship Research, QUT, Brisbane.



international opportunities being pursued. Although this is undoubtedly due in part to our geographic isolation from international markets, it remains an open question as to why, and how it can be improved. Given the greater focus on globalisation and reduction of trade barriers, improvement in the international orientation of Australia's entrepreneurs may be possible.

Finally, in interpreting the findings of this report it is important that we acknowledge that most start-ups are of a modest nature in terms of overall growth expectations and innovativeness. The typical new firm starts small and remains small. We stress that since GEM is a study of the population of all businesses, the numbers of very highgrowth start-ups captured in the study are too small to make any direct assessment of very high-growth ventures in Australia. Nonetheless, while the impact of a single new firm might be small, collectively they are crucial for the growth and development of our economy. Furthermore, the greater the quality and overall pool of start-ups, the larger the number of high-potential start-ups. In this sense, the GEM study does provide evidence that the overall pool of quality start-ups is comparatively reasonably strong in Australia. It is these high-potential startups that arguably have the greatest impact on the economy. To support this we are pleased to see that the indicators of highpotential entrepreneurship in Australia are positive. These indicators, including expected employment growth, innovativeness and opportunity versus necessity motivations of new businesses, all compared positively with other developed economies.

Further Enquiries

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