



# Westpac GEM Australia

A STUDY OF AUSTRALIAN ENTREPRENEURSHIP IN 2003

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**Westpac**

Business Bank



# **Westpac *GEM Australia***

## **A Study of Australian Entrepreneurship in 2003**

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## Preface

Paul Lilley

Group General Manager, Sales & Service  
Westpac Banking Corporation



On behalf of Westpac, I'm pleased to present the *Westpac GEM Australia Report*. This Report is an important annual measure of entrepreneurial activity that details the quality and quantity of business start-ups and young firms in Australia. It also provides a valued perspective on the cultural, structural and political support for entrepreneurship. And for the first time, the *Westpac GEM Australia Report* provides a measure of entrepreneurial orientation within established businesses.

Westpac is proud to sponsor the Australian Graduate School of Entrepreneurship. The School conducts the independent research that results in this unique document. We take a keen interest in assisting the ongoing research and development of entrepreneurship in Australia as integrity, performance and 'doing things differently' are at the heart of Westpac's own culture. Established in 1817 as the Bank of New South Wales, Westpac is Australia's first and oldest bank and its first and oldest company.

We reached our leading position in the banking industry and community through a number of factors including innovation. This has evolved through active participation in the dynamics of a growing country.

We believe the level of entrepreneurship reflects the health of the economy. This Report enables Australians to monitor our own entrepreneurial activity and benchmark our efforts against other economies. An investment in this research is an investment in the growth prospects of Australia as a whole.

A new initiative in this year's Report is the 'Action Focus' section. This feature will help SME owners and managers put into practice what research has shown makes individual businesses more profitable, and economies more dynamic and entrepreneurial. The Action Focus will be a feature of each *Westpac GEM Australia Report*.

This year, the Action Focus looks at the difficult issue of opportunity assessment – that is how to recognise and evaluate opportunities for a new or existing business. Worldwide research indicates that effective opportunity assessment is a key success factor in starting a new business, growing an existing one or even staying in business in adverse times. In this issue, Professor Kevin Hindle provides a succinct set of guidelines explaining how to conduct such an assessment. This should benefit every aspiring entrepreneur and SME in Australia.

The GEM Australia research provides a detailed knowledge base for Australian policy makers supporting new and small businesses. This year's *Westpac GEM Australia Report* includes a summary of entrepreneurship policy evolution in Australia. Of particular note is the federal government's recent announcement of a range of enhancements to the National Research Priorities Framework. The new goals include: 'Promoting an innovation culture and economy'. This description reflects the importance of commercialising innovation – that is creating a tangible commercial or social outcome from a new idea or new perspective on an existing idea.

This goal is consistent with the intent of the GEM Australia research team: to help maximise the value of Australia's enormous creative and technological capability by understanding the factors that turn ideas into businesses. Westpac's corporate responsibility also aspires to build social capital through responsible alliances and sponsorships.

Together, profitable and social entrepreneurship constitute the most important driver of Australia's economic future. From new enterprise will come the jobs and the vitality of tomorrow's Australia. Westpac is committed to the GEM Australia project because we understand the importance of supporting Australia's new businesses when they are young and even before they are born.

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# Executive Summary

## DOMINANT THEMES IN 2003

In 2003, entrepreneurial activity in Australia recovered substantially from the significant drop witnessed in 2002, though not to the previous peak of 2001. The majority of GEM participant countries experienced a mild decline. The USA and the UK, however, both saw upturns in their entrepreneurial activity.

A new measure – firm entrepreneurial activity (FEA) – was developed in 2003. This measured the extent to which established, but still privately owned, businesses engaged in entrepreneurial activity, as measured by market expansion and job creation. Australia's ranking was middling, just below the median.

## MAJOR OBSERVATIONS

Participation in entrepreneurial activity improved across the board from the low of 2002, but still fell short of the peak of 2001. Specifically:

- The start-up participation rate recovered from 3.8 per cent to 6.6 per cent (2001: nine per cent) and the rank rose from 18th to eighth.
- The young firm (aged between three and 42 months) participation rate remained stable, rising only slightly from 5.2 per cent to 5.4 per cent (2001: 7.2 per cent), ranking Australia seventh, compared with 10th last year.
- Australia's Total Entrepreneurial Activity (TEA) participation rate (start-ups and young firms combined) recovered from 8.7 per cent to 11.6 per cent (2001: 16.2 per cent) and the rank improved from 15th to eighth.
- Female participation in entrepreneurial activity rose sharply from 5.6 per cent to 9.6 per cent, not far below the 2001 level of 10.6 per cent. The proportion of female entrepreneurs to male entrepreneurs rose from 48 per cent to 71 per cent – the highest proportion in four years of participation in GEM.
- Business angel participation recovered from 1.8 per cent to 3.2 per cent, not far below the 2001 peak of 3.8 per cent.

Once again, the countries with the highest participation rates in entrepreneurial activity were from the developing economies. Uganda and Venezuela, both new to GEM, led the field with total entrepreneurial activity participation rates of 29.3 per cent and 27.3 per cent respectively. In both of these countries, however, the proportion of entrepreneurial activity motivated by necessity rather than opportunity was higher than in Australia and other OECD countries.

Of 27 countries that participated in GEM in both 2002 and 2003, 17 experienced a decline in total entrepreneurial activity, but a much milder one than was the pattern in 2002. Whereas in 2002, the decline was driven by a drop in start-up participation, in 2003 it was evenly distributed between start-up and young firm participation.

The positive relationship between entrepreneurial activity and economic growth was reinforced. The TEA rate was found to be positively correlated with the GDP growth rate (observed or projected) for the following three years. The relationship was stronger for necessity-driven entrepreneurial activity and increased with time lag.

Venture capital investment activity in Australia declined between 2001 and 2002 and continued this decline in 2003. This is consistent with a global decline in classic venture capital (funding growth rather than restructuring) investment worldwide. In the USA, classic venture capital investment as a percentage of GDP declined by 80 per cent between 2000 and 2002. Business angel investment as measured by the GEM population survey far outweighed formal venture capital investment. The majority of angel investors were related to or had prior acquaintance with their investee, indicating the importance of family and community financial support for new venturers.

The national experts interviewed for the GEM 2003 project once again identified Financial Support, Government Policy, Education, Entrepreneurial Capacity, and Culture as the main weakness areas impeding entrepreneurial activity – the same areas as last year. In terms of balance between weaknesses and strengths, financial support was considered the most critical area, probably driven by the decline in formal equity investment activity. The compliance burden generated by the Australian taxation and business regulation environment emerged as a more urgent issue than ever before in GEM Australia.

## EXPLANATIONS

Last year, the GEM Australia team presented the hypothesis that entrepreneurial activity levels in Australia – especially start-up participation – were particularly susceptible to changes in business confidence, because Australia's entrepreneurial capacity was relatively weak. The improvement in entrepreneurial activity between 2002 and 2003 was, indeed, associated with an increase in business confidence. And it was start-up participation that recovered; young firm participation remained stable. Expert assessment of Australia's entrepreneurial capacity remained low.

Within Australia, the factors that increased the likelihood of participation in entrepreneurial activity were: believing you had the skills to start a business; knowing someone who had started a business recently; and perceiving good business opportunities in your local community. The factors that decreased likelihood of participation were fear of failure and being female. These findings are consistent with previous years. Although women were less likely than men to be involved in entrepreneurial activity, they were more likely to be motivated by opportunity than necessity.

Those who were worried by fear of failure were more likely to be non-employing businesses – that is employ no-one but the owners. Conversely, those who were confident they had the skills to start a business were more likely to have at least one employee.

The key issues identified by the experts interviewed for GEM in 2003 were supported by external sources:

- **Financial support**, in the form of venture capital, has decreased. A six year review of the venture capital industry in Australia not only confirmed that investment had declined, but showed that early stage investments were hardest hit. The six year review also corroborated other limitations identified by GEM experts, not just in 2003, but in previous years. “It is hard to get funding unless you are in Sydney or Melbourne”. True: more than 80 per cent of early stage investment, over the six years, went to New South Wales and Victoria. “There are few investors in the \$200,000 to \$1 million range”. True: even at the seed stage, the average deal size was \$1 million and GEM population surveys have consistently found that only about five per cent of business angels invested more than \$200,000.
- The worsening **compliance burden** has also been highlighted by professional organisations such as CPA Australia and the Australian Chamber of Commerce and Industry (ACCI), with the taxation and employment regulations most frequently cited as a burden.
- Australia’s **entrepreneurial capacity**, in terms of ability to commercialise innovation on a global scale, was given a mediocre rating by the World Economic Forum’s Innovative Capacity Index. Australia was found to have attained the status of a ‘second tier’ innovator (an improvement on its original status of ‘imitator’), but had been overtaken by several other countries in recent years.
- Lack of role models to act as inspiration, mentors or patrons, was regularly raised by GEM experts as a problem in Australia. This was not, in the main, because they felt Australia doesn’t have suitable role models, but because such people preferred to keep a low profile. Why? Because of ‘tall poppy syndrome’ – the tendency to look for weaknesses in high achievers and ‘chop them down to size’.

## IMPLICATIONS

Four years of GEM research have observed significant fluctuations in entrepreneurial activity as measured by the TEA index, but little change in the support infrastructure for entrepreneurial activity, as measured by the nine ‘entrepreneurial framework conditions’ of GEM. Business confidence appears to be a major influence on the level of start-up activity and business confidence is highly volatile, as can be observed from the quarterly Westpac-ACCI survey of industrial trends. This volatility does not seem to be justified by external events – that is business confidence appears to over-react to adverse events and then correct when the reality proves to be less serious than the perception.

Australia’s fluctuation in entrepreneurial activity is one of the highest of long-term GEM participants. The USA has also experienced considerable volatility, which the GEM USA team attributes to the period of low US GDP growth, from which recovery began in 2002. By contrast, Australia’s lowest level of entrepreneurial activity (2002) occurred when Australia’s GDP growth was at its highest for three years. It appears that business confidence in Australia may be more heavily influenced by the health of the US (and hence global) economy than the strength of the Australian economy, even though the majority of entrepreneurial activity captured in the GEM Australia population survey consists of small business serving their local community.

A policy impact model, the Entrepreneurship Policy Framework, introduced in the GEM Australia 2000 report, was used to analyse the development of support for entrepreneurship in Australia during the four years of participation in GEM.

This perspective highlighted several adverse trends and long-term shortcomings:

- The lack of role models affects not just individual entrepreneurs, but firms, industries and even governments.
- Long-term concerns about the ability of the education system to prepare students for the possibility of starting a business rather than becoming an employee, or to improve their capacity to succeed, have not been addressed.
- The regulatory infrastructure for Australian businesses, in particular the complexity of the taxation system, is seen as getting worse, rather than improving.
- Australia’s system of government makes it hard to achieve long-term horizon within which individuals, firms and industries can plan, due to the frequency of elections and the rarity of bipartisan initiatives.
- Australia’s privately owned established businesses are not highly entrepreneurial in outlook (as measured by the FEA referred to above). In general, large companies in Australia





have a low tolerance of entrepreneurial individuals within their ranks (as reported by GEM experts).

- Australian society is unforgiving of failure, including honest mistakes, thus creating a cultural context that encourages only low-risk, low-reward ventures.

If Australia's entrepreneurial activity performance is to become more stable, we need to improve our confidence in our ability to withstand periods of adverse conditions – in other words, to increase our entrepreneurial capacity. Recommendations from previous reports have emphasised this need, and those recommendations are still pertinent.

This year, three suggested actions to which the academic community, of which the authors are part, can contribute are highlighted. Two of these build on previous recommendations:

1. The creation of a Collaborative Development Centre (CDC) devoted to enhancing entrepreneurial capacity, with particular emphasis on establishing internationally-oriented, high-growth, high-employing new ventures;
2. The establishment of an annual, regional forum to exchange latest knowledge on entrepreneurship research and entrepreneurship education;
3. Targeted research into 'tall poppy syndrome', its causes, its effect on entrepreneurial activity and leadership in general, and how its negative impact might be reduced.

## CONCLUSION

As well as highlighting key issues for policy makers and offering some suggested actions, the *Westpac GEM Australia Report* aims to be directly useful to entrepreneurship practitioners. With this in mind, a new section – the 'action focus' has been introduced. Each year, a practical method, based both on academic research and practical experience, will be presented. The first Action Focus, written by Kevin Hindle, presents a 10-step process for managing the key entrepreneurial skill of opportunity assessment.

# Introduction

## The GEM Australia project

### PROJECT OVERVIEW

The Global Entrepreneurship Monitor (GEM) project originated in September 1997 as a joint research initiative by Babson College (USA) and London Business School. It aimed to bring together specialist scholars in entrepreneurship to study the complex relationship between entrepreneurship and economic prosperity. From the outset, the project was designed to be a long-term multinational enterprise, with a growing number of partner institutions.

GEM was launched in 1999 with 10 countries participating and has expanded rapidly since then. Participant countries (by year of joining) are shown in Table 1.

**Table 1 – GEM participant countries**

Year	Countries
1999	Canada, Denmark, Finland, France, Germany, Israel, Italy, Japan, UK, USA
2000	Argentina, <b>Australia</b> , Belgium, Brazil, India, Ireland, Norway, Singapore, Spain, South Korea, Sweden
2001	Hungary, Mexico, Netherlands, New Zealand, Poland, Portugal, Russia, South Africa
2002	Chile, China, Croatia, Hong Kong, Iceland, Slovenia, Switzerland, Taiwan, Thailand.
2003	Greece, Uganda, Venezuela

GEM is both a set of linked, international research projects and a set of documents that report project results. Each country produces an independent, national report (*GEM Australia*, *GEM USA*, *GEM United Kingdom* etc.), which explores in detail the nature, extent and effects of entrepreneurship within the individual country, including selected comparisons with other nations.

At the international level, the *Global Entrepreneurship Monitor Executive Report* presents major findings across all participating countries and describes any emerging patterns.

### RESEARCH QUESTIONS AND THEORETICAL FRAMEWORK

GEM explores three fundamental questions

- Does the level of entrepreneurial activity vary between countries, and, if so, to what extent?
- Does the level of entrepreneurial activity affect a country's rate of economic growth and prosperity?
- What makes a country entrepreneurial?

These questions are explored in the context of a theoretical model illustrated in Figure 1. Before GEM, most studies of economic performance focused on established enterprise – the status sector of the economy. The value of emerging (as distinct from established) enterprise was missing from most attempts to measure economic performance.

GEM focuses its attention on a set of factors that specifically influences the entrepreneurial sector. These are termed the Entrepreneurial Framework Conditions, listed in and explained in more detail in Appendix 3.

These nine frameworks are the main determinants of the entrepreneurial environment. They achieve their influence in combination with entrepreneurial opportunity and entrepreneurial capacity. These factors – environment, opportunity and capacity (which includes both skills and motivation to capitalise on opportunity) – act together. Their combination determines the rate of business birth, death and growth (business churning), which in turn contributes to economic growth and prosperity.

### RESEARCH METHODOLOGY

Three main data collection methods are used:

- An adult population survey, randomly sampling a minimum of 2,000 typical adults.
- Face-to-face 'open-ended' interviews with at least 36 experts (called 'key informants') on various aspects of entrepreneurship. These experts also complete a detailed, structured questionnaire.
- The use of selected national economic data, measured in standard units, from sources credible international sources including the Organisation for Economic Cooperation and Development (OECD) and the World Bank.

Appendix 3 of this report contains a detailed explanation of the methods employed to collect data for GEM Australia and the forms of secondary sources used.





### SUMMARY OF PREVIOUS YEARS' FINDINGS

The four years of research 1999 to 2002 found that entrepreneurial activity did vary significantly between countries. In 2002, activity varied from a low of less than 3 per 100 persons in Japan, Russia and Belgium to a high of 18 per 100 in Thailand and India (Reynolds et al. 2002: 5).

In both 2000 and 2001, Australia was one of the most entrepreneurially active countries, ranking fourth of 21 in 2000 and third of 29 in 2001. In 2002, together with the majority of GEM participant countries, Australia's activity levels took a plunge. The GEM Australia team attributes this to a decline in entrepreneurial confidence triggered by declining economic conditions worldwide and accentuated by the shock of the events of September 11, 2001.

Even at its height, Australia's entrepreneurial activity reflected a country where a lot of small businesses were started rather than a country that produced world class companies. Australian experts consistently identified culture, education, government support and financial support as areas impeding Australia's entrepreneurial performance.

### FORMAT OF THE WESTPAC GEM AUSTRALIA REPORT

The philosophy is to present the data first, possible explanations of the data second and implications – particularly policy implications – third. The Focus Report, introduced in 2002, this year becomes an Action Focus intended to be of practical use to entrepreneurs and those who invest in them.

**Part One: Observations.** This section summarises what the data tell us in answer to GEM's three principal questions, both in Australia and by comparison with other participant countries. Part One is sub-divided into observations of entrepreneurial activity, the entrepreneurship support environment and the relationship between entrepreneurial activity and economic growth. A 'scorecard' summarises each of the first two sub-sections.

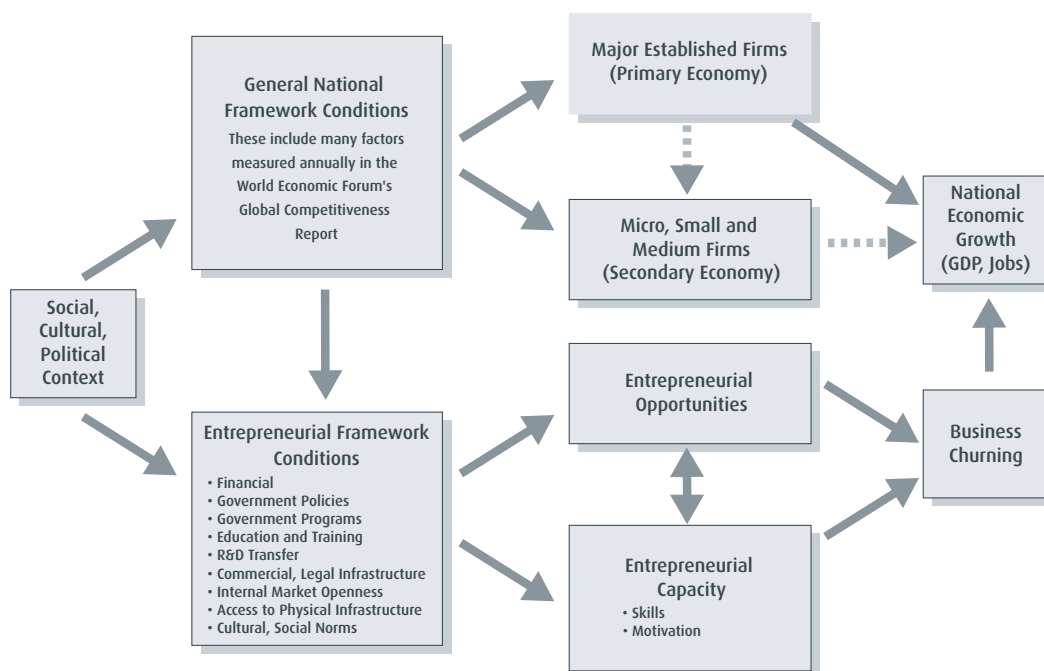
**Part Two: Explanations.** This section selects the most significant observations from Part One and seeks to explain them, offering insights from analysis of relationships within the data together with any relevant contextual influences.

**Part Three: Implications.** This section examines the key messages from Part One and Part Two in terms of implications for Australians in general and for policy makers in particular. Three recommendations are offered.

**Part Four: Action Focus.** A 10-step process for evaluating a business opportunity is presented by Professor Kevin Hindle.

**The Appendices** include photographs and brief biographical notes of the 42 distinguished Australians who contributed to entrepreneurship research in Australia by volunteering their valuable time and knowledge to the project as expert interviewees.

Figure 1 – The GEM theoretical model



# Part One

## Observations

This section of the *Westpac GEM Australia Report* deals with data. It reports findings in three sub-sections:

1. The level of entrepreneurial activity in Australia;
2. The effectiveness of Australia's support environment for entrepreneurial activity;
3. The relationship between entrepreneurial activity and economic growth.

The first two sub-sections end with a 'scorecard' summarising the key data. Because the relationship between entrepreneurial activity and economic growth is the subject of a special study by the international GEM consortium, it is dealt with only briefly in this report, with references provided to more in-depth reports on this subject.

Part One thus brings together the *presentation* of data from the various sources used by the GEM Australia project, but leaves all but the most basic *interpretation* of the data to the sections that follow.

### ENTREPRENEURIAL ACTIVITY IN AUSTRALIA

#### TERMINOLOGY SPECIAL NOTES

The terminology used by the GEM consortium for entrepreneurial activity classifies businesses according to their age, which in turn is defined as when the business first started paying wages. Businesses that have not yet started paying wages or have only been doing so for three months or less are classified as 'start-ups'. Businesses that have been paying wages for between three and 42 months are classified as 'new firms'. Businesses paying wages for more than 42 months are 'established firms'. The important distinction between 'start-ups' and 'new firms' is that a start-up may not yet have begun trading (and may never do so).

The GEM Australia team feels that this terminology is potentially confusing, as many people would use the terms 'start-up' and 'new firm' interchangeably. We have therefore decided to adopt the terminology of 'young firms' instead of the term 'new firms' used in previous reports. 'Young firms' are those that have been paying wages or salaries for at least three months but no more than 42 months (3.5 years – the survey is conducted mid-year).

#### RESULTS – HOW DOES AUSTRALIA SCORE?

After a dramatic drop between 2001 and 2002, Australia's entrepreneurial activity participation rates improved, both in absolute scores and ranking relative to other participating countries, while still falling short of the levels reached in 2001. Specifically:

- The start-up participation rate recovered from 3.8 per cent to 6.6 per cent (2001: nine per cent) and the rank rose from 18th to eighth. The highest start-up participation rates were in Venezuela (19.2 per cent) and Uganda (14.8 per cent). The median was 3.7 per cent.
- The young firm participation rate remained stable, rising only slightly from 5.2 per cent to 5.4 per cent (2001: 7.2 per cent), ranking Australia seventh, compared with 10th last year. The highest young firm participation rates were in Uganda (an unprecedented 16.9 per cent) and Venezuela (9.7 per cent). The median was 3.5 per cent.
- Australia's Total Entrepreneurial Activity (TEA) participation rate recovered from 8.7 per cent to 11.6 per cent (2001: 16.2 per cent) and the rank improved from 15th to eighth. The highest TEA participation rates were in Uganda (29.3 per cent) and Venezuela (27.3 per cent). The median was 6.7 per cent.
- Entrepreneurial activity participation for Australian males rose from 11.7 per cent to 13.6 per cent (2001: 21.6 per cent). For Australian females, it rose quite sharply from 5.6 per cent to 9.6 per cent, not far below the 2001 level of 10.6 per cent.
- With this substantial improvement in the female participation rate in entrepreneurial activity, the proportion of female entrepreneurs to male entrepreneurs also improved substantially from 48 per cent to 71 per cent – the highest proportion ever in four years of Australia's participation in GEM.
- Business angel participation recovered from 1.8 per cent to 3.2 per cent, not far below the 2001 peak of 3.8 per cent. However this participation rate only ranked 15th in 2003, compared with a ranking of sixth in 2001.

The participation rate in start-ups was higher than the participation rate in young firms, indicating a recovery in entrepreneurial confidence.

The proportion of participants who claimed to be motivated by opportunity rather than necessity reached its highest ever level at 85 per cent.

#### HOW DOES THIS COMPARE WITH THE REST OF THE WORLD?

Figure 2 shows the international comparison of entrepreneurial activity. Australia ranks eighth overall, towards the bottom of the top third of countries. This compares favourably with last year's ranking just within the top half of countries. Once again a developing country, new to GEM – Uganda – topped the entrepreneurial activity rankings. In 2002, it was Thailand and in 2001, it was Mexico. Unfortunately, neither of these countries was able to participate in 2003. The longest term GEM participants from the developing world are Argentina and Brazil, both of which have consistently maintained top quartile entrepreneurial activity rankings.





Although Australia's Total Entrepreneurial Activity (TEA) participation rate has fluctuated substantially over the four years since Australia joined the GEM project, this is mostly due to volatility in the start-up participation rate. The young firm participation rate has remained relatively stable as Figure 3 illustrates.

Australia's entrepreneurial activity participation rates recovered substantially from the low of 2002, but many countries continued to decline. Of the 27 countries involved in both GEM 2002 and GEM 2003, 17 showed a decrease in Total Entrepreneurial Activity and only 10 showed an increase. The decline was much gentler than in 2002, however, with the median TEA score decreasing only marginally from 6.53 per cent to 6.39 per cent. In 2002, the decline was driven by a drop in start-up activity in the majority of participating countries, but in 2003, the decline was evenly distributed between start-up and young firm participation.

Figure 4 illustrates the change in entrepreneurial activity participation rates for the 25 countries that participated in both GEM 2002 and GEM 2003. (Country codes are listed in the References section).

#### WHO AND WHERE ARE OUR ENTREPRENEURS?

The rich database of information collected through the adult population survey allows analysis of entrepreneurial activity

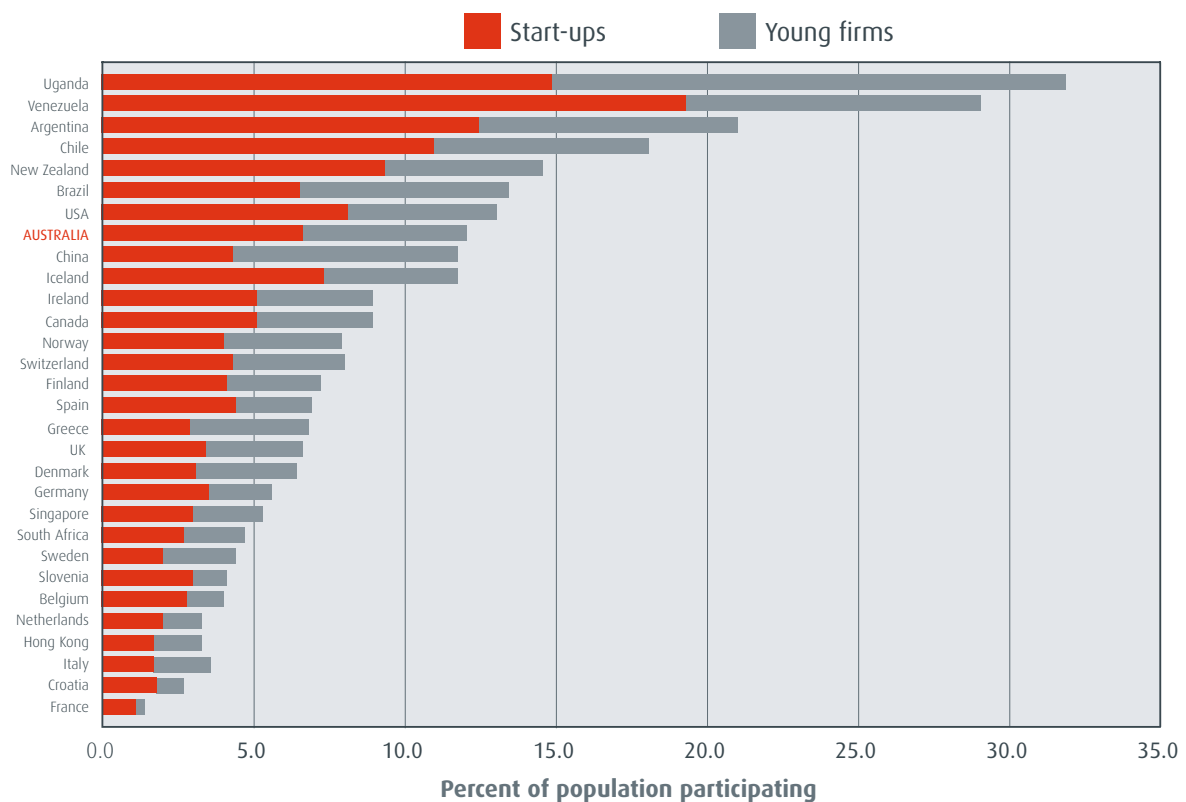
in Australia from many perspectives: demographic variance such as gender, age and geographic location; or variance in types of entrepreneurial activity – start-ups, young firms, opportunity-driven activity and so forth. But it must be remembered that when the data set is segmented for these types of analysis, the number of cases in each segment are quite small. This means that variations may not be statistically significant – that is, if the survey were repeated with a similar sized sample, there is a 5 per cent or greater chance that different patterns would be observed.

Even before respondents are split by age range or gender, the numbers are relatively small as shown in Table 2, which summarises the number of participants in various types of entrepreneurial activity in the 2003 survey.

**Table 2 – Respondents by Entrepreneurial Activity Type**

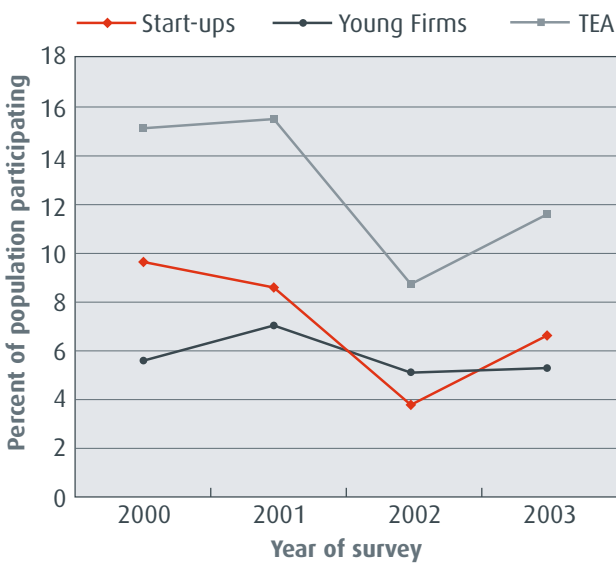
Type of activity	No. of respondents
Any type	212
Opportunity-driven activity	182
Necessity-driven activity	27
Start-up participants	119
Young firm participants	100 <sup>1</sup>

**Figure 2 – International Comparison of Entrepreneurial Activity**



<sup>1</sup> Some respondents were involved in both start-ups and young firms

**Figure 3 – Australian Entrepreneurial Activity – 4 year Trend**



In this part of the report, we have chosen to report some variations that are NOT statistically significant. This is because they may indicate a genuine variance that a larger sample would confirm. Where the same non-significant patterns are observed year after year, this is a good indication that they reflect genuine variation in the behaviour of the Australian population. In each section that follows, it is clearly stated whether or not differences reported are statistically significant.

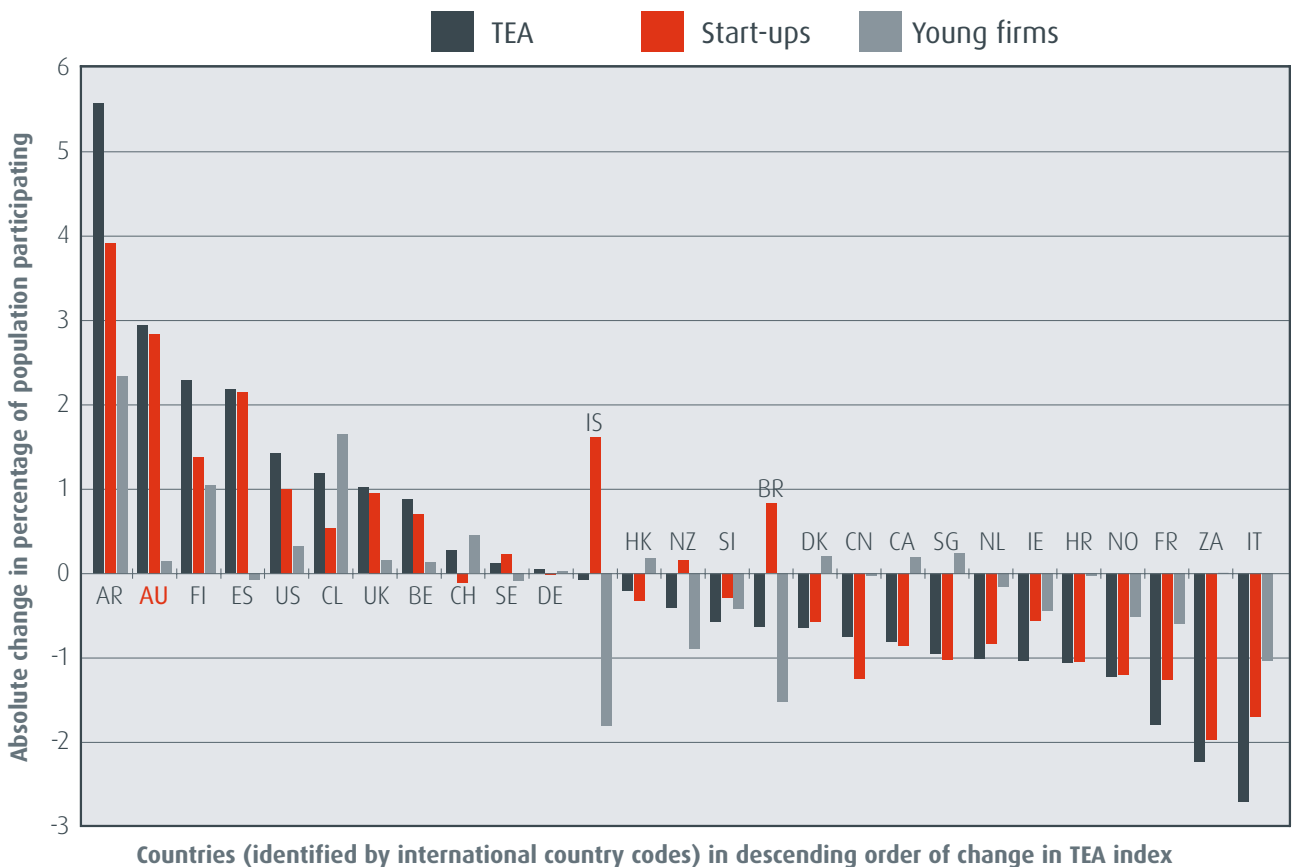
**Female Entrepreneurs**

The gap between the participation rates in entrepreneurial activity for men and women in Australia closed relative to previous years. The female participation rate in total entrepreneurial activity was 71 per cent of the male participation rate (9.6 per cent and 13.6 per cent respectively). This was made up of a 67 per cent ratio for start-ups and an 83 per cent ratio – the highest ever – for young firms. Interestingly, the ratio of female to male participation rates in established businesses was only 61 per cent, which suggests that the trend over time is for more women to be starting businesses. As was the case last year, the proportion of female participants in entrepreneurial activity who were motivated by opportunity rather than necessity was much higher than that of male entrepreneurs.

Figure 5 shows the balance between male and female participation in various types of entrepreneurial activity. For all types of activity except young firms and necessity-driven entrepreneurship, the differences are statistically significant.

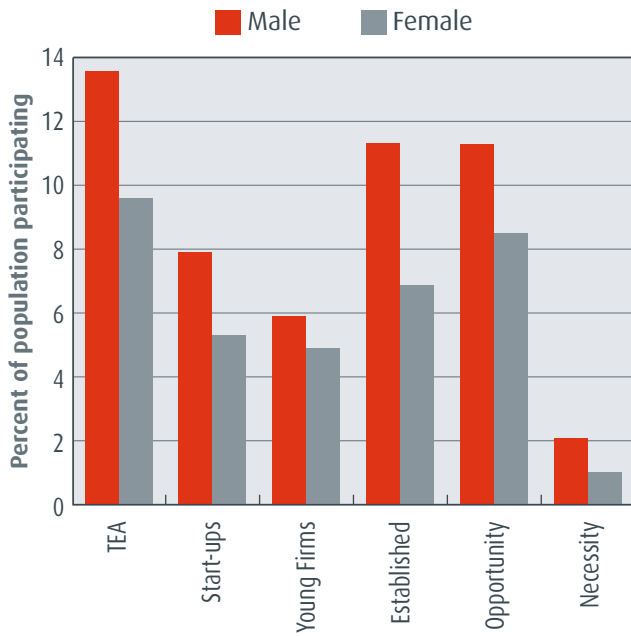
In France, the female participation rate in entrepreneurial activity exceeded the male participation rate by 2.7 to 1. However, France had the lowest overall rate of participation in entrepreneurial activity. The numbers involved are very small and the gender differences are not statistically significant and are omitted from the analysis that follows.

**Figure 4 – Change in Entrepreneurial Activity Internationally: 2002 to 2003**





**Figure 5 – Australian Entrepreneurial Activity Participation: Males – Females**

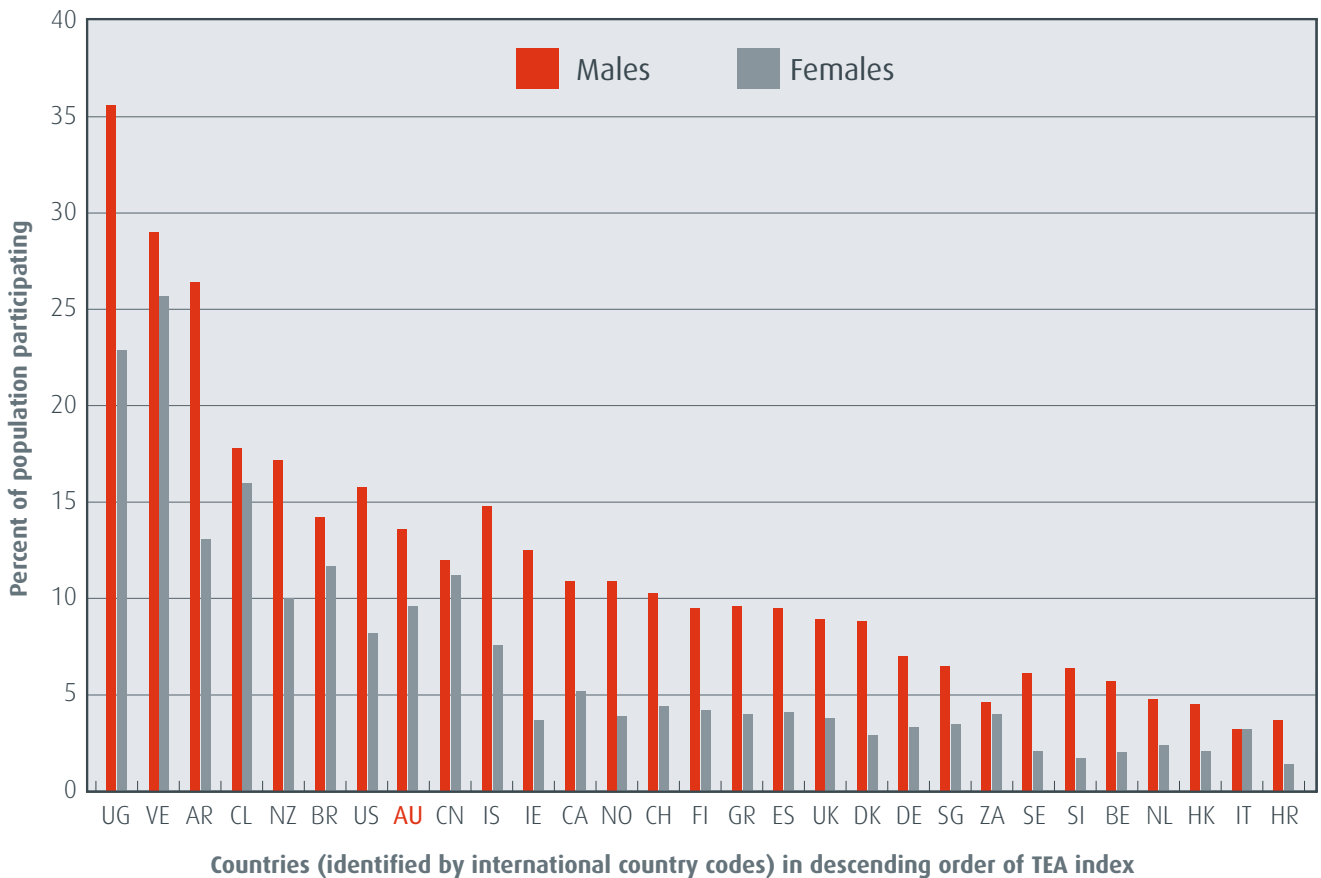


The female participation rate in entrepreneurial activity was below the male participation rate in all GEM 2003 participant countries except Italy, where it was equal. However the variation in the proportion of female participation to male participation was wider across the individual countries than in previous years. The median was 47 per cent. Women were least active relative to males in Finland and Slovenia (26 per cent) and in Ireland (29 per cent) and most active in Italy (100 per cent), China (93 per cent), Chile (90 per cent) and South Africa (88 per cent). Figure 6 illustrates the global pattern.

In China and South Africa, female participation in start-ups exceeded male participation (126 per cent and 114 per cent respectively). The median value of female participation in start-ups as a proportion of male participation was 45 per cent.

In Italy, female participation in young firms exceeded male participation but both participation rates were very low (1.5 per cent and 1.2 per cent respectively). The mean value of female participation in young firms as a proportion of male participation was 55 per cent. Aside from Italy and Australia, the other countries with a high relative proportion of female to male participation in young firms were Chile (94 per cent), Brazil (91 per cent) and China (78 per cent).

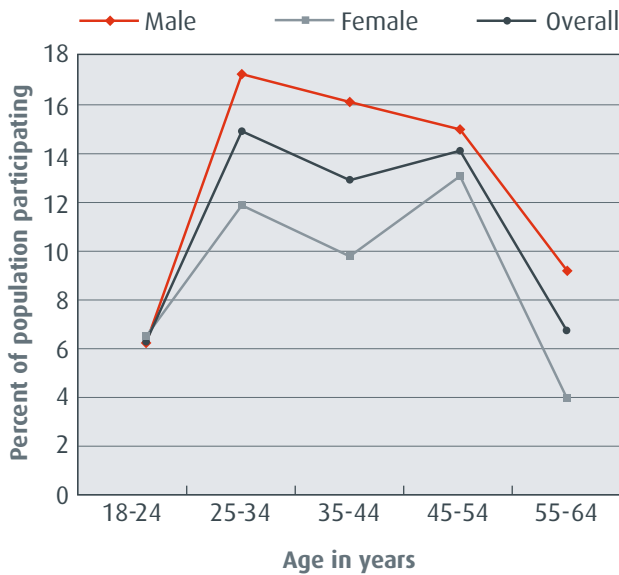
**Figure 6 – International Entrepreneurial Activity Participation: Males – Females**



### Age range

Figure 7 shows the participation rates in entrepreneurial activity by age range and gender. The highest participation rates were in the 25-34 years age range followed by the 45-54 years age range. This order was reversed last year. Once again, a small dip was evident in the 35-44 years age range, suggesting that there may be two distinct life stages where entrepreneurial activity is more likely for Australians. Female participation was highest in the 45-54 years age range, just as it was in 2002. These variations are not, however, statistically significant.

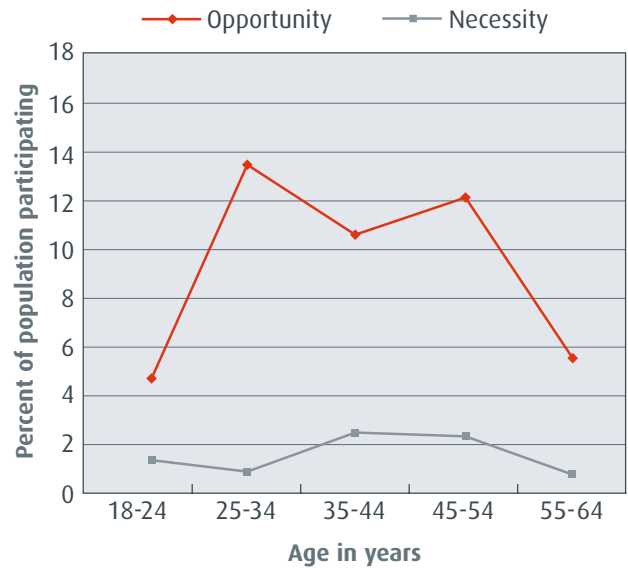
**Figure 7 - Entrepreneurial Activity by Gender within Age Range**



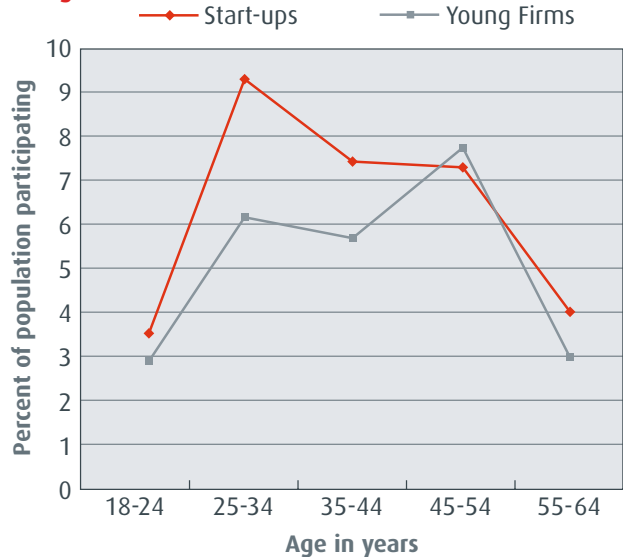
The balance between opportunity-driven and necessity-driven entrepreneurial activity also varied across the age ranges as illustrated by Figure 8. Opportunity driven entrepreneurial activity was highest in the 25-34 age range and lowest in the youngest and oldest age ranges. Necessity driven entrepreneurial activity was highest in the 35-54 age range. The differences for opportunity driven activity are statistically significant, but not for necessity driven activity, due to the small number of necessity-motivated entrepreneurs in the sample.

Start-up participation peaked in the 25-34 age range and young firm participation in the 45-54 age range as illustrated in Figure 9. In general, start-up participation exceeded young firm participation, but this relationship was reversed in the 45-54 age range. The pattern of participation was strikingly similar to last year's pattern indicating that the differences may represent genuinely different patterns of activity even though the numbers of respondents in each category are not high enough for statistical significance.

**Figure 8 - Opportunity and Necessity Entrepreneurship by Age Range**



**Figure 9 - Start-up and Young Firm Participation by Age Range**



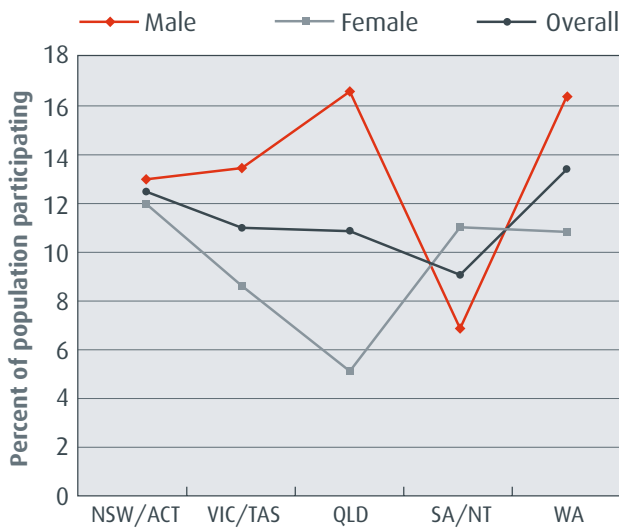
### Location

Unfortunately, this year it was not possible to repeat 2002's larger sample in the adult population survey. None of the variations in entrepreneurial activity by geographic location reported below are statistically significant.

With the smaller sample size, it was not meaningful to divide states into capital city and rest of state for analysis. For examination of potential geographic patterns, the Australian Capital Territory was included with New South Wales, Tasmania with Victoria, and the Northern Territory with South Australia. The TEA participation rates for males, females and overall within these groupings are illustrated in Figure 10. As was the case in 2002, Western Australia had the highest rate



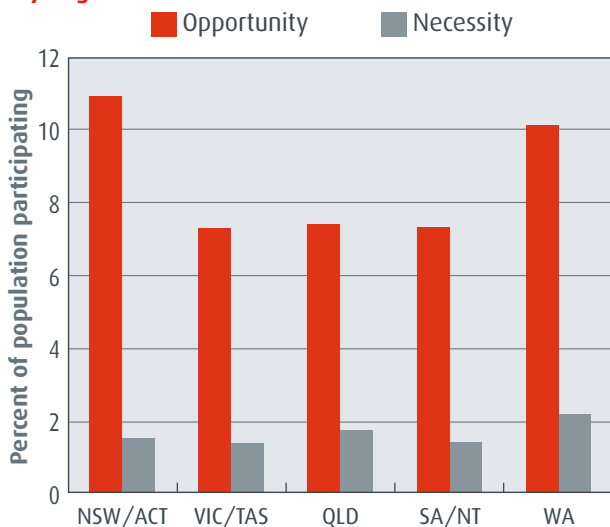
**Figure 10 – Entrepreneurial Activity by Region and Gender**



of participation in 2003. This year NSW/ACT was a close second. Male participation exceeded female participation (though only just in NSW/ACT) in all regions except SA/NT where the balance was reversed quite strongly. Overall, however, SA/NT had the lowest participation rate in entrepreneurial activity.

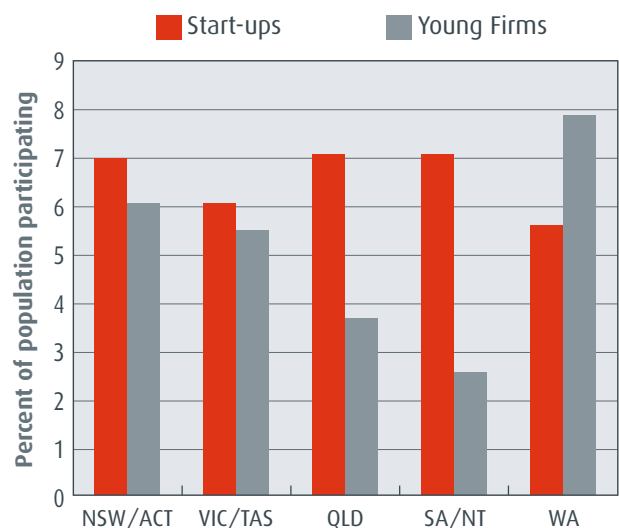
Figure 11 shows the balance between opportunity-driven and necessity-driven entrepreneurial activity by region. In all regions, opportunity-driven activity was dominant, but the gap was smaller in WA. NSW/ACT had the highest level of opportunity-driven entrepreneurial activity and WA the highest level of necessity-driven entrepreneurial activity.

**Figure 11 – Opportunity and Necessity Entrepreneurship by Region**



In 2002, participation in start-ups was well below previous years' levels and was exceeded by participation in young firms in most regions, and in Australia overall. In 2003, the balance reverted to status quo with start-up participation once again the dominant type of entrepreneurial activity. This was true for Australia as a whole and for all regions except WA, as illustrated in Figure 12. WA also had the lowest relative level of start-up participation in 2002. In view of this apparent trend, it will be interesting to see whether WA maintains its position as the region with the highest participation rate in total entrepreneurial activity in the future. If the high participation rate in young firms indicates that WA entrepreneurs are good at business survival rather than just starting up, it may do so.

**Figure 12 – Start-up and Young Firm Participation by Region**



Respondents were classified as being in a metropolitan or rural area according to their postcode. There was no significant difference in participation rates in any type of entrepreneurial activity – start-ups, young firms, opportunity- or necessity-driven or overall (TEA) – between metropolitan and rural residents. This has been the case in every GEM population survey to date.

Since segmenting the sample into urban and non-urban respondents results in two large groups, the lack of significant differences suggests very strongly that urban Australians are no more or less likely to engage in entrepreneurial activity. The pattern suggests only that rural residents may be *slightly* more likely to be motivated by necessity rather than opportunity and that the survival rate (suggested by the ratio of young firms to start-ups) may be *slightly* lower. These are *not* statistically significant findings.

**Table 3 – Business Size Comparison: Start-ups, Young and Established Firms**

No. of employees	Start-ups in 5 years (n=99)	Young firms NOW (n=98)	Established firms NOW (n=168 <sup>2</sup> )	All Australian Businesses (ABS 2003)
Non-employing	25.6%	52.5%	42.5%	50.0%
1 to 4	33.6%	33.7%	34.6%	31.8%
5 to 19	27.5%	12.4%	16.2%	14.6%
20 to 99	12.1%	1.5%	4.8%	3.1%
100 +	1.2%	0.0%	2.0%	0.5%

**HOW GROWTH-ORIENTED ARE THEY?****Job creation**

Each respondent identified as a start-up participant was asked to estimate how many people their business would employ, apart from its owners, in five years time. Each respondent identified as a young or established firm participant was asked how many people, apart from the owners, they employed now and how many they expected to employ in five years time.

In total, 111 start-up participants, 85 young firm participants and 152 established firm participants provided this information. The start-up participants expected to create a total of 685 jobs, an average of 6.2 jobs per start-up; young firm participants 347 jobs in total, an average of 4.1 new jobs per firm; and established firms 1,133 jobs in total, an average of 7.5 jobs per firm.

Start-up growth expectations were lower in 2002, compared with 2001, but recovered again in 2003. In 2002, 31 per cent of start-ups expected to remain non-employing businesses – that is to employ no-one but their owners. In 2003 only 26 per cent of start-ups had this non-growth expectation. Thirteen per cent expected to employ 20 or more people, compared with only 2 per cent in 2002. Table 3 summarises growth ambitions of start-up participants compared with size of young firm and established firm participants now.

As one would expect, established firms were generally larger than young firms. Compared with these existing firms, together with ABS averages, the growth ambitions of the start-up participants can be seen to be optimistic. For all of them to achieve their expected size in 5 years would truly be beating the odds, but since achievement rarely exceeds vision, it is better to have an ambitious vision.

Some young and established firm participants expected to employ fewer people in 5 years time. Table 4 summarises the growth expectations of young firms and established

firms. Young firms were more likely to expect growth than were established firms and, conversely, established firms were more likely to expect a decline in jobs.

**Table 4 – Job Growth Expectations: Summary**

	Young firms	Established firms
Declining	3.5%	12.6%
Static	50.5%	52.4%
Growing	46.0%	35.0%

Respondents were not specifically asked whether they expected still to be in business in 5 years time, but if a firm employed at least one person now, but said they expected to employ no-one in 5 years time, it seems reasonable to assume that they do not expect to remain in business. Table 5 examines growth expectations of young and established firms in more detail, and shows the proportion that expect to cease trading altogether. 2.4 per cent of young firms and 7.2 per cent of established firms did not expect to be in business in 5 years time. Of those that were expecting growth, for both young and established firms, the growth was modest, with most expecting to create less than 5 new jobs over 5 years.

**Table 5 – Job Growth Expectations: Detail**

5 year job change	Young firms	Established firms
Out of business	2.4%	7.2%
Shedding jobs	1.2%	5.3%
Non-employing	28.2%	30.5%
Static employment	22.4%	21.9%
1 to 4 new jobs	30.6%	23.8%
5 to 19 new jobs	11.8%	7.9%
20 to 99 new jobs	2.4%	1.3%
100+ new jobs	1.2%	2.0%

<sup>2</sup> Some young firm and established firm participants were prepared to say how many people they employed NOW, but did not provide an estimate of employee numbers in five years time.



Growth expectations did not differ greatly according to current firm size. In other words, smaller firms were no more or less likely to expect growth than larger firms. Of the non-employing businesses, 57 per cent of young firms and 69 per cent of established firms expected to remain that way.

As Table 3 shows, 50 per cent of Australian businesses are non-employing. This year, we examined whether the frequency of non-employing businesses varied according to the sex, age or location of the founder. Start-ups were classified as non-employing if they did not expect to employ anyone in 5 years time. Young firms were classified as non-employing if they did not employ anyone at the time of survey.

Only location was found to be a statistically significant factor affecting frequency of non-employing businesses. Higher frequencies of non-employing businesses were found in New South Wales and Western Australia and the lowest frequency in Queensland. Gender, age and city/country base had no significant influence.

### **Market expansion**

The majority of entrepreneurial activity participants expected to find their customers close to home. Few expected exports to be a major part of their business. Of start-up participants, 73 per cent expected no export customers. For young firm participants, the figure was 74 per cent. Only five per cent of start-up and young firm participants expected more than three quarters of their customers to be overseas.

A new question was introduced this year, chiefly for the benefit of European Union countries where physical distance and travel time is more significant than national borders. For Australia this revealed that 55 per cent of start-up participants and 61 per cent of young firm participants expected that all their customers would be based within one hour (of ground travel) of their business's location. This indicates that the majority of businesses were created to serve their local community.

Entrepreneurial activity participants were asked: whether they expected customers to find their product or service unfamiliar; whether they thought they had many competitors; and whether their product or service was dependent on technology that had only become available in the last 12 months. The responses to these questions were combined to form an index of market expansion potential. Businesses offering an unfamiliar product or service in a market with few or no competitors and using new technologies were considered to have the highest market expansion potential.

The older the business, the lower the expectation of market expansion. 81 per cent of established firm participants expected no market expansion whatsoever – i.e. they were selling a familiar product or service in a competitive market

and had no reliance on new technology. For young firm participants, the figure was 68 per cent and for start-up participants, 52 per cent. Only seven per cent of start-ups, two per cent of young firms and one per cent of established firms expected to be creating a new market niche.

Another index combined market expansion with job creation potential to assess economic impact potential. To achieve the top category, a business had to expect to create at least 20 jobs in the next five years and expect some degree of market expansion. Only three per cent of start-ups and two per cent of young firms fell into this category. And yet 13 per cent of start-ups and seven per cent of young firms expected to create 20 or more jobs in the next five years. This indicates that this job growth would be coming from expansion in established markets, and therefore probably at the expense of existing businesses in those markets.

### **ENTREPRENEURSHIP IN ESTABLISHED BUSINESSES**

The GEM consortium introduced a new measure of entrepreneurial activity in 2003 – Firm Entrepreneurial Activity (FEA). FEA is an index of entrepreneurial orientation in established businesses – owner-managers identified by the adult population survey whose businesses have been operating for more than 42 months (i.e. since 1999 or earlier for the 2003 population survey). Using the responses to the questions on market expansion potential referred to above, businesses were classified as entrepreneurial or non-entrepreneurial.

A further adjustment was made to compensate for variation in average size of established businesses between countries. Expected job creation information was used to calculate the proportion of jobs contributed by entrepreneurial established businesses. These two measures – percentage of established businesses classified as entrepreneurial, and percentage of jobs contributed by entrepreneurial businesses – were combined to create the FEA index.

Market expansion questions were first introduced to the GEM population survey in 2002. By combining data from 2002 and 2003, it was possible to calculate the FEA index for 40 countries.

In Australia, 12 per cent of established businesses were classified as entrepreneurial and Australia's FEA score was 1.86. The FEA ranking is more important than the actual value. FEA scores ranged from a low of 0.46 in Poland to a high of 5.95 in Chile. Australia ranked 23rd of 40 countries. A table showing FEA index values for all 40 countries may be found in the GEM 2003 Global Report (Reynolds et al. 2004: 22).

The FEA is a useful supplement to the TEA. The TEA measures the proportion of the population that is involved in new or young businesses. The FEA measures the extent to which

**Table 6 – Australia’s Entrepreneurial Activity Scorecard**

ITEM	Australia				All GEM countries 2003		
	This year		Last year		Median	High Score (Country*)	Low Score (Country*)
	Rank (of 30)	Score	Rank (of 37)	Score			
<b>Entrepreneurial Activity Indicators</b> (Source: Adult pop’n survey; Scale: Percent of pop’n participating)							
Start-ups overall	8	6.6%	18	3.8%	3.7%	19.2% (VE)	1.1% (FR)
New businesses (< 42 months old)	7	5.4%	10	5.2%	3.5%	16.9% (UG)	0.3% (FR)
Established businesses (> 42 months old)	6	9.1%			5.5%	19.6% (GR)	1.1% (ZA)
Total Entrepreneurial Activity (TEA)	8	11.6%	15	8.7%	6.7%	29.3% (UG)	1.4% (FR)
TEA – Opportunity	6	9.9%	13	6.7%	5.4%	17.1% (UG)	0.8% (FR)
TEA – Necessity	10	1.6%	12	1.5%	1.0%	13.2% (UG)	0.2% (IT)
TEA – Percent Opportunity	8	85.3%	18	77.1%	83.3%	91.0% (SE)	47.0% (CN)
TEA – Percent Necessity	17	12.9%	20	17.6%	15.7%	52.7% (CN)	6.3% (DK)
Firm Entrepreneurial Activity (FEA)	23 of 40	1.86	N/A	N/A	1.88	5.95 (CL)	0.46 (PL)
<b>Entrepreneurial Activity and Gender</b>							
Male participation rate in start-ups	8	7.9%	19	5.1%	4.8%	20.3% (VE)	2.1% (HK)
Female participation rate in start-ups	8	5.3%	20	2.4%	2.2%	18.2% (VE)	0.7% (SE)
Male participation rate in new firms	11	5.9%	9	6.8%	4.9%	19.3% (UG)	1.2% (IT)
Female participation rate in new firms	7	4.9%	9	3.6%	1.8%	14.4% (UG)	0.2% (SI)
Male participation rate in est’d firms		11.3%					
Female participation rate in est’d firms		6.9%					
TEA – Male	9	13.6%	14	11.7%	9.5%	35.6% (UG)	3.2% (IT)
TEA – Female	8	9.6%	14	5.6%	3.9%	25.7% (VE)	1.4% (HR)
Start-ups Female/Male ratio	7	67%	17	48%	44%	126% (CN)	21% (SE)
New businesses Female/Male ratio	4	83%	17	53%	48%	125% (IT)	10% (SI)
Est’d businesses Female/Male ratio		61					
TEA Female/Male ratio	7	71%	24	48%	47%	100% (IT)	26% (SI)
<b>Risk Capital Investment Indicators</b>					<b>Median</b>		
Pct. of pop’n business angels last 3 years	15	3.2%	27=	1.8%	3.0%	13.2% (UG)	0.5% (FR)
Classic Venture Capital (US\$millions)	13	393.7			329.1	21,224 (US)	1.9 (SI)
Classic Venture Capital # investments	8 of 27	371			215	2,514 (US)	4 (SI)
Classic Venture Capital (pct of GDP)	10 of 27	0.087%	16 of 31	0.099%	0.068%	0.212% (CA)	0.009% (SI)
VC invested per investee firm (US\$)	12 of 27	1,061	9 of 30	2,294	1061	8,442 (US)	332 (ZA)
Informal Venture Capital (pct of GDP)	11 of 28	1.12%	14 of 24	0.72	0.84%	6.59% (CN)	0.14% (BR)
Ratio: Informal: Formal Venture Capital	7 of 23	11.7	12 of 24	7.3	7.5	217.0 (GR)	1.0 (SE)

\* See References for list country codes.



established businesses, that have survived the initial danger period, are entrepreneurial in outlook. The two measures are complementary.

High TEA and high FEA do not necessarily go together. For example Hong Kong and Singapore are low TEA countries with high FEA index scores. Argentina and Thailand are high TEA countries with low FEA scores. The FEA index may explain how some countries have achieved relatively high economic growth with relatively low entrepreneurial activity as measured by TEA.

All indicators of entrepreneurial activity in Australia and in the international context are summarised in Table 6 – Australia’s Entrepreneurial Activity Scorecard.

## **THE ENTREPRENEURIAL SUPPORT ENVIRONMENT IN AUSTRALIA**

### **ATTITUDES TO ENTREPRENEURSHIP**

Questions on attitudes towards entrepreneurs and entrepreneurship were included in both the general population survey and the expert questionnaire. The results are summarised in Table 9 – Australia’s Entrepreneurial Effectiveness Scorecard, at the end of this chapter. The general population survey showed that Australians were optimistic about the existence of business opportunities and of having the skills to take advantage of them. More than one in seven Australians said they expected to start a business in the next three years.

Compared to other countries, Australians were less likely to see starting a business as a desirable career option or to think that successful entrepreneurs were held in high respect. But even though GEM expert interviewees consistently say the Australia lacks positive stories about entrepreneurs, 68 per cent of the general population said they often saw stories about successful new businesses in the media.

In the main, the GEM expert interviewees tended to have more entrepreneurial experience and be more positive about entrepreneurship than the general population. However, only 46 per cent of experts thought that starting a business was widely viewed as a desirable career choice, whereas 54 per cent of the general population believed most people thought it was a desirable option. Similarly 65 per cent of the general population thought that most people respected successful entrepreneurs, compared with only 52 per cent of experts. The explanation for this may be that the experts were thinking of larger scale, higher profile entrepreneurs who are more likely to be targets of ‘tall poppy syndrome’ while the general population were thinking of small business people who have no public profile.

### **EVIDENCE FROM THE GEM EXPERTS INTERVIEWS**

Analysis of the expert interview comments showed that the same five frameworks dominated again this year as key issue areas: Financial Support, Government Policies, Education and Training, Cultural and Social Norms, and Entrepreneurial Capacity. However, the relative importance had changed slightly, with two major issues emerging from the Financial Support and Government Policies frameworks. In terms of financial support, there was a general consensus that raising capital for new ventures was getting harder, especially for early stage ventures. It was generally felt that once a business was established there was enough – some felt more than enough – capital available.

In the Government Policies area, there was major concern about the growing compliance burden. This has always been a significant issue, but never before to the extent it was raised in 2003. There was frustration that in spite of stated government intentions to reduce red tape, the reverse seemed to happen in practice. Experts also reported considerable anxiety in the small business world about interpretation of regulations and fear of being found non-compliant even after genuine best efforts to abide by all the rules. More than ever before, becoming a paid employee seemed to be an easier way to make a living.

The key messages from the expert interviews are discussed in greater detail in parts two and three of this report.

### **EVIDENCE FROM THE GEM EXPERTS’ SURVEY**

This survey, as well as assessing the effectiveness of the nine entrepreneurial frameworks, asked the experts to assess Australia’s strength in terms of ‘existence of good business opportunities’, ‘entrepreneurial skills’, ‘entrepreneurial motivation’, ‘protection of intellectual property’ (IP) and ‘support for female entrepreneurs’.

The survey consisted of five to seven questions for each of the above frameworks. Each question was a statement which the expert was asked to rate on a scale of 1 to 5, where a rating of 1 indicated strong disagreement and a rating of 5, strong agreement. The middle rating of 3, therefore, indicated neutrality. Anything above 3 was a generally positive rating; anything below 3 generally negative. An aggregate score for each framework was calculated by averaging the scores for the individual questions within that framework. For some frameworks, two aggregate scores are calculated, because they were deemed to measure distinct and independent aspects of that framework.

Expert survey data was available from 30 countries in 2003. The GEM Australia team has been tracking expert survey responses for four years and has found remarkable consistency between the results for Australia from year to

year. That is, the responses, averaged out across all respondents do not vary greatly from year to year unless there has been a genuine change in the environment, which is explained by specific comments in the expert interviews. We therefore feel it is useful to compare the average, aggregate scores for Australia both with previous years scores and with the scores of other countries.

The surveys are also distributed to expert interviewees from previous years. In 2003, a total of 64 Australians completed the survey. The GEM Australia team extends its particular thanks to those interviewees from past years who demonstrated continued support for the project by completing the survey again this year. The survey aggregate scores and international rankings are summarised in Table 9 – Australia’s Entrepreneurial Effectiveness Scorecard, at the end of this section.

Between 2002 and 2003, the main changes in Australian expert ratings of the entrepreneurial support environment were: a drop for financial support, and rises for: overall taxation and regulation environment; effectiveness of government programs; education and training – schools; and education and training – post-school. The rises need to be put in context: the improved ratings are still on the negative side of neutral for all except post-school education. And though the government programs effectiveness rating has improved, it remains below the GEM median.

In comparison to other countries, Australia ranked well (top quartile) on: education and training in schools; lack of barriers to entry; entrepreneurial culture; perception of business opportunities; and protection of intellectual property. Australia ranked lowest on rapidity of change in markets (25th), motivation to act on business opportunities (21st) and R&D transfer effectiveness (19th).

Our highest rating on any framework was for physical infrastructure, with a very positive aggregate score of 4.2, but this only equated to a ranking of 11th. It may be that access to broadband communications was the missing factor for Australia, since several experts mentioned this as an area where we lag behind other developed countries. Our highest ranking was third for protection of intellectual property (first in 2002).

For the five critical frameworks identified by the Australian GEM experts, in comparison with other GEM countries:

- On **financial support**, Australia ranked just below the median. The majority of countries gave negative ratings on this framework. The lowest ranking was for availability of government grants and subsidies to new and growing firms.
- On **government policies**, Australia was just above the aggregate median. Overall, countries were negative on this

framework, with the median aggregate score on every individual question being negative. In view of the negative comments of Australian experts on regulatory and taxation burden, Australia’s above median score on these questions was a little surprising. It appears that many other countries experience similar problems.

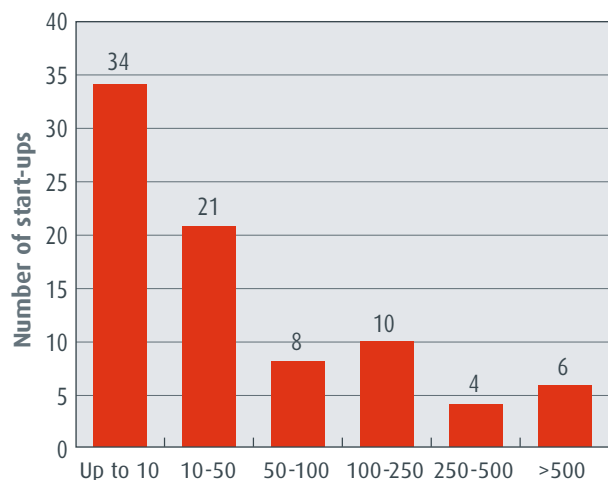
- On **education and training**, Australia was well above the aggregate median and improved its rating over previous years. However, it should be noted that the ‘sub-framework’ of education and training in schools, had the lowest ratings of any entrepreneurial framework condition. Every single country gave a negative score.
- On **entrepreneurial capacity**, Australia ranked just below the aggregate median, about the same as in 2002. Australia was above the median on experience of starting a business, but below the median on having the necessary start-up and ongoing management skills.
- On **cultural and social norms**, Australia ranked well above the median on entrepreneurial orientation, but way behind the leader, the USA. Once again, the USA ranked first on each individual question, and well ahead of the second ranked country, Hong Kong. On motivation for entrepreneurial activity, Australia ranked poorly, just as it did in 2002. In particular Australia ranked low on respect for successful entrepreneurs, and on valuing entrepreneurship as a career option.

#### ACCESS TO EARLY STAGE FINANCE

##### How are Australian start-ups being funded?

Most new businesses require some start-up capital. Start-up participants identified by the adult population survey were asked how much money in total they needed to start their business and how much of their own money they expected to put in. 83 participants disclosed total funding requirements which ranged from \$1,000 to \$8 million (the next highest was \$700,000). The majority required only a modest

Figure 13 – Number of Start-ups by Funding Range

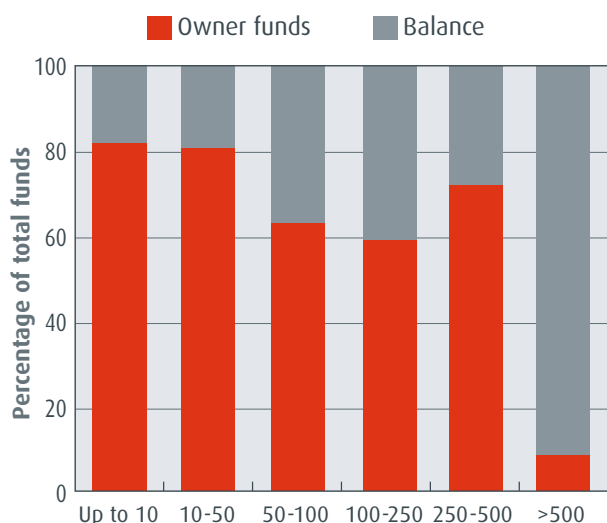




investment, with 42 per cent of start-ups requiring \$10,000 or less and 67 per cent requiring \$50,000 or less. Figure 13 shows the distribution of funding requirements. (Ranges in this figure are abbreviated for space reasons; they do not actually overlap. For example 10-50 means \$10,001 to \$50,000 and does not include businesses whose start-up funding requirement was \$10,000).

Of the 61 start-up participants who disclosed the amount of their own money they expected to invest, 57 per cent expected to fund the entire venture themselves. 85 per cent expected to provide at least half the money themselves. The more money required to launch the venture, the less likely the owner was to provide all of it as Figure 14 illustrates. All expected to invest some of their own money.

**Figure 14 – Start-up Owner Equity Balance**



Participants were asked what other sources of funding they expected to use. The results are summarised in Table 7. Easily the most popular source of finance was banks, followed by close family. Government programs were the third most popular source. Of those nascent entrepreneurs who were not 100 per cent self-funding, most were only looking to one other source of funding, but some were expecting to tap into as many as four different sources besides their own funds.

**Table 7 – Start-ups Sources of Funding**

Funding source	No. of Start-ups
Close family members	11
Other relatives	3
Work colleagues	3
Employer	2
Friends	5
Banks	36
Government Programs	7
Other	7

### Venture Capital and Angel Capital

Early in 2003, the Australian Venture Capital Journal published a six-year review of venture capital in Australia, from 1996-97 to 2001-02 (Bivell 2003). This shows a decline in investment activity, both in terms of total amount invested and number of investment deals. The September 2003 issue of the journal reported that this downward trend continued in 2002-03 (AVCJ 2003). The decline is discussed in more detail in Part Two of the *Westpac GEM Australia Report*.

The international comparison of venture capital activity, compiled by Bill Bygrave of the GEM coordination team, focuses on 'classic' venture capital, which comprises seed, start-up, early and expansion stage companies and collected data for calendar year 2002. Figures for Australia were obtained from the Australian Venture Capital Journal through its alliance with Howard Partners. They exclude investments by New Zealand firms and investments made by Australian firms in companies outside Australia.

The international data appears to show an increase in classic venture capital investment in Australia, but this is only due to an improved exchange rate with the US dollar. The amount in local currency remained static at about \$700 million. The number of companies receiving funding, however, more than doubled from 154 to 371, more than offsetting the decline in number of investments between 2000 and 2001. The average investment per company consequently halved from US\$2,291 to US\$1,061 (the reduction is somewhat exaggerated by the change in exchange rate).

As a percentage of GDP, Australia's investment in classic venture capital continued the decline seen last year, from 0.099 per cent in 2001 to 0.087 per cent in 2003. However, this was part of a general worldwide decline, so Australia's rank actually improved from 16th of 31 countries in 2002 to 10th of 27 countries for which this data was available in 2003. This decline continued a global trend first observed in 2001. Classic venture capital investment as a percentage of GDP in the USA has declined from 1.02 per cent in 2000 to 0.202 per cent in 2002.

Informal venture capital activity in Australia – otherwise known as business angel investment – as measured by the GEM adult population survey, was much lower in 2002 than had been the case in the two previous years. In 2003, it once again recovered to its more typical level of just over 3 per cent of adults claiming to have invested as an 'angel' in the past three years. By multiplying the business angel participation rate by the average amount invested per business angel and dividing by three an estimate of total annual angel investment for the years 2001–2003 can be obtained. The figure thus obtained was almost 12 times the amount of classic venture capital invested in calendar year 2002.

Many studies of business angel activity exclude investments made in businesses run by the angel's own family. The GEM survey makes no such restriction. In fact, 46 per cent of those who had invested their own money in someone else's business, including the largest investor, were related to the investee. A further 30 per cent described the investee as a 'friend or neighbour'. Only two business angels invested in a stranger's business. Business angels were spread around Australia in roughly the same proportion as all respondents.

Forty-two business angels disclosed the amount they invested. The smallest investment was \$600 and the largest, \$500,000. Investment ranges are summarised in Table 8.

There was no obvious association between size of investment and relationship to the investee. Business angels were more highly represented in the older age groups. In general, the older the angel, the more money they were likely to invest.

**Table 8 – Angel Investment Summary**

Investment amount	No. of investments
\$10,000 or less	16
\$10,001 to \$50,000	15
\$50,001 to \$100,000	8
\$100,001 to \$250,000	2
\$250,000 to \$500,000	1

All indicators of entrepreneurial activity in Australia and in the international context are summarised in Table 9 – Australia's Entrepreneurial Effectiveness Scorecard.

## ENTREPRENEURIAL ACTIVITY AND ECONOMIC GROWTH

Both entrepreneurial activity and economic growth are complex phenomena, so trying to establish the relationship between them is even more complex. If a relationship is identified, the question of causality then arises – does increased entrepreneurial activity lead to higher economic growth or does higher economic growth encourage increased entrepreneurial activity?

When investigating the relationship between entrepreneurial activity and economic growth, the unit of analysis is the country. The GEM coordination team, with access to the detailed data for all participating countries, is therefore in a better position to pursue this analysis. It is covered in detail in the GEM 2003 Global Report (Reynolds et al. 2004: 34-37).

In brief, the data continues to indicate a significant and positive relationship between entrepreneurial activity and economic growth, and that the TEA index may be a predictor of future economic growth. There has not been a consistent, significant correlation between the TEA value and the rate of GDP growth for the same year. However, there has been a consistent and significant relationship between TEA and the rate of GDP growth (observed or projected) for the following three years. If TEA opportunity and TEA necessity are examined separately, the correlation between TEA opportunity and GDP growth rate declines with increased time lag, whereas for TEA necessity it increases, being strongest with a three year time lag. Data from GEM 2000 suggests the relationship may weaken after three years (Frederick 2004).



**Table 9 – Australia’s Entrepreneurial Effectiveness Scorecard**

ITEM	Australia		All GEM countries		
	Rank	Score	Median	High Score (Country*)	Low Score (Country*)
<b>Entrepreneurship Environment Ratings</b> (Source: Key informant surveys; Scale: 1=Low to 5=High)					
[Available for 30 countries]					
Availability of capital	17	2.65	2.66	3.57 (US)	1.59 (VE)
Government policy emphasis	17	2.65	2.66	3.32 (IE)	1.53 (VE)
Low regulation and taxation burden	11	2.57	2.25	4.26 (HK)	1.32 (BR)
Government program effectiveness	17	2.70	2.72	3.52 (IE)	1.20 (VE)
Education and training: schools	4	2.50	2.03	2.76 (US)	1.38 (FR)
Education and training: post-school	8	3.07	2.82	3.81 (US)	1.89 (GR)
R&D Transfer effectiveness	19	2.40	2.49	3.47 (US)	1.63 (UG)
Commercial and professional infrastructure	9	3.42	3.28	4.21 (US)	2.55 (BR)
Rapidity of change in markets	25	2.40	2.82	3.95 (CN)	1.85 (CA)
Low barriers to market entry	7	3.00	2.80	3.42 (US)	2.10 (BR)
Ease of access to physical infrastructure	11	4.18	4.03	4.74 (HK)	3.13 (BR)
Entrepreneurial culture	7	3.15	2.64	4.59 (US)	1.74 (SE)
Perception of business opportunities	7	3.44	3.17	4.00 (US)	2.20 (VE)
Capacity to act on business opportunities	17	2.45	2.46	3.37 (US)	1.76 (FR)
Motivation to act on business opportunities	21	3.15	3.29	4.64 (US)	2.49 (SE)
Protection of intellectual property	3	3.98	3.31	4.05 (CA)	1.55 (UG)
Support for female entrepreneurs	12	3.47	3.23	4.05 (FI)	2.78 (HR)
<b>Entrepreneurship Expert Attitude Ratings</b> (Source: Key informant surveys; Rating: % answering “Yes”)					
<i>Personal beliefs:</i>					
Expect to start business in next 3 years	10	56%	44%	74% (VE)	15% (NL)
Have closed down a business in last year	10	11%	8%	36% (VE)	0% (++)
Know someone who started a business	16	95%	96%	100% (++)	79% (NO)
Perceive good business opportunities now	9	86%	82%	94% (BR, US)	37% (GR)
Have skills to start a business	8	95%	91%	100% (US, CH)	70% (CN)
Fear of failure is NOT a deterrent	6	89%	83%	100% (NZ)	48% (IS)
<i>Views on general population’s beliefs:</i>					
Prefer all have similar living standard	11	70%	65%	97% (SI)	7% (NL)
Starting a business is a desirable career	16	46%	47%	97% (US)	9% (SE)
Successful entrepreneurs have high respect	27	52%	70%	98% (HK)	28% (HR)
Successful new firms often in media stories	17	67%	69%	99% (IE)	20% (HR)
<b>Entrepreneurship Population Attitude Ratings</b> (Source: adult pop’n survey; Rating: % answering “Yes”)					
[Available for 30 countries]					
<i>Personal beliefs:</i>					
Expect to start business in next 3 years	10	15%	12%	56% (UG)	5% (FR)
Have closed down a business in last year	13	3.3%	2.6%	23.8% (UG)	1.3% (FR)
Know someone who started a business	10	45%	40%	88% (IS)	25% (UK)
Perceive good business opportunities now	3	52%	35%	65% (AR)	9% (FR)
Have skills to start a business	5	59%	41%	86% (UG)	22% (HK)
Fear of failure is NOT a deterrent	20	62%	65%	77% (US)	41% (GR)
<i>Views on general population’s beliefs:</i>					
Prefer all have similar living standard	9	73%	63%	83% (CL)	35% (AR)
Starting a business is a desirable career	22	54%	60%	87% (US)	32% (FI)
Successful entrepreneurs have high respect	19	65%	67%	86% (UG)	44% (FR)
Successful new firms often in media stories	10	68%	62%	84% (IS)	25% (ES)

\* See References for list of country codes. ++ indicates several countries with this score

## Part Two

### Explanations

Part Two of the *Westpac GEM Australia Report* seeks explanations for the main questions that arise from the data observed in Part One, both by digging deeper into the GEM data and by referring to other, related research.

#### WHY DOES ENTREPRENEURIAL ACTIVITY FLUCTUATE?

As was reported in Part One, economic growth is clearly one of the factors that causes entrepreneurial activity participation to fluctuate. But it is not the whole story. Australia's total entrepreneurial activity (TEA) participation rate has been one of the most volatile of long-term GEM participants. The drop in participation rate between 2001 and 2002 was consistent with a global trend, yet – despite a relatively high rate of economic growth – Australia's participation dropped proportionately more than most countries.

In 2003, Australia's participation rate bounced back more strongly (an improvement of 34 per cent) than most countries – in fact many other countries TEA rates continued to decline. Australia's decline between 2001 and 2002, and recovery between 2002 and 2003 was largely accounted for by fluctuation in the start-up participation rate. The young firm participation rate remained fairly stable.

In 2002, the GEM Australia team put forward the hypothesis that the start-up participation rate was an indicator of confidence rather than genuine activity. Australia's decline in start-up participation was attributed to a sharp fall in business confidence as a result of a general decline in the global economy, and accentuated by the shock of the terrorist attacks of September 11 2001. The size of the drop, we suggested was due to Australia's low overall level of entrepreneurial capacity, making our entrepreneurial activity more vulnerable to variations in the economic climate. Do the results of the 2003 GEM research support the GEM 2002 hypothesis?

There are two factors to examine here: Australia's entrepreneurial capacity and the level of business confidence in Australia. According to the GEM 2003 experts, Australia's level of entrepreneurial capacity has not improved. Australia's rankings in 2003 were 17th on entrepreneurial skills and 21st on entrepreneurial motivation of the 30 countries in which surveys were completed. This compares with 18th on skills and 24th on motivation of 34 countries in 2002. This is not surprising, as entrepreneurial capacity is likely to be affected by education, experience and cultural support, none of which

can be acquired at a national level in the space of 12 months. If last year's hypothesis is correct, we must look to an improvement in business confidence to explain our improved entrepreneurial activity participation rate.

The Australian Chamber of Commerce and Industry (ACCI), together with Westpac conducts a quarterly survey of industrial trends, which includes a composite index summarising business conditions, one component of which is business confidence ([www.acci.asn.au/surveys.htm](http://www.acci.asn.au/surveys.htm)). Annualised composite indices for both calendar year and financial year have been calculated for comparison with GEM.

Four years data is not sufficient for more than an indication of possible relationships between business confidence and entrepreneurial activity participation. However, the data suggests that the start-up participation rate follows a similar pattern to the business conditions composite index with a six month time lag. That is – since the GEM population survey is conducted mid-year – the composite index for the previous calendar year may be a reasonable predictor of the direction of movement of the GEM start-up participation rate. If this is correct, then we should expect little change in start-up participation in 2004, since the calendar year 2003 composite index is unchanged from calendar year 2002.

Business confidence appears to be strongly influenced by global economic conditions, in particular, the US economy. 2001 was a year of very low growth for the USA and the annualised business conditions composite index had its lowest value in the same year. The following year, the Australian start-up participation rate hit its lowest point. The terrorist attacks of September 11th 2001 had a disproportionate effect on business confidence. The Westpac-ACCI survey for the quarter ending December 2001 reported:

*“In contrast with the solid improvement in activity levels, respondents' confidence in the future deteriorated sharply. There was a substantial fall in respondents' assessments of likely business conditions over the next six months.... This large gap between expectations and current activity levels has not been experienced in the history of the Survey. An undoubted significant factor behind the deterioration in confidence must be associated with concerns following the terrorist attacks of September 11.”*

The following quarter, confidence rebounded, but the sharp fall indicates how vulnerable business confidence is to perception of threats. If the link between confidence and start-up participation rates is real, then more volatility may be expected.



## WHY DO DEVELOPING COUNTRIES “LEAD THE PACK”?

In each of the four years that Australia has participated in the GEM research, a developing country has led the field in terms of total entrepreneurial activity (TEA). In 2000, it was Brazil; in 2001, Mexico; in 2002, Thailand; and in 2003, Uganda, closely followed by Venezuela. Argentina and Brazil, continuous GEM participants since 2000, have consistently ranked in the top seven countries on total entrepreneurial activity (except in 2001, when Argentina ranked 11th).

First of all, a note on participation in GEM of developing countries is appropriate. Long-term followers of GEM research may have noted that, other than Argentina and Brazil, developing countries have not been consistent participants in GEM. This simply reflects the cost and difficulty of conducting the population survey in developing countries. Lack of telephone infrastructure for significant proportions of the population, physical size and multiple languages are among the factors that make the population survey most expensive in the countries that often have the least resources to finance such research. Sporadic participation reflects lack of resources, not lack of interest.

The consistent leadership in TEA by developing countries deserves some consideration of the reasons behind such high levels of entrepreneurial activity. One plausible reason is that there are fewer opportunities to be employed in developing countries together with weaker social safety nets for the unemployed. Thus a higher proportion of the population

might be expected to turn to self-employment as a means of making a living. One would expect this to show up as a higher proportion of entrepreneurial activity motivated by necessity and so it does. Of the 30 GEM 2003 countries, seven might be classified as developing: Argentina, Brazil, Chile, China, South Africa, Uganda and Venezuela. All six of the top ranked countries in necessity-driven entrepreneurial activity are developing countries.

Another useful analysis is to look at the proportion of all entrepreneurial activity in a country that is opportunity-driven and necessity-driven. Here we find that the seven developing countries are in the bottom eight ranked countries on proportion of opportunity-driven entrepreneurial activity; and in the top nine countries on proportion of necessity-driven entrepreneurial activity. Table 10 summarises the rankings.

It is apparent that the type of entrepreneurial activity varies substantially between developing and developed countries. Necessity is clearly a much more significant motivation for entrepreneurial activity in developing countries than in developed countries. Ideally, developing and developed countries should be examined as separate groups.

## WHAT FACTORS BEST EXPLAIN OBSERVED ENTREPRENEURIAL ACTIVITY?

Logistic regression is a useful statistical technique for exploring and explaining factors likely to be associated with the entrepreneurial activity observed in Part One and has been used by the GEM Australia team for the past two years.

**Table 10 – International patterns of opportunity- and necessity-driven entrepreneurial activity**

	Total Entp'l Activity	Opportunity-driven Entp'l Activity	Necessity-driven Entp'l Activity	Opportunity per cent of total	Necessity per cent of total
<b>Top six</b>					
1	Uganda	Uganda	Uganda	Sweden	China
2	Venezuela	Venezuela	Venezuela	Italy	Uganda
3	Argentina	Argentina	Argentina	Denmark	Brazil
4	Chile	New Zealand	Chile	Spain	Venezuela
5	New Zealand	Chile	Brazil	Norway	Greece
6	Brazil	Australia	China	Finland	Argentina
<b>Bottom six</b>					
23	Slovenia	Slovenia	Denmark	Greece	Finland
24	Belgium	Netherlands	Sweden	Argentina	Belgium
25	Netherlands	South Africa	Netherlands	Venezuela	Spain
26	Hong Kong	Italy	Belgium	Uganda	Iceland
27	Italy	Finland	Finland	Brazil	Italy
28	Finland	Hong Kong	Italy	China	Denmark

The technique has two particularly helpful uses. First, it shows which (if any) factors have a statistically significant association with the outcome being investigated. Second, the technique provides an odds ratio. This tells us how much of a difference a given factor makes. An explanation of this statistical technique is provided in Wright (1995).

Once again, logistic regression was used to identify the factors that increased the likelihood of an individual being involved in entrepreneurial activity. Factors investigated were demographic details and responses to questions in the population survey relating towards attitudes to entrepreneurship and societal norms.

Extra questions were introduced to the population survey in 2003, but for cost reasons, they could not be asked of all respondents. Those respondents who said they were involved in a start-up or an existing business (young or established) were asked all eight questions. Those not involved were asked either the first four or the last four of these questions, at random. The result is there were fewer cases for which the responses to these eight questions are available. The main effect of this was that the significance of a factor (whether it makes a difference) was less likely to be clear and the odds ratios (how much difference it makes) were likely to be smaller.

The variables analysed, and the results, are summarised in Table 11, which shows the factors, and their association with start-ups; young firms; total opportunity-driven

entrepreneurial activity and total necessity-driven entrepreneurial activity. A positive influence is indicated by an upward pointing arrow (↑) and a negative influence by a downward pointing arrow (↓). The odds ratio is listed alongside. An odds ratio coded '(x5)' should be read 'times five', and means 'five times more likely'. An odds ratio coded '(x0.4)' should be read 'times zero point four', and means 'only 40 per cent as likely'. An arrow without an odds ratio alongside means a relationship was indicated but was not statistically significant.

Belief that one had the skills to start a business was the most positive influence, statistically significant for start-ups, young firms and opportunity-driven entrepreneurial activity in general. Knowing someone who had started a business was also a positive influence. Perceiving good opportunities in the next 6 months increased the likelihood of being involved in a start-up and being motivated by opportunity.

Negative factors included fear of failure, which significantly decreased the likelihood of being involved in a start-up or being involved to pursue an opportunity. Being female reduced the likelihood of being involved in all types of entrepreneurial activity except young firms. Women were also relatively less likely to be involved in necessity-driven entrepreneurial activity than in opportunity-driven activity.

Being an owner of an established business decreased the likelihood of being involved in a young firm – presumably one business at a time is enough! Having previously closed

**Table 11 – Factors associated with entrepreneurial activity**

Factor	Start-ups	Young Firms	Opportunity	Necessity
Belief you have the skills to start a business.	↑ 2.4	↑ 2.1	↑ 2.5	↑
Knowing someone who started a business in the last 2 years	↑	↑ 1.7	↑ 1.7	
Perceiving good business opportunities in next 6 months	↑ 2.0		↑ 1.5	↑
Fear of failure	↓ 0.40		↓ 0.57	
Being female	↓ 0.64	↓	↓ 0.72	↓ 0.45
Being an established business owner		↓ 0.09	↓	↓
Having closed down a business in the last 6 months			↑	↑
Belief most Australians prefer similar living standards	↓ 0.67			
Belief starting a business is a desirable career option	↑	↓		



down a business was found to increase the likelihood of involvement in entrepreneurial activity in 2002, but in 2003 no significant association was found.

Attitudes to entrepreneurship and wealth creation did not appear to have much impact on involvement in entrepreneurial activity. The only significant association found was for young firm participation. Those who believed most Australians preferred everyone to have a similar standard of living were less likely to be young firm participants – possibly deterred by ‘tall poppy syndrome’.

About half of all Australian businesses employ no-one but their owners (ABS 2003). We were curious to see whether any factors influenced the decision to be an employer or not. Start-ups and young firms were classified as employing or non-employing based on whether they expected to have any employees in five years time. Logistic regression showed that those who started a business in spite of being deterred by fear of failure were three times as likely to be non-employing businesses. Those who were confident in their belief they had the skills to start a business were only 40 per cent as likely to be non-employing.

### **ARE THE KEY ISSUES PERCEPTION OR REALITY?**

First of all, a point of potential confusion needs to be clarified. The GEM population survey measures participation in start-up and young businesses, regardless of size, innovativeness or economic impact. This is a useful barometer of a nation’s propensity to be employers rather than employees and helps define the pool from which high growth businesses may develop. The depth interviews with GEM experts, however, deal primarily with the quality of the support environment for *high growth, high impact* (market and economic) businesses. Both are important to entrepreneurial activity levels in a country.

Last year, Australian experts nominated four of the nine framework conditions as key areas of weakness: Culture, Education, Government Policy support and Financial support. Interview analysis revealed a fifth theme, which we referred to as Entrepreneurial Capacity – the skills and motivation to turn opportunities into viable businesses. It appears in the GEM theoretical model as the engine that acts on the opportunity environment (defined by the nine entrepreneurial framework conditions) to create viable new businesses.

The same five frameworks topped the list of weaknesses again this year. But this year, as already reported in Part One of this report, Financial Support was the number one weakness and the issue of compliance burden emerged with increased urgency from the Government Policy framework.

The key messages from the five critical areas are summarised in Table 12 and are discussed individually in the sections that follow.

### **FINANCIAL SUPPORT**

Of the 42 GEM 2003 experts, 19 nominated some aspect of financial support among their top three limitations and ten raised it as their number one limitation. Only three experts identified key strengths in the financial support framework. In terms of the balance between weaknesses and strengths, it is therefore considered the most problematic framework.

The clear message was that raising finance for new ventures was getting harder. Consistent feedback was that equity capital was less easily available, especially for early stage ventures and that access to debt capital remained as difficult as ever for any business lacking tangible ‘bricks and mortar’ assets. The ‘equity gap’ for businesses seeking funding in the \$200K to \$1M range remained a major problem as did concentration of capital available in the major population centres of Sydney and Melbourne. There were also perceived problems with the lack of breadth in the Australian venture capital industry – that is, investment activity was focussed on perceived ‘hot’ industry sectors.

In 2003, a six-year review of venture capital in Australia, from 1996-97 to 2001-02, was compiled by Victor Bivell, using data compiled by the Australian Venture Capital Journal (AVCJ). It allows some of these perceptions to be tested against objective evidence. Table 10 explains the stages of investment referred to in the analysis that follows.

#### **Decline in availability of capital**

The six-year review clearly showed a falling off in investment activity from venture capital firms between 2000-01 and 2001-02. Overall, the decline in capital invested was only 6 per cent, but the early stages of investment were hardest hit. Seed, start-up and early expansion investment capital (‘early stage’ investment) declined by 44 per cent, 74 per cent and 37 per cent respectively. Later stage investments such as MBOs, MBIs, turnarounds and replacement capital actually increased. For early stage investment the overall decline was 55 per cent in capital invested and 19 per cent in number of deals. In terms of ‘classic’ venture capital, which is confined to funding for establishment or growth of businesses, the overall decline between 2000-01 and 2001-02 was 46 per cent in capital invested and 15 per cent in number of deals (Bivell 2003: 29-36). This downward trend continued in 2002-03 with an overall decline of 30 per cent in capital invested and a decline of 13 per cent in number of deals. Early stage capital investment declined by 33 per cent from \$263.9 to \$177.1 million, just over half the early stage total for 1999-00 and the lowest figure since 1998-99.

**Table 12 – Expert Assessment of Australia’s Strengths and Weaknesses**

<p><b>FINANCIAL SUPPORT</b>  <b>New venture financing is getting harder.</b></p>	
<ul style="list-style-type: none"> <li>✓ The long-term trend in venture capital investment is upward, in spite of a dip in recent investment activity.</li> </ul>	<ul style="list-style-type: none"> <li>✗ Upward trend in total capital available has peaked and started to decline.</li> <li>✗ Lack of capital in the \$200K to \$1M range.</li> <li>✗ Risk aversion of banking sector and preference for tangible assets.</li> <li>✗ Risk aversion of venture capital sector and preference for later stage businesses and ‘hot’ sectors (e.g. biotech).</li> <li>✗ Lack of specialisation in venture capital industry (compared with USA).</li> <li>✗ Lack of financial literacy of entrepreneurs applying for funding.</li> </ul>
<p><b>GOVERNMENT POLICY</b>  <b>The compliance burden is increasing to the point of forcing some businesses to close down.</b></p>	
<ul style="list-style-type: none"> <li>✓ It is not expensive to set up a business in Australia.</li> <li>✓ Well-directed government policies supported by well-designed programs (such as export development, IP Australia) significantly improve the environment for entrepreneurship.</li> </ul>	<ul style="list-style-type: none"> <li>✗ The compliance burden is heavy and getting worse. It is limiting the productivity and growth potential of small businesses.</li> <li>✗ Regulations, especially taxation rules, change too often. Working out how rules apply to an individual business is difficult.</li> <li>✗ There is substantial resentment of the burden of collecting GST, even among those who support the tax in principle.</li> <li>✗ The complexity of employment regulations is a major disincentive to employ staff.</li> <li>✗ Professional indemnity insurance has become a significant expense.</li> </ul>
<p><b>EDUCATION</b>  <b>The education system risks focusing on qualifications and employment to the detriment of true learning and potential for self-employment.</b></p>	
<ul style="list-style-type: none"> <li>✓ The basic education system is good (though some fears that this is being eroded through lack of investment).</li> <li>✓ Some excellent programs exist at all levels (school, undergraduate, post-graduate).</li> <li>✓ Industry associations are getting more involved in ongoing education for their member businesses.</li> </ul>	<ul style="list-style-type: none"> <li>✗ Focus is on qualifications rather than learning, getting a job rather than identifying marketable skills and passions, theoretical learning rather than experiential learning.</li> <li>✗ Not enough education is available in either entrepreneurship in general or the specific entrepreneurship skills.</li> <li>✗ A non-holistic approach – i.e. accounting, legal, HR management rather than ‘business’.</li> <li>✗ A particular gap for growth businesses (as opposed to start-ups and established businesses).</li> <li>✗ Insufficient vocational education (eg trade apprenticeships). Non-academics drop out of formal education and lack alternatives – a waste of talent.</li> </ul>



## ENTREPRENEURIAL CAPACITY

### Australia has masses of unrealised potential.

<ul style="list-style-type: none"> <li>✓ Australians are:             <ul style="list-style-type: none"> <li>• highly creative, inventive, ingenious, adaptable;</li> <li>• passionate, hard-working, resilient and tenacious;</li> <li>• competitive and always striving to improve;</li> <li>• natural networkers.</li> </ul> </li> <li>✓ We have an abundance of success stories (though we don't talk about them enough).</li> </ul>	<ul style="list-style-type: none"> <li>✗ Australians lack skills such as:             <ul style="list-style-type: none"> <li>• turning ideas into opportunities;</li> <li>• financial literacy;</li> <li>• understanding markets;</li> <li>• risk management;</li> <li>• building teams.</li> </ul> </li> <li>✗ Adverse perceptions of entrepreneurship make successful entrepreneurs reluctant to act as role models or mentors.</li> <li>✗ Corporate Australia discourages entrepreneurial activity within its ranks.</li> <li>✗ Our comfortable, materialistic, individualistic culture deters people from making short-term sacrifices required to start an entrepreneurial venture.</li> </ul>
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## CULTURAL NORMS

### Australians respect achievement through hard work, but dislike arrogance and conspicuous wealth.

<ul style="list-style-type: none"> <li>✓ Entrepreneurs are highly respected when they have succeeded on merit and without exploitation of others.</li> <li>✓ Australians' sense of fair play (the 'fair go') makes them inclined to support new ventures to give them a chance to succeed.</li> <li>✓ There are plenty of ethical entrepreneurs who would make good role models.</li> </ul>	<ul style="list-style-type: none"> <li>✗ Entrepreneurs are not widely valued by Australian society. They are subject to negative stereotypes and tall poppy syndrome encourages a low profile. This leads to a lack of role models.</li> <li>✗ Fear of failure. A failed business is still generally seen as a career black mark and a social stigma.</li> <li>✗ Risk aversion combined with lack of reward for entrepreneurial endeavour creates a powerful disincentive for entrepreneurial activity.</li> </ul>
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Number of deals also declined, but less sharply, by 9 per cent from 284 to 258 deals, just below the 1999-00 total (AVCJ 2003).

In short, for early stage businesses, the investment climate is better than it was four years ago, but worse than in each of the following three years.

The six-year trend was, however, very much upwards, with a doubling of 'classic' capital invested and more than doubling of number of deals. If expansion stage investment is excluded, i.e. only early stage investments are examined, then the upward trend was even more pronounced – invested capital up by more than 400 per cent and number of deals by 329 per cent. This confirms the experts' view that availability of equity capital is now much greater than it was five years ago.

### The 'equity gap' for small investments

In theory, the later the stage of investment, the larger the average sum invested per deal. In practice in Australia, there has not been much difference between the four stages that constitute 'classic' venture capital. Over the six years covered by the AVCJ review, the average deal sizes for seed, start-up, early expansion and expansion were \$1M, \$1.7M, \$1.7M and \$2.5M. There was no difference in average deal size between start-up and early expansion stages. (Bivell 2003: 88). The figures do confirm that venture capital has not generally been an option for businesses seeking less than \$1M in funding, corroborating the experts' perception of an equity gap at this level of funding.

### The bias towards Sydney and Melbourne

The six year review confirmed that investment has been heavily concentrated in NSW and Victoria. Furthermore, early stage investment has been even more skewed in favour of NSW, which received 56.6 per cent of all early stage capital over these six years, more than twice Victoria's portion of 25.5 per cent (Bivell 2003: 37). The overwhelming majority of this capital would have gone to companies based in the capital cities. If you were an entrepreneur seeking venture capital and lived outside Melbourne or Sydney, the odds were stacked against you.

Business angels as identified by the GEM adult population survey were, however, spread across the country in roughly the same proportion as respondents.

### Focus on 'hot' industries

As you would expect, capital intensive industries attracted more capital investment. Over the six years covered by the AVCJ review, manufacturing attracted 24 per cent of all capital invested. However, much of this was represented by MBO deals (see Table 13 for definition), not classic venture capital. In terms of number of investments, IT and software was the leader with 16 per cent of the total number of deals, followed by business & financial services at 13 per cent, health & biosciences at 12 per cent and communications at 9 per cent (Bivell 2003: 16-17).

IT & software, together with health & biosciences were the growth areas in venture capital over the six year period and remained strong in 2001-02 in spite of an overall decline in investment. This does tend to support the view that venture capital flows to perceived 'hot' industry sectors (Bivell 2003: 43-59).

**Table 13 – Definitions of venture capital investment stages**

Development Stage	Definition
Seed	To develop, test and ready a product for production or a service for commencement
Start-up	To commence commercial business operations
Early expansion	Growth funding for a relatively new business
Expansion	Growth funding for an established business
Management buy-out (MBO)	For a current management team to buy out a business
Management buy-in (MBI)	For a new management team to buy into a business

(Red shaded stages constitute 'classic' venture capital by GEM definition)  
(Source: Bivell 2001)

### GOVERNMENT POLICY

Thirteen experts nominated some aspect of Government Policy among their top three limitations and five raised it as their number one limitation. Only five experts identified key strengths in the Government Policy framework.

The standout message on government policies was that the compliance burden of taxation and other business regulations was becoming painful to the extent of forcing people out of business. The compliance burden has been an issue raised in every GEM Australia survey to date, but never before with such urgency as it was in 2003.

Although only three key informants raised some aspect of compliance burden as the number one problem, a further eight nominated it as one of the top three limitations to entrepreneurial activity.

The main problems cited were that regulations changed too often; that it was hard to get good advice, even from the regulatory bodies, on how to maintain compliance; that GST compliance placed an unfair burden on businesses by requiring them to act as tax collectors; that regulations governing employment of staff introduced a level of overhead and a fear of penalties such that businesses were reluctant to take on employees; and that professional indemnity insurance had become a new and significant business expense. The clear message was that along with the major challenges of building a new enterprise, entrepreneurs are being expected to shoulder an ever more onerous administrative burden.

The other significant limitation in the government policy framework was lack of effective government support for entrepreneurial activity. The main problems cited were that small businesses do not have much lobbying power with government (small business is usually a junior portfolio); that government supports the established business sector at the expense of emerging business sector; and that a misconception of 'innovation' means that support is skewed towards technology-based new ventures.

The feedback on compliance burden will not surprise anyone who is a regular reader of the small business press. Several surveys conducted in 2003 have highlighted the same problem.

A survey conducted by CPA Australia in April 2003 found that "increasing levels of regulation continues to place a disproportionate burden on small businesses". Tax obligations were considered the most onerous component of the compliance burden. The survey found that 61 per cent of small business owners resented the time required for compliance and 41 per cent felt swamped by paperwork. Employing businesses faced an even greater burden (CPA



Australia, 2003: 4). A newspaper report in June 2003 described Australian small businesses as “drowning in a sea of regulation” (Studdert, 2003).

An Australian Chamber of Commerce and Industry (ACCI) paper on business tax reform reported: “overwhelmingly, the most important problem confronting business is the level and complexity of business taxation” (ACCI 2003: 1). The two most important issues were the frequency and complexity of changes to tax laws and regulations; and the level of business taxation. Another ACCI survey conducted just before the 2001 federal election also raised these same issues as the top two issues small businesses wished to see addressed (ACCI 2001: 1). The urgency of the compliance burden issue reported by GEM experts interviewed may reflect a degree of frustration at the apparent lack of progress.

There is, therefore, substantial external support for the validity of the issues raised by the GEM expert interviewees.

#### **EDUCATION AND TRAINING**

Nine experts nominated some aspect of Education and Training among their top three limitations and three raised it as their number one limitation. This apparently lower priority for education as a limiting factor reflects the formal introduction of entrepreneurial capacity into the framework conditions. Many issues that would previously have been classified as education, related to skills and experience and are now categorised under entrepreneurial capacity. As was the case in previous years, limitations were offset by identified strengths. Nine experts also nominated aspects of education and training as key strengths.

The overall message was that the education system as a whole needs to focus more on developing the ability to think and learn, to collaborate and be creative, rather than acquiring qualifications and narrow skills; and that this needed to start as early as possible in the education process.

The main problems cited were that education risked becoming too theoretical, too focused on qualifications and too oriented towards getting a job, in an environment where permanent employment was declining; that education in entrepreneurial skills was not sufficiently widely available, especially for small businesses wishing to grow; and that a lack of vocational training could result in non-academic students (often the best entrepreneurs) dropping out altogether.

On the strengths side, the general quality of education in Australia was still felt by many to be world class but, as in previous years, fears were expressed that standards might be eroding with declining investment relative to other countries. Pockets of world class entrepreneurship education were identified, as was a trend for industry bodies to promote and provide education to their members.

When experts talked about the limitations of the education system in supporting entrepreneurs, they rarely confined their comments to education specifically aimed at teaching entrepreneurial skills. Their concerns were broader and went to the education system as a whole. They tended to think that any improvements had to start with the school system. By the time students reached tertiary or vocational education, it was felt to be too late to address the gaps in any systemic fashion. This has been a consistent theme of GEM expert feedback over four years of GEM in Australia and led to the recommendation in the GEM 2002 report that entrepreneurship curricula be introduced into Australian schools (Hindle and Rushworth 2002: 34-35).

It would be going too far to say that the 2003 GEM experts felt the Australian education system was in crisis, but nonetheless there was a widespread concern that it was moving in the wrong direction and that a shift in philosophy was needed.

A major study of learning strategies across 22 OECD countries (including Australia) and 4 non-OECD countries, the Programme for International Student Assessment (PISA) was carried out for the first time in 2000. It assessed the abilities of 15-year-old students in each country to use their reading, maths and science skills to meet real-life challenges. Finnish students outperformed all other countries in all three areas of achievement.

The study concluded that for education to lead to higher performance, it was important that students should acquire an ongoing ability to learn. The learning strategy most closely related to performance was student control over their learning. The motivational characteristic most closely related to performance was interest in reading (Artelt et al. 2003: 72-73). This is different from reading performance and the difference is important for Australia. Australian students ranked among the top countries on reading performance, but below the median on reading engagement (interest). Finnish students ranked first on both measures (Kirsch et al. 2002).

The PISA findings led the UK Office of Standards in Education (OFSTED) to conduct a study of approaches to teaching six year-olds in England, Finland and Denmark. Finland and Denmark had similar approaches to early schooling, which differed from the English approach. Children started school later; the focus was on how six year olds developed as people rather than what they should know and be able to do; and the curriculum was much less centralised and closely defined than in England. The study also found a much greater degree of agreement between parents and teachers in Denmark and Finland about the purpose of early childhood education, than in England. In Denmark, this approach did not lead to the same high performance in later years as it did in Finland. In fact, the English students out-performed the

Danes. The differentiating factor seemed to be a very widespread interest in reading among Finnish students that far exceeded that of any other country in the PISA study (OFSTED 2003: 5-6).

Why is this relevant to Australia or to GEM? First of all, it suggests the approach to learning in Finland is worthy of closer examination. Secondly, the philosophy of early childhood education in Finland (and Denmark) is strikingly similar to what some (not all) GEM experts felt was needed in Australia. Many of them talked about schools needing to allow children to develop as individuals and find their personal strengths rather than being guided towards a limited set of pre-defined outcomes. It has been a consistent theme of GEM experts over the past four years that children with natural entrepreneurial inclinations often do not fit well within the Australian education system.

There is local support for a new approach to education, including greater autonomy for teachers. Education consultant, Dr Kevin Donnelly, argued that “teachers should be freed to get on with the job and to do what they love – that is to actually teach”. He quoted the NSW Vincent Report (published September 2002) finding that syllabi were dumped on teachers without adequate consultation, and the report’s recommendation that primary school teachers should be given simple, succinct syllabus outlines that they can implement in their own way (Donnelly 2003).

### **ENTREPRENEURIAL CAPACITY**

Seventeen experts nominated some aspect of Entrepreneurial Capacity among their top three limitations and seven raised it as their number one limitation. This is consistent with their low ratings for entrepreneurial capacity in the expert survey, as compared with ratings of experts from other GEM countries. Even more experts – nineteen in total – nominated key strengths in the Entrepreneurial Capacity framework, sixteen of which were the number one strength identified.

Key strengths identified included: creativity, adaptability, tenacity, competitiveness and a high propensity for networking – the raw material of entrepreneurial capacity. The deficiencies noted were about refining raw talent into repeatable skills, together with a lack of depth of experience from which aspiring entrepreneurs could learn. They also saw the lack of encouragement for entrepreneurial activity within established companies in Australia as a major limitation to entrepreneurial activity in general. Negative perceptions of entrepreneurship (also noted under Cultural Norms below) further reduced entrepreneurial capacity by discouraging successful and experienced entrepreneurs from accepting the public profile necessary to make them effective role models.

The overall message was that Australia has a great deal of

unrealised potential, which could be released if natural entrepreneurial orientation and raw skills could be refined through education, mentoring and experience. The mood was one of “we could do so much more if only...”.

Very relevant to Entrepreneurial Capacity is the report “Assessing Australia’s Innovative Capacity in the 21st Century”, released in June (Gans and Stern, 2003). The GEM Australia team has been wary of the term “innovation” because there is a tendency to perceive innovation as an event, ending with the identification of an idea, rather than a process ending with a commercial outcome. This problem was discussed in the GEM Australia 2002 report (see Hindle and Rushworth 2002: 31-34). The above report did recognise this distinction. The opening paragraph of the executive summary noted that: “Prosperity flows from the ability of a nation’s companies to create *and then globally commercialise* new products and processes” (italics are ours). Its primary measure of innovation was international patent applications, which are unlikely to be applied for unless there is a serious intention to commercialise.

The report was based on an innovation index, which has been calculated from 1980 onwards. Although Australia’s score has improved consistently over this period, its rank has not improved since 1985 and, in fact, declined between 1995 and 2000. The authors acknowledged Australia had attained the status of a “second tier innovator” and this represents a significant shift from its previous status as an “imitator”, but they note that in the last five years, other countries had leap-frogged Australia’s progress and that two key indicators of innovative capacity: higher education expenditures and university research performance were on the decline in Australia.

Gans and Stern noted that not only was R&D investment by private organisations in Australia low by world standards, but it was not directed towards Australia’s traditional research strengths. Australia was the only OECD country where life sciences dominated degrees awarded; in most countries engineering dominated by a factor of up to four times the next most popular sector. And yet private R&D investment in Australia was directed not to life sciences, but overwhelmingly towards engineering and software (Gans and Stern, 2003: 37-38). GEM experts drew attention to the lack of entrepreneurial innovation in Australia’s large companies. This was most often attributed to the fact that many of the largest companies in Australia were branches of foreign multi-nationals, whose major research activity was located elsewhere. Gans and Stern noted that private R&D investment was generally aimed at applying technology developed elsewhere. Australia is internationally recognised as an early-adopter nation, especially of software and



telecommunications technology. This makes the high proportional spend on software and engineering understandable.

Consistent “first tier” innovators included the USA, Japan and the Scandinavian countries. Apart from the USA, these countries have been low to medium scorers on the TEA index. Innovative capacity is not a predictor of entrepreneurial activity in terms of number of active business owners. Nor is it intended to be. It is an indicator of the ability to produce world leading companies, based on world leading research. This reinforces a warning expressed in the first GEM Australia report (Hindle and Rushworth 2000). We in Australia cannot afford to be complacent about our high ranking in total entrepreneurial activity while we are producing very few companies that generate significant job growth and are recognised globally as leaders in their field.

Innovative capacity strictly belongs more in the Research and Development (R&D) Transfer framework than under Entrepreneurial Capacity, as it deals with the capacity to turn research into commercial outcomes. However GEM expert feedback over the four years of GEM in Australia consistently point to a general lack of capacity to commercialise ideas in general, not just as a result of explicit R&D activities, as a higher priority issue. While R&D transfer capacity in Australia is considered to have weaknesses, it also has many strengths, and it is not highlighted as an issue with the frequency and urgency of the five frameworks on which we have chosen to focus.

### **CULTURAL AND SOCIAL NORMS**

Nineteen experts nominated some aspect of Cultural and Social Norms among their top three limitations and ten raised it as their number one limitation. As was the case with Entrepreneurial Capacity, the strengths outweighed the weaknesses.

According to the GEM experts, the Australian attitude towards entrepreneurship is mixed and often appears contradictory. On the one hand, Australians respect enterprise (‘having a go’), like to give new ventures support (‘a fair go’) and respect achievers. On the other hand, they dislike arrogance and flaunting of wealth, are generally unsympathetic to failure, rather enjoy seeing successful people fall from their pedestal (‘tall poppy syndrome’) and, in spite of the famous ‘have a go’ mentality, are highly risk averse in many aspects of their behaviour. This picture has not changed significantly over the four years of GEM research in Australia.

All the experts felt that Australia has plenty of successful entrepreneurs who would be respected by the majority of Australians if they knew about them. The problem, they said, was that many of these people prefer to keep a low profile

for fear of becoming victims of ‘tall poppy syndrome’ – that is, pleasure in seeing conspicuously successful people cut down to size. Consequently the experts believed there were fewer entrepreneurs available as role models and mentors than would be the case in a more supportive culture.

South Australian academic, Norman Feather, has conducted several studies on ‘tall poppy syndrome’. He found that in general, the higher the achiever the more Australians tended to be pleased to see him or her fall, but only to an average position, not to the bottom of the scale. In other words, we only want to trim our tall poppies to the size of the average poppy, not chop them off at the roots. He also found Australians expected higher standards of tall poppies: attitudes towards high achievers who cheated to maintain their success were far more punitive than towards average achievers who cheated in the same way (Feather 1989). If success was perceived to be deserved, people were less likely to take pleasure in a fall, and if the reason for the fall was perceived to be no fault of the individual, they were more likely to be sympathetic (Feather, Volkmer and McKee, 1991 cited in Feather 1995: 218-222).

Feather delved beyond these findings to investigate whether the value system of the individual or the society in which they lived influenced their attitude towards high achievers. He found that cultural values did have an influence. For example, a society that values the collective above the individual is less likely to be comfortable with individual high achievers (Feather and McKee, 1993 cited in Feather 1995). He found that individuals with low self-esteem and low perceived personal competence were more likely to favour the fall of tall poppies. Those with high self-esteem and perceived competence were more likely to favour the continued success of tall poppies, but were less likely to be sympathetic to them if they did fall (Feather 1991 cited in Feather 1995: 247).

Australian author, Susan Mitchell, believes that Australians lack self-esteem. In her book, “Be bold”, she called for Australians to shed their addiction to self-deprecation and understatement. Australia, she said, was a country in love with mediocrity, preferring the understatement to unashamed full-throated praise. Battlers, not winners, she argued, were applauded in Australia – except, of course, in sport (Mitchell 2000).

The term ‘tall poppy syndrome’ is so widely understood and accepted in Australia, that it doesn’t seem to be considered important to question how it arose, why it is so widespread and whether it can be changed. Given the limitations it may be placing on Australia’s ability to compete globally, perhaps it is time for it to be given more attention.

# Part Three

## Implications

Parts One and Two of the *Westpac GEM Australia Report*, respectively, provided some answers to the questions: *what* is happening concerning entrepreneurship in Australia and *why* is it happening? Part Three is concerned with the 'so what?' issues of policy direction and implementation. In each year of Australian GEM research, the evidence of entrepreneurial activity and its interpretation indicates both the most appropriate general themes for policy-makers to concentrate their attention upon, and some specific policies that ought to be enacted. This year, in addition, we provide a consolidated, longitudinal summary of the evolution of GEM's contribution to entrepreneurship policy, both in Australia and in other GEM participant countries.

### A REVIEW OF GEM AUSTRALIA'S POLICY PERSPECTIVE

#### 2000

2000 was the first year that an Australian GEM report was produced. The key issues that emerged centred on education; availability of capital; government policy (compliance and taxation burden, and short-term outlook); and culture. No specific policy recommendations were made. The emphasis instead was on providing context for meaningful and productive policy debate about Australian entrepreneurship.

This first GEM Australia report introduced a tool for analysing and developing entrepreneurship policy. In the form of a matrix, the Entrepreneurship Policy Framework (Hindle and Rushworth 2000: 41-44), it could be used to categorize the relevant roles of all stakeholders (not just government policy makers) with respect to the development of entrepreneurship at the level of: individuals; firms; industries; government and society at large. It is a framework the GEM Australia team has returned to in subsequent years for framing policy recommendations and has been drawn on by other GEM national teams (for example New Zealand, see Frederick et al. 2001: 41). We will use it in this report to review policy trends during the four years of GEM research in Australia.

#### 2001

The pattern of key issues identified in 2000 was repeated in 2001, with key issues centred on the four frameworks of Culture, Education, Government Policy and Financial Support. Two recurrent themes across frameworks were the need for more collaboration between stakeholders and clustering as a means of achieving critical mass and encouraging collaboration. In addition, there was a move to broaden the

conception of the field to include both government entrepreneurship and especially *social* entrepreneurship – the development of innovative, creative enterprise in the non-profit sector.

The two specific policy recommendations made (see Hindle and Rushworth 2001: 47-48 for full details) did not claim to address all the key issues identified in 2001, but to suggest achievable initiatives that relevant stakeholders might embrace:

1. The development and establishment of a Cooperative Development Centre (CDC) program akin to the existing Cooperative Research Centre (CRC) program but focused on the 'D' in 'R&D'.
2. The creation of a portfolio of focused micro debt and equity (MDEF) funds designed to be small-scale, risk-tolerant and locally focused. Their common theme would be stimulation of new venture development among communities and in sectors traditionally deprived of economic and social capital.

#### 2002

In 2002, key issues again centred on the four frameworks of Culture, Education, Government Policy and Financial Support. With the benefit of three years of interview data, the GEM Australia team identified a fifth 'framework' of Entrepreneurial Capacity – possession of the skills and motivation to transform new ideas into new ventures. It appears in the GEM model as the factor that acts on the entrepreneurship support environment represented by the nine entrepreneurial framework conditions. Its significance is recognised in Australia under the banner of 'innovation'.

The Implications section of the 2002 GEM Australia Report contained a strong critique of our national misunderstanding about what does and what should constitute 'innovation policy' (Hindle and Rushworth 2002: 31-34). Although innovation is a process in which a new idea is just the beginning, too often in debate and policy development, it has been associated with the generation of new knowledge or simply 'ideas'. This has been to the detriment of developing capacity to apply new knowledge to create tangible economic or social outcomes.

Finally, in 2002, a related research project allowed a specific focus on Indigenous Entrepreneurship, summarised as a standalone section of the main report.

The 2002 GEM Australia Report contained five specific policy recommendations (Hindle and Rushworth 2002: 34-38). All were aimed at addressing the issue of entrepreneurial capacity in various ways:



1. The creation, development and implementation of a national, assessable high school curriculum for the study of innovation and entrepreneurship.
2. Commencing in 2003, the establishment of an annual national conference to examine and disseminate leading-edge knowledge about a selected topic pertaining to the enhancement of Australia's entrepreneurial capacity.
3. The creation of an Australian SME entrepreneurial knowledge-transfer network, providing, to the business community at large, free, on-line delivery of highly useful knowledge, teaching materials and packages currently developed by SMEs with high levels of proven entrepreneurial capacity.
4. Building on one of the recommendations made in 2001, the creation of a national Collaborative Development Centre for research, dissemination and application of knowledge about the development of entrepreneurial skills.
5. Building on the social entrepreneurship theme of 2001 and the Indigenous entrepreneurship focus in 2002, the development and implementation of a targeted pilot program to test the efficacy of creating a diversified, national Indigenous entrepreneurship education and training program for Australia.

The GEM Australia team does not claim that the recommendations made in GEM Australia reports to date are a comprehensive set of initiatives, only a selected set that we have felt able to frame. Most of them are long-term initiatives and require multiple stakeholders. Since we have been at pains to emphasise that ideas are only the start of the innovation process, it would be unreasonable to expect that having articulated our ideas that others would immediately put them into action! Recommendation 2 above, however, has been begun with a successful conference on Corporate Entrepreneurship held in August 2003, hosted by the Australian Graduate School of Entrepreneurship and supported by the Victorian Government (Department of Industry, Innovation and Regional Development). It would be very pleasing to see other universities continue the momentum in 2004 and beyond.

### **GOVERNMENT SUPPORT FOR ENTREPRENEURSHIP INTERNATIONALLY**

The survey completed by GEM expert interviewees in each participating country includes sections on support for entrepreneurship through Government Policies (general intent, represented by legal and taxation regime, purchasing policies, government portfolios with responsibility for promoting entrepreneurship etc) and Government Programs (specific initiatives aimed at supporting new and growing

businesses). A detailed analysis of expert assessments was conducted by the GEM Ireland team and is included in the GEM 2003 Global Report (Reynolds et al. 2004: 109-112). The key points are summarised below.

In the 2003 survey experts were asked to assess whether (i) government policies and (ii) government programs in their country, aimed at supporting new and growing businesses, were effective on a scale of 1 (not effective) to 5 (very effective). An average score above 3 therefore represented a generally positive evaluation and an average score below 3, a generally negative one.

The results were something of a global black mark for governments. In 25 countries, the average score was generally negative. Only in five countries was the average above 3 and only in Ireland was it above 3.5. In other words, no experts considered their countries' governments to be strongly supportive of entrepreneurship. Australia had average scores of 2.74 and 2.77 for Government Policy and Government Programs support respectively, ranking 11th on both measures.

Specifically, regarding Government Policies:

- Only in two countries was support for new and growing businesses considered to be a high priority at national government level. No country considered it to be a high priority at local government level.
- In no country were government policies (such as public procurement) considered consistently to favour new businesses.
- In two thirds of countries the tax burden borne by new and growing businesses was considered too high. Only Hong Kong experts considered the level of taxation was not a burden. Hong Kong was also the only country where experts considered tax rules applied predictably and consistently to new and growing businesses.
- Only in Iceland were experts in no doubt that new businesses could obtain the licences and permits they needed within a week. Australia's score on this measure has declined from 2.48 in 2000 and in 2001, to 1.93 in 2002 and 2.02 in 2003.

Regarding Government Programs:

- France was the only country where science parks and business incubators were considered to provide effective support to entrepreneurial businesses.
- No countries received a clearly positive assessment for: assistance through contact with a single agency; adequate number of support programs; competency and efficiency of program administrative staff; ease of access for new businesses to information about government programs.

For countries where governments believe there are a wide range of effective programs available to support new and growing businesses, the expert ratings indicated a need to bridge an information gap between program providers and their target audience. Certainly, in Australia, expert interviewees directly involved in managing entrepreneurial ventures had low awareness of government programs designed to support them. They often said they were too busy to check out what was available. Another frequent comment was that none of the programs they were aware of seemed to apply to their business situation – either eligibility criteria excluded them or the lead time between applying for and receiving funding was too long. COMET (COMmercialising Emerging Technologies) was the program most widely known and generally well-regarded among practitioners, investors and advisors – possibly in part because it is still relatively new.

Governments are, of course, an easy target. They are expected to tackle the most complex of problems, perceived shortcomings are always highlighted and successes rarely acknowledged without reservation. Nevertheless, the consistently low ratings indicate that few governments worldwide are providing substantial or effective support for entrepreneurial activity.

This should not be taken to mean that governments worldwide do not consider entrepreneurial activity important. World policy bodies such as the OECD and World Economic Forum have commissioned studies into the contribution of entrepreneurship and innovation to growth, several of which have been referred to in this and previous GEM reports. One measure of government interest in entrepreneurship is support for the GEM project itself.

In the majority of GEM participant countries, the project is funded at least in part by government departments. In many cases governments, or agencies funded by government, were the sole source of funding for the first year of participation in GEM (and sometimes longer), allowing the university partners to demonstrate the value of the project sufficiently to attract commercial sponsorship.

The GEM UK team has been particularly successful at getting government support for GEM. With the financial support of government departments (and some private organisations) from all parts of the UK, they were able to conduct a survey of 22,000 UK adults in 2003, and to include additional questions – for example, sources of finance sought, and success rate in obtaining finance. The larger sample allowed for analysis of differences in entrepreneurial activity across 12 regions. It also made it possible to achieve a greater degree of certainty about whether the variations observed in participation across age ranges, gender, location, education level etc are significant or not. The extra questions allowed detailed

examination of specific aspects of entrepreneurial activity, such as entrepreneurship in minority groups, access to finance, technology, and social entrepreneurship (Harding 2003).

The GEM Germany team, with the support of the German government and a public bank, has established a local variant of GEM – the Regional Entrepreneurship Monitor (REM). In 2003 7,500 German adults were surveyed; in 2002, 15,000. This enabled in-depth analysis of variations in entrepreneurial activity between regions of Germany.

## REVIEW OF ENTREPRENEURSHIP SUPPORT IN AUSTRALIA

Since the GEM Australia team are originators of the Entrepreneurship Policy Framework, it is appropriate to use it to analyse how the entrepreneurship support environment has evolved in Australia over the past four years. The Framework was introduced in the first GEM Australia report and is reproduced here as Figure 15. Five groups of stakeholders are represented: individuals, firms, industries, government and society in general. The framework is an impact model, which summarises, in one or two words, the type of influence the entrepreneurial subset of each stakeholder group can have on each group of stakeholders in general. For example, ‘entrepreneurial firms’ provide employment to ‘individuals at large’.

Rather than attempting a detailed analysis of each ‘cell’ of the framework, we will present an overview of the most important areas of influence, beginning with the most influential stakeholder: governments.

### GOVERNMENTS

The row of the matrix devoted to ‘entrepreneurial governments’ has a common theme: **capacity**. The role of governments is to provide capacity for other stakeholders to fulfil their potential, in the form of education, infrastructure and a long-term horizon within which other stakeholders can plan.

On *Education*, there is a clear feeling among GEM experts that Australian governments are not doing enough. The concern extends to general education, not just education in business and entrepreneurial skills. This concern has remained constant in four years of GEM research.

*Infrastructure* covers a multitude of areas. The key ones are taxation, the business regulation regime, and government programs to support business. Progress on these areas is mixed. GEM expert feedback suggests that levels of taxation are now considered more acceptable, and that government programs are steadily improving. However, the process of calculating and paying taxes, and the compliance burden of running a business are considered to be getting worse.

Physical infrastructure provision, has consistently been very



**Figure 15 – The Entrepreneurship Policy Framework**

	Individuals at large	Firms in general	Industry in general	Government sector	Society at large
Individual entrepreneurs	Role models	Challenge	Leadership	Taxes	Inspiration
Entrepreneurial firms	Employment	Role models	Renaissance	Taxes	Applied innovation
Entrepreneurial industries	Affiliation	Networks	Role models	Strategy	Feasibility
Entrepreneurial governments	Capacity: Education	Capacity: Infrastructure	Capacity: Horizon	Capacity: Role models	Value
The entrepreneurial society	Motivation	Choice	Challenge	Priorities	Diversity

highly rated (with the possible exception of broadband access), but is increasingly being moved to the private sector.

*Horizon* is a difficult area for Australian governments. The term of office for the federal government is shorter than for governments in most comparable economies. Our federal structure means there is always a state election looming somewhere in Australia. It is therefore difficult for governments to articulate and progress towards a long-term vision. While lack of long-term vision has not been among the most critical issues raised, feedback has been consistent that short-term outlook of governments is an impediment to entrepreneurial activity. Since the electoral structure in Australia is unlikely to change, more bipartisan initiatives would seem to be the best hope of improvement in this area.

Underlying all of this is the degree to which support for entrepreneurial activity is seen as a priority for governments. There has been some progress here, largely due to the interest in innovation and, by association entrepreneurship. The National Innovation Summit held in February 2000 attracted a large audience representing a wide variety of stakeholders and led to the \$3 billion (over five years) package of initiatives under the banner *Backing Australia's Ability*.

Innovation has become a specific portfolio in some governments (Queensland and Victoria, for example). Innovation features in numerous government programs at both federal and state level and many of these are specifically aimed at commercialisation of innovation. But there is little evidence that the role of entrepreneurship and the importance of entrepreneurial capacity in achieving successful commercialisation is well understood or recognised. 'Entrepreneurship' does not feature in any government portfolios. Innovation initiatives are still skewed towards generating knowledge rather than applying it and towards technology-based businesses. It still difficult for new and growing businesses to benefit from these programs.

But there are signs that progress continues. The importance of young businesses in converting ideas to tangible outcomes

is being recognised. For example, the need for the Collaborative Research Centres (CRCs) to be made more accessible to small and medium-sized enterprises (SMEs) has been highlighted recently by Dr. Gautem Tendulkar, Business Development and Commercialisation Director for the Smart Internet Technology CRC:

*It is essential for publicly funded research organizations to work together. It is even more important that these organizations work in a manner consistent with the objectives of private enterprise. Cooperative Research Centres (CRCs) are failing on this front, in so far as small-to-medium enterprises (SMEs) are concerned. (Tendulkar 2003: 64).*

The role of the social sciences and humanities in commercialising innovation has also been recognised. The national research priorities, first announced in December 2002, were recently updated with this in mind. They included, four new goals, one of which was 'promoting an innovation culture and economy'. The description states:

*Understanding the factors that lead to highly creative and innovative ideas and concepts, and the conditions that lead to their introduction, transfer and uptake is critical for any nation that aspires to lead the world in breakthrough science, frontier technologies, and in other forms of innovation. Promoting an innovation culture and economy requires research with a focus on developing and fostering human talent, societal and cultural values favourable to creativity and innovation, and structures and processes for encouraging and managing innovation. (DEST 2003)*

The word 'entrepreneurship' may not be used but the goal above might be quite accurately summarised as 'promoting entrepreneurial capacity'. And intent has been matched by action. The GEM Australia team has recently been awarded an ARC grant, with Westpac as Industry Partner, to carry out detailed research into the key components of 'entrepreneurial capacity'.

## ROLE MODELS

The 'leading diagonal' (top left to bottom right) of the policy matrix also has a common theme: role models. The entrepreneurial subset of each stakeholder group provides role models to the group in general. It has been a consistent theme of GEM expert feedback that Australia lacks role models at both individual and firm level – not because suitable individuals and firms do not exist (though we need more), but because they prefer to keep a low profile.

This is widely attributed to 'tall poppy syndrome'. To offer yourself, your firm, your industry or even your government, as a role model carries the risk of being branded a 'tall poppy', and coming under close scrutiny from potentially hostile audiences. Any shortcomings are more likely to be identified and publicised. Misunderstandings may be blown out of proportion. This can present a real risk to your business. Entrepreneurs are good at risk assessment. It is therefore not surprising that many of them decide that, even though they would like to support aspiring entrepreneurs, the risk outweighs the reward.

Tall poppy syndrome is widely entrenched and seems to be accepted as a fixed aspect of Australian society. It is hard to imagine it disappearing. But it is a major contributor to the negative cultural context for entrepreneurship in Australia.

## INDIVIDUALS

The most significant influence entrepreneurial individuals can have is as role models for other individuals. As has been noted above, this potential influence is diminished in Australia by tall poppy syndrome.

Another area of influence individual entrepreneurs can have is within existing organisations (represented by row 1, column 2 in the policy matrix) by challenging the status quo. Feedback from GEM experts indicates that most established businesses in Australia do not tolerate entrepreneurial individuals well. They are likely to end up leaving out of frustration, or being ejected as disruptive influences. Some may go on to start their own businesses, but probably many more decide to stop rocking the boat and keep their entrepreneurial ideas to themselves. Whether they leave, or stay and conform, the creativity and energy of these individuals is lost to their employers. Along with it goes some degree of competitive edge and the pool of potential company leaders is diminished.

This is not to say that every disruptive individual in an established organisation is a frustrated entrepreneur. We freely admit that some may just be people who like making trouble. Entrepreneurial firms learn to distinguish between the two and nurture entrepreneurial drive where they find it.

Entrepreneurial individuals are often the pioneers of new products and markets, providing leadership to industries. Australia's strong research base, creativity and early adopter mentality provides a good breeding ground for such pioneers. However, this needs to be matched by appropriate skills and supportive infrastructure – entrepreneurial capacity – and this remains relatively weak.

## FIRMS AND INDUSTRIES

Entrepreneurial firms and industries both provide employment to individuals. Entrepreneurial industries, in addition, provide a sense of affiliation – pride in belonging to an exciting, evolving industry and motivation to improve it further. Entrepreneurial firms can help revitalise their industry. Entrepreneurial industries encourage their member firms to work together for mutual benefit and can thus identify strategies to benefit the industry as a whole and, if they can demonstrate benefit to the country as a whole, help provide strategic directions to governments.

Unfortunately, GEM research suggests that Australian firms are not particularly entrepreneurial. In the new Firm Entrepreneurial Activity (FEA) index referred to in Part One, Australia ranked 23rd of 40 countries. The FEA index refers only to privately owned businesses, but there GEM expert feedback suggests that, if anything, Australia's public companies are even less entrepreneurial. Established Australian businesses are consistently criticised for being much more occupied with managing status quo and keeping costs down than finding new markets and improving revenue streams. They are also criticised for relying too much on government support.

Australia's wine industry is an example of an entrepreneurial industry. It has achieved outstanding growth through collaboration with and successful lobbying of government. It now faces considerable challenges and, no doubt, mistakes have been made along the way. That's fine – role models are not supposed to be perfect. Part of their value is that they are open about their mistakes so that others (not to mention themselves) can learn from them.

## SOCIETY

An entrepreneurial society provides a stimulating, supportive environment for entrepreneurs to experiment safely. It is educated, informed and quick to learn, providing a rich source of human capital for entrepreneurial firms. It is not satisfied with mediocrity and stimulates industries to provide better, faster, easier to use products and services. It shares information and recognises common concerns quickly, and it communicates these priorities to governments.

Australian society has many of these characteristics, but it is unforgiving of failure – even honest mistakes. There is a



tendency to demand that at least one head must roll for any error or adverse event – even if that head has hitherto performed well and no obvious replacement exists. We are an increasingly litigious society, seeking someone to blame for events that we might previously have regarded as simple bad luck. This is not a supportive environment for entrepreneurs, who push boundaries and tread new ground, and are therefore more likely to make mistakes and discover new pitfalls. Nor is it conducive to learning and improving. Executing a scapegoat might satisfy public bloodlust, but it doesn't solve underlying problems.

A society that does not forgive honest failure also discourages high ambitions, since high ambitions involve risk, and risk increases the likelihood of failure. And yet high rewards and breakthroughs are unlikely to result from modest ambitions. This has also been a theme of GEM expert feedback over the past four years. Summarising a few points from the 2003 survey and interviews:

- The vast majority of Australia's start-up and young ventures expect all their customers to be 'close to home' and have no expectation of any export-derived income.
- The vast majority of Australia's start-up and young ventures expect to practice no innovation whatsoever. They intend to create low-horizon, 'me too' ventures.
- Our comfortable, materialistic, individualistic culture deters people from making short-term sacrifices required to start an entrepreneurial venture. Passive income from property or shares is easier and safer, and losses carry less social stigma.

### SOME SUGGESTED ACTIONS

The *Westpac GEM Australia Report* does not aim to present a comprehensive list of recommendations. The experts interviewed for GEM in 2003 were asked to suggest ways of improving support for entrepreneurial activity in Australia. A summary of those suggestions – some broad in impact, some very specific and targeted – will be provided as a separate document on the GEM Australia web site ([www.gemaustralia.com.au](http://www.gemaustralia.com.au)) shortly after publication of this report.

The recommendations presented here represent a few that have significant potential impact and to which the research and higher education community, of which the authors are part, can make a direct contribution.

The first recommendation is not new. It is a further refinement of the call for a Collaborative Development Centre (CDC) program, first raised in the 2001 GEM Australia report.

*Recommendation 1. The creation of a National Collaborative Development Centre (CDC) devoted to enhancing national entrepreneurial capacity. The centre*

*would research, disseminate and apply knowledge about the entrepreneurial skills required to start and progress a variety of successful new ventures. The centre would place special emphasis on expanding national entrepreneurial capacity to establish internationally-oriented, high-growth, high-employing new ventures.*

This recommendation addresses the updated national research priorities referred to above and also the need for greater involvement of SMEs in collaborative research and development.

The second recommendation also builds on a previous recommendation:

*Recommendation 2. The establishment of an annual, regional forum to exchange latest knowledge on entrepreneurship research and on entrepreneurship education. The research component would comprise presentations and discussions of research-in-progress papers with a focus on entrepreneurship. The teaching component would aim to facilitate practical and intellectual collaboration between the academic and business worlds.*

This continues the objective of facilitating knowledge transfer and skills development in entrepreneurship and entrepreneurial capacity suggested by the 2002 GEM Australia report's recommendation for an annual conference on a selected topic pertaining to entrepreneurial capacity in Australia. The Australian Graduate School of Entrepreneurship held the first such conference (on Corporate Entrepreneurship) in August 2003, and will trial the exchange forum concept in February 2004, with a view to making it an annual event. The exchange forum and annual conference can be complementary, with the research exchange suggesting topic areas for conferences and the teaching exchange building on the education needs identified by such conferences. The value of the research and teaching exchange forums would be enhanced by conferences on specific aspects of entrepreneurship, but do not depend on them.

Finally, a call to researchers in the social and behavioural sciences field:

*Recommendation 3. Targeted research is needed into 'tall poppy syndrome', its causes, its effect on entrepreneurial activity and leadership in general, and how its negative impact might be reduced.*

'Tall poppy syndrome' appears to be firmly entrenched in Australian society and four years of GEM expert interview have consistently told us that it is a serious impediment to entrepreneurial activity. It would seem to be time that we understood it better. Library catalogue and internet searches

reveal surprisingly few books or refereed journal articles on the subject. There is a substantial literature on egalitarianism, which is clearly a related subject, but it is a broad field with many definitions, by some of which Australia is considered a relatively egalitarian society and by others, relatively unequal (Gilding 2003).

Even allowing for our imperfect knowledge of 'tall poppy syndrome', there are proven techniques for reducing risk in entrepreneurial endeavour, and a wider understanding of these can improve the success rate and raise the aspirations of existing entrepreneurs, and perhaps give enough confidence to aspiring entrepreneurs to encourage them to take the plunge. Each year, from now on, the *Westpac GEM Australia Report* aims to present one such practical tool for entrepreneurs.

## INTRODUCING THE 'ACTION FOCUS'

The GEM Australia team is concerned not only with researching entrepreneurship but also with making research findings useful to practitioners. The principal GEM research output, both the data and evaluation of it, is fundamentally aggregate in nature: it is about the big picture. As such, it is directly useful to policy-makers concerned with the development of Australia's economy and to researchers, students and any citizen wishing to understand entrepreneurship as a phenomenon of social, political and economic importance to the nation. This audience includes people directly involved in active entrepreneurship: those Australians at work in start-up firms, new firms and anyone in the SME sector who is interested in business growth through creating and commercialising dynamic new initiatives. Business operators can also gain particular benefit by perceiving the general entrepreneurial context in which their firm operates.

It is a practical limitation that policy-oriented, aggregate information is broad and general by nature and only indirectly useful in the day-to-day running of a business. So from this year onwards, in each *Westpac GEM Australia Report*, we would like to add value by offering entrepreneurial individuals and firms (and their advisors) an action focus, in the form of very practical operational guidelines about how to handle an issue directly relevant to the day-to-day specifics of running an entrepreneurial business. Each year, the area selected for attention will be one that GEM research, and the wider field of entrepreneurship research generally, has shown to be important but for which few practical management aids currently exist. In the years to come, the action focus sections of *Westpac GEM Australia* may be written by many guest authors, and cover a broad array of issues and insights.

This year's action focus, written by Professor Kevin Hindle, tackles an area that is fundamental: opportunity assessment. Is there a simple, low-cost system by which new venturers and SME managers can discover, evaluate and make decisions about the exploitation of entrepreneurial opportunities? This question is at the heart of worldwide entrepreneurship theory and Australia-wide entrepreneurship practice. It offers a specific remedy for a general problem. Australian entrepreneurs and SME managers are often guilty of setting their horizons too low. A regime for simple, effective assessment of opportunities offers a remedy.



## Part Four

### Action Focus: Opportunity Assessment

The formal entrepreneurship research literature and most GEM expert respondents talk a lot about how important it is for small and medium enterprises (SMEs) to 'manage the process of opportunity assessment'. But the question remains: How can this be done – especially by small firms with extremely limited time and resources who feel it is a struggle just to meet the every-day demands of running a business? This year's Westpac GEM Australia Action Focus provides nascent entrepreneurs and SME owners and managers with a practical method for assessing entrepreneurial opportunities in a systematic, time-effective manner. The opportunity assessment process can be presented by combining a flowchart of key concepts with a sequence of ten, plain-English questions (see Figure 16). This provides nascent entrepreneurs and SME operators with a tool for discovering, evaluating and considering the best ways to exploit entrepreneurial opportunities.

Opportunity assessment is the key to successful entrepreneurship. In four years of detailed GEM research, one issue has been consistently prominent: Australia's relative weakness in converting ideas into commercial opportunities. This is in spite of widespread agreement that Australians are actually rather good at generating new ideas. Recognising the difference between an idea and an opportunity, and the ability to assess the relative potential of opportunities are key skills for the entrepreneur or would-be entrepreneur. They are also highly desirable skills for the SME manager who aspires to remain in business and stay profitable. These skills involve three key aspects of entrepreneurial capacity: the ability of individuals or firms – especially smaller firms lacking abundant resources and strategic sophistication – to discover, evaluate and exploit entrepreneurial opportunities.

*Entrepreneurial opportunities are those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production. (Casson 1982).*

There is an essential distinction between specifically entrepreneurial opportunities and the larger set of all opportunities for profit – especially those concerned with enhancing the efficiency of *existing* goods, services, raw materials and organising methods. Most management textbook tools, techniques and guidelines aim to help managers to do existing things better. Entrepreneurial opportunities are not about doing existing things better:

they are about doing entirely new and different things and/or achieving outcomes in entirely new ways. Opportunity assessment is at the heart of entrepreneurship as the following definition provided by Shane and Venkataraman (2000) shows:

*We define the field of entrepreneurship as the scholarly examination of how, by whom and with what effects opportunities to create future goods and services are discovered, evaluated and exploited.*

The aim of this 'action focus' is to show how theory and the fruits of 'scholarly examination' can be turned to practice. This produces a simple system, which even the smallest and most resource-poor businesses, or indeed entrepreneurial individuals can use as a strategic tool to discover and evaluate potentially profitable entrepreneurial opportunities.

#### THE ENTREPRENEURIAL OPPORTUNITY FRAMEWORK

Figure 1 below is a stylised flow-chart of the relationship between the four key stages of opportunity assessment: existence; discovery; evaluation and exploitation.

First, in research jargon, the theoretical *existence* of entrepreneurial opportunity depends on 'economic disequilibria' and 'asymmetries of information'. Simply put, this boils down to the fact that markets are not perfect and information is not uniformly distributed among the business population. Thus potential profit opportunities exist whether *anyone sees them* or not. So, what is critical is the ability of different people (with different ways of viewing the world) to see opportunities relevant to them in different aspects of various situations. The key practical problem for any SME management, consciously seeking to recognise entrepreneurial opportunities, or for any individual or group of aspiring entrepreneurs, is to find a way to scan the environment quickly, adequately, and cheaply.

Second, the *discovery* of entrepreneurial opportunity results from a combination of an entrepreneur's prior knowledge and his or her cognitive properties (the way he or she thinks). Some generic factors tend to make some opportunities of 'higher value' than others. These factors include: large demand; high industry profit margins; technology at the early stage of its life cycle; middling competition density (neither very many or very few competitors); and low cost of capital.

Individual differences also contribute to different perceptions of the value of an opportunity. These include differing perceptions of: personal opportunity costs (for instance loss of leisure time may mean more to one person than another); resource cost differentials; prior relevant experience (for instance, it is very hard to perceive and rate a software opportunity if one has absolutely no experience in that industry); and transferability

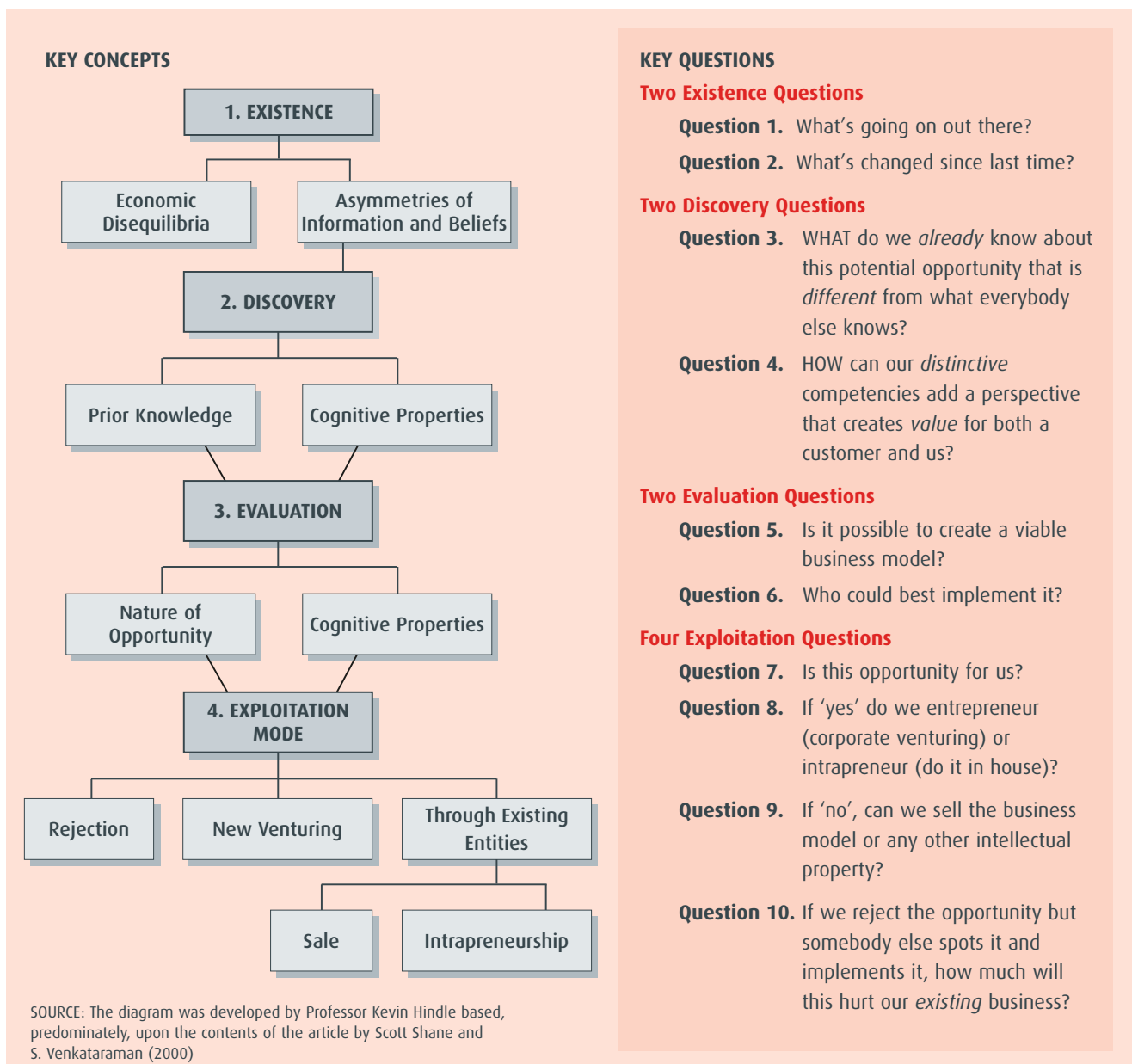
of experience. From the point of view of an individual entrepreneur or individual firm, the key practical issue here is to discover something that they know – and nobody else does – that is highly valuable to identifiable customers.

Third, *evaluation* of entrepreneurial opportunities is a function of two things. There is the *nature* of the opportunity (for instance the opportunity to produce and market a new piece of technical software is intrinsically different from the opportunity to open a sandwich bar in an under-serviced high-rise office building). And there are pronounced differences between *individuals* (some people just aren't

interested in software or sandwiches). The key practical questions here are: can a profitable way (business model) be developed to exploit the opportunity and are we (or someone else) the best people or organisation to implement it.

Fourth and finally, the mode of *exploitation* of an entrepreneurial opportunity must be considered. Should it be: rejection (the decision not to exploit); the creation of a new venture; or the use of existing organisations (either selling the intellectual property to an external organisation or developing it in an existing organisation of one's own)?

**Figure 16 – The Opportunity Assessment Process**





## STARTING SCENARIOS

The following method for systematically assessing entrepreneurial opportunity is, essentially, a sequence of questions based on the opportunity framework of Figure 1. The issue now arises: in what context should these questions be asked? By whom? How often? What priority should be given to asking them? There is an infinity of scenarios, based on an infinity of contextual variables, for an infinity of firms desiring to conduct a systematic search for and evaluation of entrepreneurial opportunities. For instance, a large SME with abundant resources in a highly volatile, technical market may have a formal opportunity-search division, with full-time, dedicated staff, in constant activity. A very small SME in a relatively stable market place would monitor the environment less often and apply less formality and fewer specialised resources in doing so.

For what follows in this article, I provide, for illustrative purposes, just three imagined starting scenarios. All are very loosely conceived and general in nature.

### SCENARIO ONE

A couple of software developers who have known each other since university and worked together from time to time for various employers have an idea for a software product and are considering going into business together to develop it. They are both working full time. So, they are researching the opportunity in their spare time and agree to meet once a week over a takeaway meal at each others' homes to share what they've learnt and try to put together a business plan.

### SCENARIO TWO

This is the famous 'Friday afternoon sales meeting and wrap-up' in a small firm of about 20 employees in an industry not specified. A brief wrap-up of the week's activities has concluded. Attention now turns to the issue not of what we *have done* and *are doing*: but to the issue of what *we could be doing*. Are there any opportunities for making the firm better and stronger for everyone who works in it? Everyone has a copy of the flowchart (Figure 16), a list of 10 key questions and is comfortably seated (beverage firmly in hand) facing a white board where good ideas can be quickly captured.

### SCENARIO THREE

The context envisaged here is of a larger SME with well-developed and more formal systems of corporate governance and management. It is a regularly scheduled meeting involving the CEO, the heads of all functional departments – sales and marketing, accounting and finance, human resources, information technology – and as many other key employees as are deemed relevant. This company has a conscious policy of opportunity management and this

meeting has been prefaced by a process of short-listing opportunities. Pre-evaluations have been conducted by appropriately trained personnel. The opportunity evaluation committee members come to the meeting carrying well-annotated copies of a thorough set of briefing notes that each have received well in advance of the meeting. There has been a great deal of pre-meeting informal discussion among participants and they all possess a high degree of formal training in the skills of opportunity evaluation.

### YOUR SCENARIO?

In reading what follows, business practitioners will make their own minds up about the degree of formality, structure, training and preparation that might be relevant to their own circumstances. The opportunity evaluation method presented here should be regarded as indicative, not prescriptive. It is painted with a very broad brush and provides a mere sketch of possibilities not a portfolio of detail. Nevertheless, development and execution of a systematic process of opportunity management, based on the combination of principles and key questions I provide, is not beyond the reach or the purse of any size of SME that has a genuine commitment to innovation and well-managed growth. For individuals about to launch a new venture from scratch, it provides a systematic assessment method that should save them from predictable mistakes and put them in a better position to cope with the inevitable uncertainties of new venturing.

## OPPORTUNITY ASSESSMENT USING 10 KEY QUESTIONS

The key idea in the sequence of ten questions is simply that it *is* a sequence. If you get a negative answer to any question in the list at any stage of the process, then you stop! You can be reasonably assured that the opportunity is not suitable for you or your firm. For instance, you might get as far as question three which asks: *What* do we *already* know about this potential opportunity that is *different* from what everybody else knows? And mature reflection quickly confirms that you or your firm do not have pre-existing knowledge that is in any way unique; and getting such knowledge is likely to cost more in terms of time and effort than is affordable. The investigation of that particular opportunity is now over. There is no need to even consider questions four through to ten. The ten key questions are summarised in Figure 16.

## TWO EXISTENCE QUESTIONS

The assessment begins by asking two deceptively simple questions:

**Question 1.** What's going on out there?

and

**Question 2.** What's changed since last time?

These questions are traditional staples of end-of-week or end-of-month reporting by sales people from the field, but participation should not be limited to sales or marketing or any category of personnel, nor to perceptions of existing market areas. For instance, someone in the production department might have been reading about laboratory applications of a new technology, and thinks this offers the possibility of producing a radical product with high potential appeal to a defined group of customers. Now is the time to discuss it. The fundamental purpose of the 'existence' questions is to pick up early indications of any trends, events or behaviours (by customers, potential customers, competitors or suppliers) away from any aspect of 'business as usual'. Any item that emerges positively from discussion of these two questions is listed, very broadly, as a potential opportunity for the market we are operating in (but not necessarily our firm) and consideration proceeds.

Our two budding software entrepreneurs (scenario one) should be looking at what is going on and what is changing in the market they believe their product will address.

## TWO DISCOVERY QUESTIONS

The next two questions seek to discover whether broad potential for *someone* can become focused potential for *us*.

**Question 3.** What do we *already* know about this potential opportunity that is *different* from what everybody else knows?

**Question 4.** How can our *distinctive* competencies add a perspective that creates *value* for both a customer and us?

The essential concepts here are *matching* and *feasibility*. For instance, no matter how clear it is that there is a huge demand for a new type of motor car, it is not a viable opportunity for a company not already in either the established automotive industry or in an allied industry. We need to match our distinctive capabilities to a feasible plan for creating customer value.

By the time people reach question 4, a firm's investigation of a particularly appealing 'candidate opportunity' may need to go well beyond the boundaries of the Friday afternoon meeting (scenario two), the initial evaluation session (scenario three) or the informal weekly catch-up over take-away (scenario one) with which we started. It may not be

possible to do adequate justice, in these environments, to the task of considering and articulating what aspects of our distinctive competence can be matched to customers' value perceptions and needs. As the questions get more complex, the time and resource required to answer them will increase proportionately.

In a firm that has sufficient resources (such as in scenario three), it may be deemed worthwhile to appoint a sub-group to investigate in depth and produce a mini-report at future time and for a different audience. More market research or other investigation may be needed.

The important thing for this narrative is to elucidate the *principles* involved in the process – not to try to anticipate the exact details of how the process might be carried out by particular firms in particular circumstances. That would be impossible. At every stage of the process it is assumed that the firm will be capable of determining both the extent of investigative effort required and whether the potential yield of further investigation is worth the effort in time and resources.

## TWO EVALUATION QUESTIONS

**Question 5.** Is it possible to create a viable business model?

In prevailing business jargon, there is possibly no bigger buzzword or no worse defined concept than 'business model'. It can mean many different things to many different people. With practicality and brevity in mind, I offer the following succinct definition. As far as I know it is original to me and, based as it is on deep reading in this field, should be reasonably uncontroversial:

*A business model is a well-articulated plan for turning effort into profit using identified resources and stakeholders.*

This is precisely what I recommend that you or your firm needs to do at this stage of its opportunity evaluation. It might take minutes (unlikely). It might take months. But no 'opportunity evaluation' is worth the name if it falls short of the key task of demonstrating how the service of customer needs in a particular way will produce reliable profits in a demonstrable way. If you can't come up with a viable business model, on paper, or are unwilling to make the effort, then this alleged opportunity fails to pass the assessment criteria.

**Question 6.** Who could best implement it?

Suppose your investigation produces a brilliant business model: the blueprint of a well-designed money machine. The question of feasibility then raises its head again. Brutal honesty is the order of the day. Maybe we could implement this business model, but – supposing they knew about it – are



there any existing organisations that could implement it better than us? Whatever the answer to this question, if you have got this far in your investigation, there is no doubt that you have discovered a genuine entrepreneurial opportunity, that may be profitable for someone even if you don't decide to execute all or any of it yourself.

#### FOUR EXPLOITATION QUESTIONS

You have reached the stage of needing to consider, systematically, how to exploit the entrepreneurial opportunity.

**Question 7.** Is this one for us?

This obviously depends a great deal on your response to Question 6. If you identified an existing organisation that was much better placed to pursue the opportunity than you are, then you would be foolhardy to press on regardless.

**Question 8.** If 'yes' do we entrepreneur (corporate venturing) or intrapreneur (do it in house)?

If you are starting without an existing organisation, then obviously 'entrepreneur' is your only option and Question 8 is redundant.

**Question 9.** If 'no', can we sell the business model or any other intellectual property?

In the case of our two software entrepreneurs (scenario one), they might be able to persuade an existing software development firm to hire them to set up a new division based on their software product idea, and might even give them an equity stake in the business.

These three questions are clearly matters for judgement contingent upon circumstances. So, there is little scope or need for advice, in this article, on how to answer them. Many firms get this far but fail to consider the tenth and final question recommended in this opportunity assessment regime.

**Question 10.** If we reject the opportunity but somebody else spots it and implements it, how much will this hurt our existing business?

As a conclusion to your evaluation of any entrepreneurial opportunity, force yourself to consider the implications if someone takes up an opportunity you decide to reject. The dark side of opportunity is threat. Never mind 'profits foregone', this may threaten your existing business. There is a clear example of this in the electronics industry. Many companies producing transistors knew a great deal about the potential of silicon chips but consciously decided to reject the entrepreneurial opportunities involved. They were wiped out. Ironically, some of those now defunct transistor companies once were innovators. They owed their initial success to *not* rejecting the entrepreneurial opportunities of new technology

(transistors) when diode-valves were the state of the art. Nothing could better illustrate the need for any firm with an interest in future growth to spend some of its valuable time on a *regular* and *systematic* search for entrepreneurial opportunities and their implications.

#### CONCLUSION

The ten-question regime presented in this action focus does not pretend to be a 'tick-the-box' or 'turnkey' solution to every firm's need to search for, and evaluate entrepreneurial opportunities. It is a stimulus and aid to hard thinking in this vital area – not a substitute for it. But, in the hands of sensible venture managers, the method can serve as a tool of practical strategy. If you want to assess opportunity in a systematic way, you can begin by conceiving of entrepreneurial opportunity in its framework environment (Figure 16, above) and then use the ten suggested questions as a strategic review regime. Any firm – or indeed individual contemplating a new venture – can use this method to develop the habit of constantly monitoring the business environment for entrepreneurial opportunities and evaluating their potential in a systematic manner. It seems reasonable to claim that acquisition of that habit creates the danger of earning a large profit from a small effort.

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### INTERNATIONAL COUNTRY CODES:

AR = Argentina	AU = Australia	BE = Belgium	BR = Brazil	CA = Canada
CH = Switzerland	CL = Chile	CN = China	DE = Germany	DK = Denmark
ES = Spain	FI = Finland	FR = France	GR = Greece	HK = Hong Kong
HR = Croatia	HU = Hungary	IE = Ireland	IL = Israel	IN = India
IS = Iceland	IT = Italy	JP = Japan	KR = South Korea	MX = Mexico
NL = Netherlands	NO = Norway	NZ = New Zealand	PL = Poland	RU = Russia
SE = Sweden	SG = Singapore	SI = Slovenia	TH = Thailand	TW = Taiwan
UG = Uganda	UK = United Kingdom	US = United States	VE = Venezuela	ZA = South Africa

# Appendix 1

## GEM Australia, 2003 Respondents

Names are presented in alphabetical order per framework

### FINANCIAL SUPPORT



#### **Bob Beaumont**

Bob Beaumont has 30 years experience in Investment Banking and Finance, together with SME Investment and has worked in the UK, USA and most states of Australia, with an emphasis and empathy for rural and regional business. He serves as a Business Case Manager for the Federal Governments COMET Program. He is also the Program Manager of VECCI's Venture Capital Access Program (VCAP), which, over the past three years, has assisted 50 selected Victorian SMEs in commercialising their technologies by attending Executive Business School courses in target markets such as US and UK and mentoring the companies through a structured 12 months program..



#### **Jock Clough**

Jock Clough left the construction industry in 1982 to join McIntosh and Co – stockbrokers in Melbourne as an oil and gas analyst. He later became an institutional share dealer with Wilson and Co. in Brisbane. He joined stock broking company Hartley's in 1988, became a Director in 1990 and became a Chairman in 1996. Jock joined the Board of Clough Limited as a non-executive Director in 1985 and became an Executive Director of Clough Limited in 2001. With his extensive experience in corporate finance he has been extensively involved with Clough Limited's investment decision-making.



#### **Richard Power**

Richard Power is the Executive Chairman of Focus Capital Group.

In 1981, Richard commenced his finance-consulting career and co-established a financial services company, which remains a very successful business today. To administer the expanding rental operation, Rental and Finance Ltd (R&F) was formed in 1984. R&F's ability to expand in a controlled manner and manage the enterprise through difficult economic cycles has been the result of the great depth of specialist knowledge and skills that Richard possesses.

In 2001, the company name was changed to Focus Capital Group Limited and is now a dynamic force in major corporate and government equipment financing throughout Australasia.



#### **John Price**

John Price is the Chairman of the Australian Information Industry Association (AIIA). John is known for his business building track record and his work through AIIA in promoting and developing the IT sector. John has three start-ups to his credit across his 24yrs of IT Industry experience. The Focus Group, JSP Associates and SI Resources.

John has investments in a number of Australian start-ups and is a director of Incite, a Private Equity Firm. John is Chairman of Item3 one of the BITS incubators which also has a major interest in Intellinc a Tasmanian incubator. He is also Chair of Terasys, IT Training Company.



#### **Jan Stewart**

Jan Stewart is the Chief Executive Officer of the Lotteries Commission of WA. Prior to that, as Director of Community Funding for the Commission from 1990-92 Jan managed the allocation of Lotteries grants to charities and community groups throughout WA. As Chief Executive Jan is responsible for the Commission's lottery business with a turnover of \$483 million, as well as the Commission's direct community funding program which now totals over \$148 million annually.

Jan first worked for the Lotteries Commission as a Grants Consultant in 1987, using experience gained in the field of social work to develop policy and to assess applications for Lotteries Commission grants.





## GOVERNMENT POLICIES



### **Clive Brown**

Clive Brown is the Minister for State Development in the Western Australian Parliament. His portfolios have included Community Development, Public Sector Management and Small Business & Tourism. He was also a member of the Legislative Assembly's Public Accounts and Expenditure Review Committee.

He was the Labour spokesman for Commerce and Trade, Small Business and Science and Technology immediately prior to the State election. As State Development Minister he oversees the State's vast minerals and energy sector. Mr Brown has also held a variety of positions in business, the union movement, and in the non-government sector.



### **Craig Emerson**

Craig Emerson is the Federal Shadow Minister for Innovation, Industry and Trade.

Prior to being elected to Parliament, he was Economic Adviser to Bob Hawke, Prime Minister of Australia, and Peter Walsh, Minister for Finance, as well as Senior Policy Adviser to Wayne Goss, Premier of Queensland. Craig has also held several senior public service positions in both Federal and State Governments. He was CEO of the Southeast Queensland Transit Authority, Director-General of the Queensland Department of Environment and Heritage and Assistant Secretary, Industries, Trade and Resources Division, in the Department of the Prime Minister and Cabinet. Craig has also worked in the United Nations, academia and private consulting.



### **Martin Hamilton-Smith**

Martin Hamilton-Smith was the Minister for Innovation in the South Australian Liberal Government from 2001/2002.

Following an army career as a Lieutenant Colonel and as a private sector Defence Analyst, he set up a group of companies in commercial and residential property investment and in the construction and operation of private childcare centres and kindergartens in two states. He sold this business on entering parliament. He has a continuing interest in entrepreneurship and is currently the South Australian Shadow Minister for Innovation and Information Economy, Tourism, and the Arts.

## GOVERNMENT PROGRAMS



### **Rowan Gilmore**

Rowan Gilmore is the Chief Executive Officer of the Australian Institute for Commercialisation (AIC) a national, not for profit company that delivers programs to improve commercialisation of Australia's research investment.

Dr. Gilmore has spent much of his working life abroad in both small start-up companies and large multinationals. He recently returned to Brisbane after having worked in Switzerland and the UK, where he was Managing Director of Network Services, Northern Europe for SITA-Equant, the airline IT and telecommunications company. Prior to that he was employed by Telstra, Central Microwave, and Schlumberger Corporation.



### **Tim Harcourt**

Tim Harcourt is the chief economist of the Australian Trade Commission ("Austrade"). As chief economist Tim analyses the global economy to help Australian exporters and helps Austrade devise its own business strategies. Tim is also an active commentator in the Australian and international media on economic and trade issues.

Before joining Austrade, Tim was an economist and industrial advocate with the Australian Council of Trade Unions (ACTU). Tim was also an economic policy adviser to the ACTU on international trade, Aboriginal and Torres Strait Islander affairs and the environment.

## EDUCATION AND TRAINING



### **Tim Atterton**

Tim Atterton is the Director – Entrepreneurship and Business Development Unit, Curtin Business School, Curtin University of Technology.

He had previously worked at the Durham University Business School where he was appointed Executive Director of the Small Business Centre in 1991.

In June 2000 Tim became Director of the Small Business Unit at Curtin Business School, which he helped establish in 1995. The unit has recently been renamed the CBS Entrepreneurship and Business Development Unit. Tim's interests and expertise spans the spectrum of entrepreneurship, enterprise development, and small and medium business support.



### **Angèle Cavaye**

Angele Cavaye headed the DBA program at the Australian Graduate School of Entrepreneurship, Swinburne University of Technology from 2002 to 2003. She coordinated DBA research and facilitated the DBA research methods subject. Professor Cavaye has worked in various universities internationally and in Australia.

She has been involved with management development in Europe and in Australia. She has taught at post-graduate level in both Europe and Australasia. She has published over 50 refereed research articles. Her personal research interests include e-commerce strategy and information systems issues in small business.



### **Geoffrey Harcourt AO**

Geoffrey Harcourt is a leading economic theorist who has taught at the University of Adelaide and the University of Cambridge.

He was elected a Fellow of the Academy of the Social Sciences in Australia in 1971; made an officer in the General Division of the Order of Australia (AO) 'for service to economic theory and to the history of economic thought' in 1994; and made a Distinguished Fellow of the Economic Society of Australia in 1996.

Harcourt has published 22 books (as author or editor) and written over 190 articles and chapters in books.



### **Carol Haslam**

Carol Haslam built her own company, importing and distributing computer software and hardware products, and gained a News/Australia Day Special Merit Business Achievement Award in 1990. In 1991 she created another business as project manager of high-tech exhibitions and conferences. She spent five years in France from 1996, where she was Managing Director of a French importing and distribution company with a turnover of 100 million FFR and 25 French staff. She was a member of the Board of Directors of Enterprise Development Inc from 1991-1996, and is currently the CEO of that organisation that conducts the well-known Enterprise Workshops program.



### **Tim Mazzarol**

Tim is the Director of the Centre in Entrepreneurial Management and Innovation (CEMI) at the Graduate School of Management, University of Western Australia.

Over the past six years he has been actively engaged in consulting to a wide range of small to medium organizations as well as corporations and government agencies. He has extensive experience in marketing and management related research including international work for the Karpin Task Force on Leadership and Management, Australian International Education Foundation and the Government of Canada. Tim's research in small business management and marketing has been published internationally.





## R&D TRANSFER



### **Darryl Bubner**

Darryl Bubner is the Chief Executive of Wave Global Pty Ltd. He is the developer of WAVE online innovation management metrics, diagnostics and tools. Before establishing Wave Global in 1997, Darryl ran his own consulting practice and worked in the areas of strategy, survey research, corporate performance measurement and quality. He has conducted innovation capability benchmarking for several major Australian clients, and technology and commercial assessments for the CSIRO Timber & Forestry Products Group. For six years, he has been strategy adviser and workshop leader to the CRC for International Food Manufacturing and Packaging Science.



### **Jim Fox**

Jim Fox is the Managing Director of Vision Systems Limited (VSL), which incorporates the Invetech Group founded by Dr Fox in 1987. VSL is a leading supplier of contract R&D and technology commercialisation services to manufacturing industry in Australia, USA and Europe, and manufactures high value medical instruments and cancer detecting reagents, video surveillance products and high sensitivity smoke detection products.

Under Jim's leadership, VSL has grown from sales of A\$10 million (A\$2m in exports) in 1993 to a running rate of annual sales of A\$150 million and exports of A\$120 million. The company now employs over 770 staff, continues to grow at an annual rate exceeding 30 per cent.



### **John Rothwell**

John Rothwell has played a major role in the development of the Australian aluminium shipbuilding industry and is a founding Director of Austal Ships Pty Ltd, one of the world's leading aluminium shipyards employing some 1100 people with an annual turnover in excess of \$350million.

John's achievements have been recognised through several awards, including the Ernst & Young Entrepreneur of the Year in 2002, the W.A. Premiers Award for Excellence in 2000, Australian Exporter of the Year in 2000, the Youth Employer of the Year 2000 and the Western Australian Citizen of the Year in the category of 'Commerce and Industry' in 1999.



### **Rodd Sala**

Rodd is the Managing Director of Lumacom Limited. He has been involved in the development and management of technology companies for over 20 years. He was previously General Manager of a publicly listed company, which developed a sophisticated data encryption technology for use in major banking institutions. Rodd is currently Managing Director of Lumacom Limited, which is an electronic large outdoor sign company employing the Luma Graph Display Technology. He is experienced in corporate and project management, new product commercialisation and new venture fund raising and associated activities.



### **Rhonda Selleck**

Starting from her own kitchen, Rhonda has launched a company Citrus Sensation, and secured multi-territory patents around her unique 'fresh cut preservation process'. This process has the potential to revolutionise the fruit & vegetable fresh-cut industry, by extending the shelf life of fresh-cut fruit and vegetables from the current 3 to 5 days to 21 days (or more). Originally developed to extend the life of citrus fruits, the Flavortec™ technology since has been extended to include every fruit and vegetable except the banana. Rhonda recently won the Innovation Award from the Federal Government at the Celebration of Innovation Event.



### **Judith Slocombe**

Judith Slocombe is the Managing Director of Gribbles Veterinary Pathology Services, a major provider of veterinary diagnostics throughout Australia and New Zealand. The business uses state of the art technology in laboratory diagnostics, has an annual growth rate of 25 per cent and employs over 150 people.

Key amongst her achievements is her vision to combine human and veterinary pathology services and technology into a single business model.

In 2001 her dedication and vision earned her Australia's most highly regarded award for women in business: the Telstra Australian Business Woman of the Year, and in 2003 she was awarded the Centenary Medal.



**John Yencken**

John Yencken has worked as a management consultant since 1966 and has substantial experience with technology-based businesses. He was a government appointed member of the Council of the Australian National University from 1966 to 1983 and a Foundation Chair of Anutech Pty Ltd., a University owned company managing technology marketing, patents and consulting services. In 1996, 1998 and 2000, John was Co-chair of the Engineering and Physical Sciences Expert Panel in the CRC Program. He is presently Visitor to the CRC for Wood Innovations and is close to completing his doctoral thesis on university technology spin-off companies.

**COMMERCIAL AND PROFESSIONAL INFRASTRUCTURE**



**Sharyn Ch'ang**

Sharyn Ch'ang is a specialist intellectual property (IP) lawyer and a pioneer in corporate IP governance and management in Australia. She has worked as IP and legal counsel for several IP-centric organisations and, as a private practitioner, has assisted enterprises, from multinationals to SME's, to identify, protect and commercialise their IP. Whilst the management of IP is only one aspect of entrepreneurship, Sharyn believes it is all too frequently overlooked or under leveraged – often to the detriment of sustainable business success. At the time of interview Sharyn was a partner of Ernst & Young, and a director of Software Engineering Australia (National) Limited.



**Adrian Cran**

Adrian Cran is the Managing Director of Cran Cameron Partners. He is an advisor to a number of directors of public and private companies on strategic matters in connection with acquisitions and disposals, Initial Public Offerings (IPO's), capital-raising techniques, listings and prospectuses.

Adrian and his team undertake a variety of assignments for clients. They may be for major syndications; public or large private company groups; share and business valuations; all aspects of insolvency; strategic business planning, corporate structuring and reorganizations; mergers, acquisitions and divestments; joint ventures; due diligence investigations; fundraising; corporate and management services; and audit.



**Stuart Hope**

Stuart's background is in Software Engineering with a First Class Honours degree and Master's degree in Computer Science. He is currently the CEO of Software Engineering Australia (Western Australia) Ltd, Director of the WA BITS incubator eIR Pty Ltd and Managing Director of AutumnCare Systems Pty Ltd – a software start-up.

Stuart has over 28 years experience in the Information, Communication and Technology (ICT) industry in both large and small Australian companies. Stuart contributes substantially to the development of the ICT industry, is a member of the Ministerial ICT Advisory Forum and was recognised in 2002 when he was made a Companion of the Institution of Engineers Australia.



**Richard Rosebury**

Richard Rosebury is the Managing Director of The Profit Motif Pty Ltd. Initially trained within mainstream advertising agencies such as McCann Ericksons and Ogilvy & Mather, he has undertaken many strategic marketing plans, and successful market feasibility studies and consultancy assignments over the past 15 years.

Clients include companies that have become worldwide brand names within the hospitality industry, such as Select Hotels & Resorts International and Small Luxury Hotels of the World.

He was a key force behind both the staging of the First Fleet Re-enactment Voyage for Australia's bicentennial and the marketing of Bounty Voyages.



**Darren Shirlaw**

Darren Shirlaw is a Managing Partner of Shirlaws, a firm that delivers business-coaching services to individuals and small to medium businesses. Established in Australia in 1999, Shirlaws now employs over 100 coaches working internationally across many different industries. They now have operations in the USA, Australian, New Zealand and the UK. Darren Shirlaw is the founder of Shirlaws and designer of many of the coaching tools and models.

In 2002 Shirlaws was nominated as the 7th fastest growing business in Australia by BRW. In 2003 Shirlaws was the winner of the Telstra and NSW Government Small Business Award – Cisco Systems Category for businesses with 50-100 employees.





**Greg Siegele**

Greg Siegele is the CEO and co-founder of RATBAG Pty Ltd. Australia’s most successful video games developer for the PC and PlayStation 2. Founded in 1993, RATBAG employs 50 video games and entertainment experts where three development teams continually produce award-winning games for the North American and European markets.

Each of the four games released by RATBAG have achieved international acclaim and have been awarded ‘Racing Game of the Year’, with combined sales exceeding 1.5 million titles worldwide.

Greg is a valued mentor for Australian games developers and new business advocates. In 2002 he received the Ernst and Young Central Region ‘Young Entrepreneur of the Year’ Award.



**James Smeatham**

James Smeatham is a consultant at Innovation Partners Australia. He has worked in the manufacturing and resources sectors for 20 years and his experience spans operational, project management and business development roles. James has extensive experience in innovation and technology management in the oil and gas, mining and chemical industries.

This has involved managing research and development projects, protecting intellectual property, technology transfer, new product development, marketing, funding development, and strategic planning.

James has particular strengths in the management of technical portfolios, commercialisation strategies for intellectual property, and the practical challenges of bringing technical and non-technical people together to implement programs.

**MARKET OPENNESS**



**Mark Avery**

Mark Avery is the Managing Director, ThemeStar Holdings LLC. ThemeStar develops touring live entertainment products for the global marketplace, through licensing and developing intellectual property that is sold through a global proprietary sales network. ThemeStar has a competitive advantage of proprietary protection over the intellectual property copyrights and licenses, first market advantage to secure markets, a well-developed network and management team.

Mark is a professional and entrepreneurial leader with significant ‘Live Entertainment’ experience and knowledge combined with an entrepreneurial and innovative background and qualifications. He has a proven record in strategic vision, strong communication, project and relationship management skills across a commercial focus in different entertainment environments.



**Betty Byrne Henderson AM**

Betty Byrne Henderson is the former Owner and Governing Director of The Byrne Group of Companies. In 1998 Byrne Ford ranked 29th in Queensland’s top 40 privately owned companies. Since handing over the trading company to her son Peter in 1995, Betty is now free to engage in her board and community interests.

Betty was made awarded the AM in the Queen’s Birthday Honour’s list of 1995 “for service to the community, particularly in the field of women’s health”. In April 1998, she was named as one of “The Leading Women Entrepreneurs of the World”, one of 53 women from 26 countries to receive this award.



**Kath Rose**

Kath Rose formed Kath Rose & Associates (KRA) in early 1999 after working for 12 years in the private sector.

Based in Fortitude Valley/Spring Hill, Brisbane, KRA is a boutique public relations and marketing firm that works with a select international and local client base.

Kath has worked with some of the country’s most progressive tourism companies including Warner Bros., the Warner Village Theme Parks, 2001 Goodwill Games and the Pacific Film and Television Commission. She has marketed international and local products and events for 14 years and understands intimately the dedication required. Kath has an extensive network of corporate, industry and media contacts and enjoys immensely what she does!



### **Sarina Russo**

Sarina Russo is the Founder and CEO of the companies that comprise the Sarina Russo Group. The group consists of 350 dynamic individuals spread between Bundaberg and Melbourne. Each year it trains over 3000 students from all over the world and finds over 20,000 jobs, assisting significant numbers of jobseekers with barriers to employment. Its strength in employment services has been reflected by the "rollover" contract success with the Commonwealth Government.

Sarina was a recipient of the Centenary Medal in 2003 and was recognized in Paris as one of the forty Leading Woman Entrepreneurs of the World of 2002.

## **CULTURAL AND SOCIAL NORMS**



### **Amanda Gome**

Amanda Gome is the "Emerging companies" section editor of The Business Review Weekly. This is a wide-ranging role that covers home-based business, start-ups, entrepreneurs, family businesses and women in business – and issues such as tax, e-commerce, succession planning, internet use, battling big business, working from home, strategic alliances, starting a dot-com, life after a dot-com, and motivating staff.

Amanda also runs the BRW Fast 100, an annual feature that uncovers Australia's fastest-growing small and medium-size businesses and reveal new business trends and tips from the entrepreneurs.

Amanda has worked as a business journalist since 1988 and appears regularly on radio and television.



### **Anne Henderson**

Anne Henderson is the Deputy Director of The Sydney Institute.

The Sydney Institute is a high profile, privately funded think tank. It publishes two journals, conducts a major annual lecture and holds around 60 policy forums per year and occasional conferences. Anne Henderson edits The Sydney Papers and co-edits The Sydney Institute Quarterly. She has written a number of books and also writes occasionally for The Canberra Times, The Age, The Australian and The Sydney Morning Herald. She also appears regularly on Richard Glover's ABC Radio 702 "Drive Time" program. In 2003, Anne Henderson was a recipient of a Centenary Medal for her work at The Sydney Institute.



### **Sophia Provatidis**

Sophia Provatidis is the Managing Director of Majestic Opals, an opal-mining firm based in South Australia. She founded the Safety In Opal Mining Committee in 1999 and was a prime mover behind a safety booklet and video recently released by the government's Mining and Quarrying Occupational Health and Safety Committee.

She is a member of the Asia Pacific Business Council for Women Inc, The Council for Multicultural Australia and the Chinese Chamber of Commerce. Previously, she has worked as an Occupational Health and Safety Project Manager in the SA mining industry and was the Executive Officer of the National Opal Symposium 2001.

## **CORPORATE ENTREPRENEURSHIP**



### **Ike Bain**

Ike Bain has been Dick Smith's right hand man in growing Dick Smith Electronics to the successful business it is today. He was appointed General Manager in 1975 and together with Dick Smith, expanded the company throughout Australia and New Zealand. After serving as Managing Director and then as President of US operations, Ike Bain returned to Australia in 1987 to become CEO of the start-up company Australian Geographic. Over a 10-year period he helped expand the business into a national chain of Australian Geographic stores and a publishing house with subscribers worldwide. Ike Bain has recently written the best seller *The Dick Smith Way*.





### **Jason Cotton**

Jason Cotton started his career in a technical development role for Australia's largest wool processor based in Adelaide where he discovered his passion for creating value through innovative initiatives. Undergoing a change in both career direction and organisation, Jason joined ICI (now Orica) in 1994 in new business development. After moving to Melbourne, Jason led the building of Orica LIVEWIRE, an Innovation and New Business Venturing unit for Orica Chemicals Group. It was widely recognised at the time as a best practice program in Corporate Innovation.

In 2002 Jason established his own business, Dynamic Horizons, centred on the creation of value in Corporations from Innovation and Entrepreneurship.



### **Darren Johannesen**

Darren Johannesen is the General Manager of the Home Electronics Division, Pioneer Electronics Australia – once Pioneer's "problem child", having lost money for over 15 years. Under Darren's leadership the division broke even within 18 months and turned its first profit at the end of the second fiscal year.

The division shows the fastest sales growth rates for Pioneer Globally (in excess of 60 per cent) and currently holds the highest Market Shares for Pioneer world wide in the key categories of DVD and Home Theatre.

Darren is currently completing a Masters in Entrepreneurship and Innovation at the AGSE and is a member of the Young Entrepreneurs Organization.



### **Susan Oliver**

Susan Oliver is a futurist and strategic planner. She is the Chairman of ScreenSound Australia - the National Screen and Sound Archive, a non-executive Director of Transurban City Link Ltd, MBF (Medical Benefits Fund), and Programmed Maintenance Services Ltd.

Susan is also Managing Director of Futures Alliance, a consulting company that specialises in futures studies, scenario planning, strategic planning and technology strategy.

She is an experienced public speaker and presenter, and has written, edited and published a number of publications. She was the principle author of the Australian Business Foundation 'Scenarios for the Future for Business in Australia'.



### **Heather Ridout**

Heather Ridout is the Deputy Chief Executive and Executive Director of Public Policy and Communications of the Australian Industry Group. She has particular responsibility for the development, implementation and advocacy of Ai Group's Public Policy positions in relation to issues including economics, industry, education and training; and management responsibility for Ai Group's public affairs including publications and communications/media strategies.

Heather is currently Chair of NSW Industry Capability Network (ICN), Member of the General Motors Australian Advisory Council, Member of The Advisory Board, Macquarie Graduate School of Management, and a Member of the NSW Information Industries Business Advisory Board.



### **Andrew Wilkinson**

Andrew Wilkinson is a Business Consultant and Entrepreneur. He has developed extensive business skills, working with a range of organisations from emerging business start-ups through to established not-for-profits and multi-nationals. He is particularly skilled in the area of commercialisation, product management, product/service/concept development, commercial strategy, business planning, operations, leadership, creativity, innovation, and entrepreneurship.

During his career he has been responsible for significant strategy, technology, business, research and commercialisation initiatives both in consulting and business environments. He has developed commercially sensitive strategies, championed the implementation and exceeded revenue and business objectives.

# Appendix 2

## GEM Australia Principal Sponsor

### WESTPAC BANKING CORPORATION

As Australia's first bank, Westpac was founded by pioneering entrepreneurs. Today we continue to value the entrepreneurial spirit within our organisation as we strive to provide our business customers with innovative solutions to improve their experience with the Bank and help them achieve their own individual goals. These initiatives are reinforced by our sponsorship of the GEM Report, the prestigious Ernst and Young Entrepreneur Of The Year awards and the inspiring Champion of Champions Small Business awards and help demonstrate our ongoing commitment to our business customers.

The most significant of these initiatives is the recruitment and continuous investment in our small business service proposition. In September 2003 we commenced an initiative to return face to face business banking services to where customers were demanding it most – in their local branch.

And for those customers who prefer the convenience of telephone access to our expert staff, one call to Business Direct offers immediate access to a team of Business Banking Managers for help with their business banking.

This expansion of our service proposition, in combination with our Business Online solution, gives customers a choice in how they access the banking service we offer.

Westpac has also invested in a 'Guide to starting a new business'. This is targeted at helping budding Australian entrepreneurs in the initial stages of their business life. It includes information on the ins and outs of starting a business, as well as tips on what new business operators can expect from their first meeting with a Financial Institution and how to best present their business if lending is required.

Our other industry leading initiatives include:

#### • Business Life

Business Life recognises that at different stages in the life of a business the requirements from a bank are very different. Rather than provide solutions based solely on the size of your business, the most important step is to identify where your business is in its lifecycle, then select a combination of solutions that best suits your needs. The package solutions range from Start Up solutions through to exiting strategies.

#### • Industry Specific Solutions

It makes sense that financial and banking solutions are more effective when they are developed for specific industries. Westpac has been pioneering this approach for over three years, with extensive industry and customer research leading to comprehensive financial solutions for the Wholesale, Pharmacy, Independent Schools, Beef, Financial Planning, Accounting and Manufacturing industries.

#### • Beyond Survival®

More than 4500 business owners have already benefited from Westpac's Beyond Survival seminars. In two inspiring days Beyond Survival focuses on the key financial drivers in your business and provides world's best practice tools which could mean the difference between a business merely surviving and thriving.

For more information about Westpac Business Banking visit [www.westpac.com.au/business](http://www.westpac.com.au/business) or call Business Direct on 132 772.



## Appendix 3

### GEM Australia Methodology

The purpose of this appendix is to detail the data collection methodology used in the GEM Australia 2003 study. GEM uses four major data sources

- An adult population survey, randomly sampling at least 2,000 typical adults in each GEM country;
- Each GEM country conducts personal interviews with at least 18 experts/key informants, focusing on various aspects of entrepreneurship;
- Standardised questionnaires to be completed by these same experts and experts interviewed in prior years of GEM research; and
- The use of standardised economic data selected from credible international and national sources.

#### 1. THE NATIONAL POPULATION SURVEY

##### SURVEY METHODOLOGY

GEM's first major area of investigation – 'What are the differences in the level of entrepreneurial activity between countries?' – is addressed through a national population survey which examines a representative sample of adults in each country. A minimum of 2,000 respondents is required, but countries may choose to pay for a larger sample to achieve lower variability. All national population survey data collection and checking is co-ordinated by the GEM coordination team at London Business School. The aim is to produce, within and across nations, the most reliable benchmark data within the cost constraints of the project. The Australian Survey Research Infrastructure Network (ASRIN) conducted the Australian survey during June-August of 2003. ASRIN is a networked survey research facility run across a number of Australian universities.

##### KEY ENTREPRENEURIAL ACTIVITY INDICATORS

The key indicators of entrepreneurial activity measured by the survey are:

- participation in genuine business *start-ups* (paying wages no longer than three months);
- participation in *young firms* (firms less than 42 months old at time of survey - for GEM 2003, this means established in 2000 or later); and
- participation in business *angel* investment.

The first two of these participation rates are combined to form an index known as the 'Total Entrepreneurial Activity Index' (TEA). The TEA is best thought of as an 'index for comparing the relative performance of countries', rather than 'an actual event that happened'.

To measure participation in new venture creation, the questions asked were:

1. You are, alone or with others, currently trying to start a new business, including any type of self-employment; and
2. You are, alone or with others, trying to start a new business or a new venture with your employer - an effort that is part of your normal work.

A response of 'Yes' to either of the above led to three supplementary questions to determine whether the venture was a genuine start-up. These were:

- a) Over the past 12 months, have you done anything to help start this new business, such as looking for equipment or a location, organising a start-up team, working on a business plan, beginning to save money, or any other activity that would help launch a business?
- b) Will you personally own all, part or none of this business?
- c) Has the new business paid any full-time salaries or wages, including your own, for more than three months?

A 'yes' response to a); 'all' or 'part' to b); and a 'No' response to c) were required for the respondent to be classified as a genuine start-up participant; i.e. they had to be active in the business and expect to own at least part of it. 'Yes' to a), b) and c) indicated a potential young firm participant.

Participation in young firms was measured by the question "You are, alone or with others, the owner of a company you help manage". Respondents who answered 'yes' to this question and whose business had first paid wages in 2000 or later were classified as young firm participants. Respondents who said they had not yet paid any wages were reclassified as start-up participants.

#### 2. DEPTH INTERVIEWS OF NATIONAL EXPERTS

Interviews are conducted with people who are considered to be experts in at least one of the nine identified framework conditions of entrepreneurship. This allows for a collection of varied opinions from professionals and entrepreneurs with specialist knowledge about different dimensions of entrepreneurship.

The nine frameworks are:

- **Financial Support:** availability of financial resources, equity, and debt, for new and growing firms including grants and subsidies;
- **Government Policies:** the extent to which government policies as reflected in taxes, regulations and their application, are either size-neutral, discourage, or encourage new and growing firms;

- **Government Programs:** the presence of direct programs to assist new and growing firms at all levels of government – federal, state and local;
- **Education and Training:** the extent to which training in creating or managing small, new, or growing business is incorporated within the educational and training systems at all levels; and the quality, relevance and depth of such education and training;
- **Research and Development Transfer:** the extent to which national research and development will lead to new commercial opportunities and whether or not R&D is available for new, small, and growing firms;
- **Commercial and Professional Infrastructure:** the availability and quality of commercial, accounting, and other legal services and institutions that allow or promote the emergence of new, small, or growing businesses;
- **Market Openness/Barriers to Entry:** the extent to which commercial arrangements are prevented from undergoing constant change and re-deployment, preventing new and growing firms from competing and replacing existing suppliers, subcontractors, and consultants;
- **Access to Physical Infrastructure:** ease of access to available physical resources—communication, utilities, transportation, land or space—at a price that does not discriminate against new, small, or growing firms; and
- **Cultural and Social Norms:** the extent to which existing social and cultural norms encourage, or do not discourage, individual actions that may lead to new ways of conducting business or economic activities and, in turn, lead to greater dispersion in wealth and income.

In 2003 we interviewed 42 respondents, more than twice the minimum number. We sought out experts with multi-framework experience, and backgrounds that extended beyond for-profit entrepreneurial activity. Interviews are conducted face-to-face wherever possible and are recorded on tape and subsequently transcribed.

The interview is semi structured with three objectives:

1. to identify the factors that limit the development of entrepreneurship in Australia;
2. to identify the factors that contribute to the development of entrepreneurship in Australia; and
3. to identify suggestions about what can be done to increase the development of entrepreneurship in Australia.

To meet these objectives the Key Informants are asked what they believe are the top three weaknesses impeding entrepreneurial activity in Australia, the top three strengths supporting entrepreneurial activity in Australia and to suggest changes they believe would improve Australia's entrepreneurial effectiveness.

The interview content is then classified, using qualitative analysis techniques, into the nine framework conditions, with the freedom to create new categories where comments do not fit any of the framework conditions. Extensive use is made of sub-categories – for example Financial Support weaknesses might include a sub-category of problems relating to obtaining venture capital funding.

### 3. THE INTERNATIONAL SURVEY OF EXPERT OPINION

Subsequent to the interview each Key Informant is then asked to complete an extended questionnaire. The objective of this questionnaire is to gather quantitative information on the nine entrepreneurial framework conditions, on entrepreneurial opportunity and capacity, as specified in the GEM conceptual model. Key informants from past years are also invited to participate in this survey.

The questionnaire comprises the following:

- Statements relating to the nine framework conditions and to entrepreneurial capacity, opportunity, respect for entrepreneurs, IP protection, and female entrepreneurship (between five and seven statements per category). The five point items measure the expert's perception of the conditions influencing entrepreneurial activity in their country.
- Population survey items. They are the same as those used in the adult population survey and are used to compare the expert's attitudes to those of the general population.

The results of these surveys are summarised by country at individual question level and at section summary level. This allows expert opinion to be compared between countries. A similar approach is used in The IMD World Competitiveness Yearbook.



#### 4. SECONDARY SOURCES

The GEM coordination team provides a database of standard secondary data (for example rates of GDP growth) from sources such as the International Monetary Fund, the World Bank, the Organisation for Economic Co-operation and Development (OECD) and the World Economic Forum. This ensures that all teams are using the same sources for important economic indicators and other national information (such as population, labour force etc) and optimises use of GEM human resources.

Additional Australian sources are also used to supplement the GEM data such as Australian Bureau of Statistics material, and surveys such as the quarterly Australian Chamber of Commerce and Industry surveys.

Relevant reports from other sources, both national and international are used whenever they can add insight to the GEM findings.

#### LIMITATIONS

Like every study, GEM has its limitations. The most obvious one is that entrepreneurship is difficult to measure, especially on a large scale and while maintaining consistency between more than 30 countries, speaking many different languages. The quantitative element of GEM therefore concentrates on measuring an activity that is commonly understood across all nations and cultures: owning and operating a business. While many of the businesses identified by the survey will not be entrepreneurial in intent, starting a business is a prerequisite for a genuinely entrepreneurial new venture and thus provides a useful baseline.

The set of experts interviewed in depth changes from year to year. It could be argued that it is not valid therefore to compare either aggregate survey ratings or interview key issues from year to year. This is mitigated by the requirement to choose experts from specific backgrounds, consistent with the nine entrepreneurial framework conditions. In practice, the survey scores from Australian experts have been highly consistent from year to year and, where there has been a change, it is consistent with comments made in the interviews that a particular factor has improved or deteriorated.

Finally, we are limited in the amount of material we can include in the yearly report. There are many interesting insights offered by the GEM data and from the expert interviews and there is scope to dig deeper! The GEM Australia team welcomes enquiries from anyone interested in doing so.

# Acknowledgments



Professor Kevin Hindle



Susan Rushworth

To the following people and organisations we give our sincere thanks:

- **To our principal sponsor**, Westpac Banking Corporation without whose support this research would not be possible. Thanks to the senior management who approved the sponsorship, the Marketing team of Alison Tosh and Jacki McKinnon, and to both Westpac and Swinburne's legal divisions for their can-do approach to contract negotiation.
- **To our research assistant**, Ann Copeland, whose information gathering and organising skills have been invaluable and who was sometimes our only island of calm in a sea of chaos.
- **To our interstate co-researchers**: George Aslanis in Perth, Peter Balan in Adelaide, Rebecca Loudoun in Brisbane, Alison Cutler and Nicky Canavan in Sydney, and Andrew Wilkinson in Melbourne for extending our research team so effectively and seamlessly.
- **To the Australian entrepreneurship community** who continue to affirm the value of the research by responding with interest and enthusiasm to each year's report.

The GEM Australia research relies on the enormous amount of work done by the GEM 'mission control' team who coordinate the research, supervise the conduct of the adult population data, collate and clean the data, gather and organise data from secondary sources, and provide the results to each of the GEM national teams in a consolidated data set. The Australian team extends their particular thanks to: Professor Paul Reynolds, Professor Bill Bygrave, Professor Erko Autio, Professor Michael Hay, Dr Stephen Hunt, Marcia Cole, Michelle Hale, Anwen Garston and, last but not least, our former and much-missed colleague Natalie De Bono.

And finally, thanks to Lucy Tara for being such an exceptionally good-natured baby and to Neil for being such a supportive father and partner. Without their cooperation, Susan's contribution to this report would not have been possible.

Published 2004 by  
Swinburne University of Technology  
John Street, Hawthorn, Victoria 3122, Australia

Design and Layout by Swinburne Press  
John Street, Hawthorn, Victoria 3122, Australia

Printed and bound in Australia by Chillipress

Not for sale

Distribution and availability:

Australian Graduate School of Entrepreneurship  
(Phone: 03 9214 5871, Fax: 03 9214 8381)

Web Address: [www.gemaustralia.com.au](http://www.gemaustralia.com.au)



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ISSN 1448-7128 (Print)

ISBN 0-855900-60-1

The *Australian Graduate School of Entrepreneurship Research Report Series* is an occasional refereed research report series published by Swinburne University of Technology.

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### FULL ACADEMIC CITATION DETAILS FOR THIS PUBLICATION:

Hindle, K. and Rushworth, S. 2004. Westpac GEM Australia: a Study of Australian Entrepreneurship in 2003. *Australian Graduate School of Entrepreneurship Research Report Series*, Vol. 1, No. 1. Melbourne: Swinburne University of Technology.



