How Entrepreneurial is Ireland?
How Entrepreneurial is Ireland?

The Global Entrepreneurship Monitor 2001

The Irish Report

Paula Fitzsimons      Colm O’Gorman      Frank Roche

Sponsored by: Enterprise Ireland and Forfás
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We would also like to thank our sponsors, Enterprise Ireland and Forfás, without whose generous sponsorship Ireland’s participation in GEM 2001 would not have been possible.
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Executive Summary

The recently completed Global Entrepreneurship Monitor 2001 (GEM) ranks Ireland 6th in terms of the overall entrepreneurial propensity of its adult population across 29 countries. This is a revised result and corrects the very low position that Ireland obtained in GEM 2000.¹

GEM is an international research programme run jointly by London Business School and Babson College in the USA. It seeks to bring together some of the world’s leading researchers in the area of entrepreneurship to explore three related questions:

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

As a result of its analysis over three years, GEM clearly demonstrates that the level of entrepreneurial activity differs between countries, and that entrepreneurial motivation differs between developing countries (“push” or necessity entrepreneurship) and those with more developed economies (“pull” or opportunistic entrepreneurship). Ireland quite clearly falls into the latter category with 82% of entrepreneurs responding to perceived opportunities. The link between entrepreneurship and growth, however, is not as clear as originally thought. The level of entrepreneurship and growth can only be clearly demonstrated in those countries with less developed economies.

The year 2001 is the third consecutive year in which this study has taken place. Each year more countries are becoming involved. GEM began as a pilot study in 1999 with 10 countries involved. It grew to involve 21 countries in 2000 and 29 countries participated in the 2001 study. This is Ireland’s second year of participation. Forfás and Enterprise Ireland co-sponsored Ireland’s involvement in GEM in 2001.

GEM uses four research instruments in exactly the same way in each of the participating countries. In this way, cross country comparisons can be made. The instruments are as follows:

(i) A population survey of approximately 2,000 adults;
(ii) Face to face in-depth interviews with at least 36 key or expert informants on various aspects of entrepreneurship;
(iii) A detailed questionnaire completed by the experts interviewed; and
(iv) Various comparable national economic data.

GEM identifies nine framework conditions that, together with the degree of entrepreneurial recognition and capacity² within the adult population, have a significant bearing on the differing levels of entrepreneurial activity among the adult population between countries.

The GEM 2001 results of the adult population survey for Ireland confirm the views of the experts interviewed. A generally supportive environment now exists within Ireland for

¹ New information came to light in September 2001, which cast doubt on the accuracy of the previous results for Ireland. Appendix 1 gives a detailed explanation as to how this situation came about.
² “Capacity” in this context means possessing both the skills and motivation to bring the perceived entrepreneurial opportunity to commercial reality.
entrepreneurship. A summary of the main results of GEM 2001 for Ireland is as follows:

- 7.2% of the adult population is currently engaged in the process of trying to start a new business. These are referred to as nascent entrepreneurs. This level of activity places Ireland 12th among the 29 countries;

- 4.8% of the adult population currently partly or fully own and operate a business that was started since 1998. These are referred to as new firm entrepreneurs. This level of activity among new firm entrepreneurs places Ireland 6th; and

- 3% of all start-ups are perceived by their founders to have high growth potential. This result places Ireland in 10th place among the 29 countries.

GEM clearly demonstrates the importance of informal or “business angel” investment in supporting new ventures. Just over 3% of Irish adults have informally invested in this way over the last three years in a new venture started by someone else. This result places Ireland just above the average among GEM participating countries in terms of business angel investment in new enterprises.

Areas that GEM highlights as a matter of concern for Ireland is the relative unavailability of seed funding, the low number of women entrepreneurs, and infrastructural inefficiencies that are beginning to have a negative effect on the country’s overall relative international competitiveness.

There is general agreement that the positive environment for entrepreneurship that exists in Ireland should be further strengthened. To this end, six recommendations are outlined which are designed to achieve this objective by building on Ireland’s strengths in this area, while seeking to overcome identified deficiencies.

In summary, the recommendations that are being proposed for Ireland by the Irish GEM team are as follows:

- Entrepreneurial activity and its consequent benefits should be championed at national level.

- The barriers preventing a greater involvement by women in entrepreneurial activity should be systematically identified and their participation must be actively encouraged and supported.

- A series of educational and training initiatives should be designed to develop both the required skills and confidence in individuals, through the formal general education system and through entrepreneurial specific initiatives.

- The availability of pre- and start-up seed capital for different types of business’ needs should be reviewed and any gaps in the availability of financing should be addressed. The relative attractiveness for investors of investing in early stage enterprises should also be examined and the risk/reward of such investment made more attractive through fiscal incentives.

- Means of transferring the significant research, technological development and innovation (RTDI) investment, currently being implemented, into new entrepreneurial initiatives should be actively encouraged and any barriers to its transfer should be identified and removed.

- The inefficiencies and shortcomings in the country’s physical and telecommunications infrastructure should be addressed with a real sense of urgency.

These recommendations are detailed in Section 4.

\(^3\) “High growth potential” is defined as being capable of employing 50 people within five years.
GEM has given Ireland for the first time a means of benchmarking the entrepreneurial propensity of its adult population against 28 other countries. It also provides access to a range of international research and policy initiatives, so that Ireland can learn from the experience of other countries, ways and means of encouraging a greater level of entrepreneurial drive and initiative among its adult population. International research indicates that the more entrepreneurial activity there is within a country, the greater the number of value adding, high growth potential new ventures that will be initiated.

The number of countries participating in GEM is set to rise to almost 40 in 2002 as more and more countries perceive the benefits which participation can convey. The Irish GEM team is determined to ensure that Ireland will remain fully committed to GEM so that the country can continue to enjoy the benefits of collective learning, together with the means of measuring progress towards the goal of becoming a leading entrepreneurial nation.
CHAPTER 1

The GEM Project

1.1 History of the Project

The Global Entrepreneurship Monitor (GEM) is a research programme run jointly by London Business School and Babson College in the USA. The research also involves a consortium of teams from each of the countries involved in the study. In 2001, 29 countries participated.4

The aim of GEM is to create an annual assessment of the levels of entrepreneurial activity across countries. The research also explores a variety of factors both within and across countries that might give rise to systematic differences in entrepreneurship rates. Through a greater understanding of these factors, policies to enhance the level of entrepreneurial activity can be based on solid research and the role of entrepreneurship in contributing to a positive economic environment can be better understood.

GEM began in 1999. The first study began with 10 countries5, expanded to 216 in the year 2000, and to 297 countries in 2001. In 2002, it is expected that the number of participating countries will rise to about 40.

1.2 GEM Definition of Entrepreneurship

For the purposes of the research, GEM uses a very comprehensive definition of entrepreneurship, which encompasses any type of entrepreneurial initiative, including self-employment. The Total Entrepreneurship Activity (TEA) rating is made up of those actively planning to become entrepreneurs, and taking some specific actions to bring this about, (categorised by GEM as “nascent” entrepreneurs) and those who have set up a new enterprise in the 42 months prior to the carrying out of the adult population survey (categorised by GEM as “new firm” entrepreneurs).

1.3 Thesis to be Proven

GEM was designed to answer three fundamental questions:

(i) Does the level of entrepreneurial activity vary between countries, and, if it does, to what extent?

(ii) Does the level of entrepreneurial activity affect a country’s rate of economic growth and prosperity?

(iii) What makes a country entrepreneurial?

1.4 The GEM Theoretical Model

Most studies of economic performance focus on the ‘primary economy’ of large, established firms and industries, and the ‘secondary economy’ of small and medium sized enterprises. The focus is, therefore, on enterprises already established, in other words

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4 Argentina, Australia, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Hungary, India, Ireland, Israel, Italy, Japan, Mexico, Netherlands, Norway, New Zealand, Poland, Portugal, Russia, Singapore, South Africa, Spain, South Korea, Sweden, UK, and USA.

5 Canada, Denmark, Finland, France, Germany, Israel, Italy, Japan, UK and USA.

6 Ireland was among the countries that participated in GEM for the first time in 2000. The other first time participants in that year were Argentina, Australia, Belgium, Brazil, India, Norway, Singapore, Spain, South Korea, and Sweden.

7 The first time participants in GEM 2001 were Hungary, Mexico, Netherlands, New Zealand, Poland, Portugal, Russia and South Africa.
the “status quo”. The entrepreneurial sector, (i.e. start-ups and new firms), is missing.

The GEM model specifically incorporates both the established and entrepreneurial sectors and illustrates the relationship between them. GEM seeks to examine the strength and influence of the entrepreneurial sector, (i.e. the effect of new firm creation and growth,) on the economy.

The model for GEM is illustrated in diagrammatic form in Figure 1.

Figure 1: The GEM Theoretical Model

The general environment, which pertains within a particular country at a point in time, influences both new and existing firms. The characteristics of this general environment are referred to in GEM as the “National Framework Conditions”.

The National Framework Conditions are as follows:

- The relative openness of the economy,
- The role and extent of Government intervention,
- The efficiency of the financial markets,
- The level and intensity of technology and R&D,
- The physical infrastructure,
- The availability and extent of management skills,
- The degree of flexibility in the labour market,
- The degree to which institutions are unbiased and the rule of law prevails.

In addition to this, there is a set of factors that GEM has identified as specifically influencing the entrepreneurial sector. These are termed the “Entrepreneurial Framework Conditions”. The Entrepreneurial Framework Conditions are as follows:

- Financial
- Government Policies
- Government Programmes
- Education and Training
- R&D Transfer
- Commercial Infrastructure
There is somewhat of an overlap between the National Framework Conditions and those specifically affecting entrepreneurship, but within the Entrepreneurial Framework Conditions, it is the relative effect of the Condition for a new firm that is the issue. For example, there may be instances within countries whereby the general financial environment is supportive of established businesses, but is less available to and less supportive of new businesses.

GEM suggests that at the heart of the explanation of the relative entrepreneurial propensity of a country’s adult population is a combination of the following:

- Differences in the nine Entrepreneurial Framework Conditions between countries;
- The relative perceptiveness of the adult population of new venture opportunities, (‘entrepreneurial opportunity’); and
- The capacity and motivation of the adult population to capitalise on such opportunities (‘entrepreneurial capacity’).

1.5 How Gem Collects Data

The GEM model incorporates four fundamental research instruments\(^8\) in order to explore these questions. These instruments are as follows:

(i) A population survey, based on a random sample of approximately 2,000 adults.

(ii) Face-to-face interviews with at least 36 experts (called ‘key informants’) on various aspects of entrepreneurship.

(iii) A detailed questionnaire completed by the experts interviewed.

(iv) The use of selected national economic data, measured in standard units, from credible international sources including the Organisation for Economic Cooperation and Development (OECD), the World Bank, and the World Competitiveness Yearbook.

Details of each of these instruments are contained in the paragraphs that follow.

(i) Adult Population Survey

Professional survey research firms in each country administer the adult population surveys, which are based on a random sample of approximately 2,000 adults. Sampling procedures vary somewhat, but all of the survey firms are able to provide samples that are, when properly weighted, representative of the adult population in each country.

Telephone interviews are utilized in Ireland, as in most of the developed countries, where most households have a telephone. The interview completion time ranges from a low of 60 seconds to a high of 15 minutes, depending on the extent of the respondent’s involvement in entrepreneurial activity. The first four items asked of all those interviewed are related to participation in entrepreneurial activities — starting a new firm, owning and managing a new firm and informally investing in another’s new firm. Anyone engaged in any of these activities is asked for additional selected details about that activity.

A further six items, also asked of all those interviewed, are for assessing attitudes towards and knowledge of the entrepreneurial climate.

(ii) Expert Informant Interviews

Expert informants are chosen by reputation and referrals to represent the nine entrepreneurial framework dimensions in the GEM model as outlined above. At least three experts should come from each of the nine entrepreneurial framework conditions and 25% of them should be entrepreneurs. The GEM national team conducts face-to-face interviews

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\(^8\) (i) and (iv) are the responsibility of the GEM central co-ordination team and (ii) and (iii) are the responsibility of the national team.
with at least 36 such experts, called “key informants”. The interviews attempt to ascertain the views of national experts on the factors that have been shown to influence the level of entrepreneurial activity.

(iii) Detailed Questionnaires Completed by the “Key Informants”

The experts interviewed also complete a detailed questionnaire. The group of experts, chosen for an in-depth face-to-face interview, complete this questionnaire in the presence of the interviewer at the end of the interview, while experts interviewed in the preceding year(s) are requested to complete the questionnaire and return it by post.

Expert self-completed questionnaires, translated into the national languages, consist of those items asked in the adult population survey, plus an additional 69 five-point scale items covering a range of topics relating to the Entrepreneurial Framework Conditions, the entrepreneurial capacity and opportunity recognition perceptiveness of the adult population, as well as other socio-demographic items. These questionnaires take about 15 minutes to complete.

(iv) National Economic Data

Standardized cross-national data on a variety of national characteristics and attributes (e.g., growth in GDP) are assembled from a wide range of harmonized international sources. Sources include the United Nations, Eurostat, ILO, U.S. Census International Data Base, World Bank, and International Monetary Fund, among others.
CHAPTER 2

The GEM Results

2.1 The GEM Results

GEM has identified the following trends across the participating countries.

(i) The level of entrepreneurship differs substantially between countries.

(ii) Only in the less developed countries has a link between entrepreneurship and growth been demonstrated.

(iii) There is a distinct difference in entrepreneurship motivation (Necessity vs. Opportunistic) between countries. This has a significant impact on the growth potential of the entrepreneurial activity in a country. For example, one in seven opportunity driven entrepreneurs expects that their new business will grow significantly, while only one in fifty necessity entrepreneurs have such growth expectations. Opportunity entrepreneurship is also more prevalent in certain sectors of the economy.

(iv) The age, gender and educational attainment levels of the adult population has a profound effect on the level, type and scale of entrepreneurial activity within a country.

Those who believe that there are good opportunities within their communities to start a business are three times more likely to be entrepreneurially active than are those who do not believe that such opportunities exist. While those that consider that they have the skills to create and run a successful business are six times more likely to be entrepreneurially active. Among those pursuing opportunities, it is those with the higher levels of education who are the most entrepreneurially active. This holds true for both men and women.

(v) Three Entrepreneurial Framework Conditions are generally considered by the international group of experts as particularly facilitating higher levels of entrepreneurial activity. These are as follows:

- Cultural and Social Norms,
- Financial Supports, and
- Government Policies.

The key informants, in the more entrepreneurially active countries, placed particular emphasis on the need to encourage women and minorities to be more entrepreneurial and to create a mind-set of creativity and innovation; to improve the risk assessment culture in the financial community; to increase the long-term, strategic focus in governments’ perception of the benefits of encouraging and supporting entrepreneurship; and to deepen governments’ understanding of entrepreneurship.

(vi) The level of informal and formal business investment differs significantly between countries, with the US dominating in virtually every area in this regard. Policy makers often underestimate the significance of informal investment in entrepreneurial ventures, with few realising that it represents the equivalent of 1.1% of GDP on average across all GEM countries. While venture capital is invested in a much smaller number of new enterprises, those in which it is invested tend to grow larger more quickly.

The paragraphs that follow analyse the GEM results across the 29 countries in more detail in each of the areas (i) to (vi) outlined above.
Section 3 “How Entrepreneurial is Ireland?” focuses specifically on the results for Ireland.

2.2 Level of Entrepreneurship across Countries

Figure 2 illustrates the results of GEM 2001 in terms of the entrepreneurial activity of the adult populations across the 29 countries. The range of entrepreneurial activity across the participating countries differs substantially, from a low of less than 5% in Belgium to a high of approximately 18% in Mexico.

Mexico and New Zealand appear to lead a group of five countries with generally higher entrepreneurial prevalence rates than all other GEM 2001 countries. However, the rank order among the five is uncertain since the differences between the countries are not statistically significant.

The GEM study divides countries, based on their adult population survey, into two groupings in terms of their entrepreneurial activity rating. Counties are categorised as “High” or “Low” based on the level of entrepreneurial activity among their adult populations. Within the “High” category is included any country equal to or above the median prevalence rate. Within the “Low” category is included any country below the median prevalence rate on the Total Entrepreneurial Activity (TEA) Index.

Table 1 lists the countries in alphabetical order in each category.
Table 1: GEM countries categorized on the basis of their entrepreneurial activity

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<td>Germany</td>
<td>Hungary</td>
</tr>
<tr>
<td>Israel</td>
<td>India</td>
</tr>
<tr>
<td>Japan</td>
<td>Ireland</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Italy</td>
</tr>
<tr>
<td>Norway</td>
<td>Korea</td>
</tr>
<tr>
<td>Poland</td>
<td>Mexico</td>
</tr>
<tr>
<td>Portugal</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Russia</td>
<td>United States</td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3: Nascent vs. New Firm Entrepreneurs

In the GEM 2001 Executive Report, Ireland was incorrectly categorized as belonging to the “Low” group. This error occurred as the revised adult population figures for Ireland were only becoming available as the Executive Report was going to press. Hence, while all the Figures in that report reflect the revised result, the references to Ireland’s relative position in the body of the text are incorrect, as they were not changed to take account of the revised figures.
As might be expected, in almost every country\textsuperscript{10} there are much greater numbers of people planning to start a new business (nascent entrepreneurs) than actually bring a new enterprise into being (new firm entrepreneurs).

Across the GEM countries, 6.3\% of all adults are actively planning a new business and are categorised as “nascent entrepreneurs”, while 3.5\% of entrepreneurs identified by GEM across all countries have actually started a new enterprise over the previous 42 months and are categorised as “new firm” entrepreneurs.

Figure 3 illustrates for each of the countries the relative proportion of nascent and new firm entrepreneurs.

2.3 Entrepreneurship and Economic Growth

One of the initial objectives of GEM was to enquire whether the level of entrepreneurial activity affected a country’s rate of economic growth and prosperity.

While the first study (1999) appeared to show a strong correlation between the level of entrepreneurial activity in a country and its growth rate, as the number of countries involved in GEM expanded and included a greater variety in terms of size, stage of development and propensity to trade internationally, the connection between entrepreneurship and economic growth was perceived to be more complex.

The 2000 Report asserted that despite various research initiatives “...remarkably little is known about the relationship between entrepreneurship and economic growth, including how it works, what determines its strength and the extent to which it holds for diverse countries.”\textsuperscript{11}

GEM 2001 was able to demonstrate a positive correlation between “Necessity” entrepreneurship and GDP growth. In other words, where there was a high level of necessity entrepreneurship, and this tended to occur in the less affluent, less developed countries, the level of economic growth in the country tended to be high. India, Mexico and Brazil are examples of countries where this relationship is present. This correlation was not found between “Opportunity” entrepreneurship and GDP growth.

In the more developed countries, GEM suggests that the desirable combination is a high degree of competitiveness relative to other countries, allied to a high level of entrepreneurial propensity among its adult population. Moreover, the entrepreneurial motivation will tend to be based on a response to perceived opportunity rather than on “necessity entrepreneurship”.

In certain countries, such as Singapore, while the country ranks well in the World Competitiveness Index\textsuperscript{12}, the level of entrepreneurial activity among its adult population is relatively low\textsuperscript{13}. In response to this situation, the Government of Singapore is actively promoting technology-based entrepreneurship through its “Technopreneurship 21” initiative, which it launched in 2000.

Ireland, on the other hand, ranks relatively well on all three dimensions—relative international competitiveness\textsuperscript{14}; a high level of entrepreneurial activity among its adult population; and a high level of opportunity rather than necessity driven entrepreneurship.

2.4 Entrepreneurial Motivation

GEM clearly demonstrates that the level of entrepreneurial activity differs between countries. It also shows that the motivational drive behind the entrepreneurial activity differs between countries.

\textsuperscript{10} Israel is a clear exception to this trend in 2001. This may have more to do with the political situation within the country at this time, however, rather than an inherently different underlying trend.

\textsuperscript{11} Reynolds, Hay, Bygrave, Camp and Autio, 2000.

\textsuperscript{12} Garelli Stephane, The World Competitiveness Yearbook: 2000, Lausane, Switzerland International Institute for Management Development. In 1999 and again in 2000, Singapore was ranked 2\textsuperscript{nd}, just behind the United States.

\textsuperscript{13} GEM 2000 (4.1\% — 21\textsuperscript{st}/21) and GEM 2001 (5.2\% — 27\textsuperscript{th}/29).

\textsuperscript{14} Ireland is ranked 7\textsuperscript{th} in the 2000 report, having been ranked 5\textsuperscript{th} in the previous year’s report. Ireland’s relative position for 2001 has, however, fallen back to 10\textsuperscript{th} position.
Figure 4: Opportunity vs. Necessity Entrepreneurship

Opportunity Entrepreneurship

Necessity Entrepreneurship
Two distinct types of motivation are identified. The first relates to those involved in creating and growing new firms who do so in response to a perceived opportunity. These efforts are referred to as “opportunity entrepreneurship”, reflecting the voluntary nature of participation. Opportunity entrepreneurs have other options open to them, but choose to start a new business out of personnel preference. In contrast, the second group become involved because they perceive that they have “no better choices for work”. Such efforts are referred to as “necessity entrepreneurship”, reflecting the individuals’ perception that such actions present the best option available for employment, but not necessarily the preferred option.

About 54% of those involved in creating and growing new businesses across the entire GEM countries were responding in a positive way to a perceived opportunity (“opportunity entrepreneurship”); 43% became involved out of necessity (“necessity entrepreneurs”); and 3% became involved for other reasons.

The pattern of participation in opportunity and necessity entrepreneurship varies dramatically across the GEM countries. Necessity entrepreneurship is much more prevalent in the developing countries than it is in the more developed economies.

Figure 4 separately illustrates the opportunity and necessity entrepreneurship rates for all 29 GEM countries.

The results of GEM 2001 also show that consumer oriented businesses represent almost 50% of all entrepreneurial activity. A much greater percentage of opportunity motivated entrepreneurial activity occurs in the business services sector (21%), than in other individual sectors, while necessity entrepreneurship is most prevalent in consumer-oriented services (54%). The relationship between the motives for entrepreneurship and the sectors in which the entrepreneurs engage is illustrated in Table 2.

Table 2: Entrepreneurship Motives and Selected Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total</th>
<th>Opportunity Entrepreneurship</th>
<th>Necessity Entrepreneurship</th>
<th>Mixed or Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up, or Nascent Firm (number of cases)</td>
<td>6,609</td>
<td>3,489</td>
<td>2,908</td>
<td>212</td>
</tr>
<tr>
<td>Extractive: Farming, Fishing, Hunting, Forestry, Mining</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>Transforming: Construction, Manufacturing, Transportation, Wholesale, Communications, Utilities</td>
<td>33%</td>
<td>30%</td>
<td>37%</td>
<td>36%</td>
</tr>
<tr>
<td>Business Services: Financial, Insurance, Real Estate, Consulting, Business Professionals</td>
<td>14%</td>
<td>21%</td>
<td>5%</td>
<td>13%</td>
</tr>
<tr>
<td>Consumer-Oriented: Retail, Hotels, Restaurants, Consumer Services, Health, Education, Social Services</td>
<td>49%</td>
<td>45%</td>
<td>54%</td>
<td>43%</td>
</tr>
<tr>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Growth aspirations also differ very dramatically between necessity and opportunity driven entrepreneurs, as is illustrated in Table 3. About 14% of opportunity entrepreneurs expect their new ventures to be high growth start-ups, i.e. to produce 50 or more jobs in five years, compared with only 2% of necessity entrepreneurs who have such expectations. Moreover, 90% of necessity entrepreneurs expect their new businesses to be employing no more than 5 in the next five years.

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15 The number of cases refers to the total number of nascent entrepreneurs, identified in the adult population surveys throughout the 29 countries, who indicated the sector in which their fledgling enterprises are active.
Table 3: Entrepreneurship Motives and Growth Expectations

<table>
<thead>
<tr>
<th>Growth Aspirations</th>
<th>Total</th>
<th>Opportunity Entrepreneurship</th>
<th>Necessity Entrepreneurship</th>
<th>Mixed or Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up, or Nascent Firm (number of cases)</td>
<td>6,609</td>
<td>3,489</td>
<td>2,908</td>
<td>212</td>
</tr>
<tr>
<td>Expect no jobs in 5 years</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>Expect 1-5 jobs in 5 years</td>
<td>62%</td>
<td>52%</td>
<td>75%</td>
<td>47%</td>
</tr>
<tr>
<td>Expect 6-19 jobs in 5 years</td>
<td>15%</td>
<td>20%</td>
<td>9%</td>
<td>18%</td>
</tr>
<tr>
<td>Expect 20 or more jobs in 5 years</td>
<td>9%</td>
<td>14%</td>
<td>2%</td>
<td>18%</td>
</tr>
<tr>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

There is also a difference in the type of entrepreneurship that is taking place in less developed compared to the more developed countries. In the less developed countries, much of the entrepreneurial activity is necessity driven. In the more developed countries, there is a greater emphasis on opportunity perception and high growth starts. Hence, in these countries the emphasis is often on encouraging greater levels of creativity and innovation among the population.

2.5 Personal Characteristics of Entrepreneurs

GEM suggests that the relative perceptiveness of the adult population of new venture opportunities, (“entrepreneurial opportunity”) and the capacity and motivation of the population to capitalise on such opportunities (“entrepreneurial capacity”) is central to an explanation of the relative entrepreneurial propensity of a country’s adult population.

Both of these important factors relate to personal characteristics. The paragraphs that follow examine the GEM findings relating to identified personal characteristics that distinguish entrepreneurs from others in the adult population and differentiate between entrepreneurs on the basis of those pursuing opportunities and those involved through necessity.

The personal characteristics, which have been identified, include the following:

- “Entrepreneurial opportunity” recognition,
- “Entrepreneurial capacity,” (skills and motivation)
- Gender differences,
- Age profile,
- Educational attainment level.

The results of the GEM research clearly show that those who believe that there are good opportunities within their community to start a business are three times more likely to be entrepreneurially active than are those who do not believe that such opportunities exist. While those who consider that they have the skills necessary to create and run a successful business are six times more likely to be entrepreneurially active.

Those who personally know an entrepreneur are more than twice as likely to be involved themselves, as those who have no entrepreneur acquaintances. Those expecting their family’s economic situation to improve in the next year are three times more likely to be involved in entrepreneurship than those expecting their situation to decline.

The GEM research confirmed previously conducted research, which demonstrated that men are more entrepreneurially active than women.

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16 The number of cases refers to the total number of nascent entrepreneurs, identified in the adult population surveys throughout the 29 countries, who indicated the number of employees that their fledgling enterprises would aspire to employ.
Across the 29 GEM countries, 70% of all adults identified, as being entrepreneurially active, were men.

In general, the most entrepreneurially active age group is 25-44 year olds, with 55% of all entrepreneurs across all GEM countries being within this age group. Patterns relating to age, however, are quite different for opportunity and necessity entrepreneurship. For men and women, opportunity entrepreneurship is highest in the age group 35 to 44 years. Necessity entrepreneurship for men is highest in the 18 to 24 age group, and then declines steadily in the older age categories. Women, on the other hand, are equally represented up to the age of 54, when there is a dramatic decline in their level of entrepreneurial activity.

Figure 5 illustrates the entrepreneurial prevalence rates for men on the right, and for women on the left, for all five GEM measures of entrepreneurial activity (i.e. overall Total Entrepreneurship Activity Rate (TEA), TEA Opportunity, TEA Necessity, Nascent Entrepreneurs, and “New Firm” Entrepreneurs). The age categories are also presented for each type of entrepreneurial activity.

The GEM analysis shows that those who have completed secondary or third level education or training, represent the majority (74%) of those currently active as entrepreneurs.

When all types of activity are considered, as shown in Figure 6, there are quite different patterns for men and women. Participation in entrepreneurial activity increases with more education for women, with a major jump among those who go beyond completion of secondary education. For men, in contrast, there is a reduced participation among those who go beyond secondary education, with the lowest levels among those with the most (i.e., graduate experience) or least (i.e., non-completion of second level) amount of education.
When those pursuing opportunities, however, are compared with those involved in entrepreneurial activities out of necessity, the patterns are quite different. Among those pursuing opportunities, it is those with the higher levels of education (at least secondary school completed) that are the most entrepreneurially active. This is particularly true for women who become more entrepreneurially active as their level of education increases. The pattern for necessity entrepreneurship is reversed for both men and women. It is also true that those in the upper third of household incomes within their countries are much more active in pursuing opportunity entrepreneurship. This is once again particularly true for women.

The general patterns by gender and educational attainment for the five types of entrepreneurial activity are presented in Figure 6.

The GEM results also show that the type and scale of the entrepreneurial activity is directly related to the educational attainment levels of the entrepreneurs. This is illustrated in Table 4. The most highly educated have the greatest expectations that their enterprise will grow significantly. They also tend to be the most involved in Business Services.
Table 4: Educational Attainment and Type of Entrepreneurial Ventures

<table>
<thead>
<tr>
<th>Economic Sector</th>
<th>Secondary School Experience</th>
<th>Secondary School Completed</th>
<th>University or College Experience</th>
<th>Graduate Experience</th>
<th>All Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>1,010</td>
<td>1,571</td>
<td>1,298</td>
<td>75</td>
<td>3,954</td>
</tr>
<tr>
<td>Extractive</td>
<td>4%</td>
<td>5%</td>
<td>3%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Transforming</td>
<td>32%</td>
<td>32%</td>
<td>29%</td>
<td>20%</td>
<td>31%</td>
</tr>
<tr>
<td>Business Services</td>
<td>7%</td>
<td>9%</td>
<td>24%</td>
<td>42%</td>
<td>14%</td>
</tr>
<tr>
<td>Consumer-Oriented</td>
<td>57%</td>
<td>54%</td>
<td>44%</td>
<td>30%</td>
<td>51%</td>
</tr>
</tbody>
</table>

| Expected Growth       |                             |                            |                                 |                     |           |
| Number                | 1,648                       | 2,455                      | 2,891                           | 280                 | 7,274     |
| No jobs in 5 years   | 36%                         | 27%                        | 40%                             | 21%                 | 34%       |
| 1-5 jobs in 5 years  | 57%                         | 54%                        | 38%                             | 48%                 | 48%       |
| 6-19 jobs in 5 years | 6%                          | 9%                         | 14%                             | 14%                 | 11%       |
| 20 or more jobs in 5 years | 1%                      | 10%                        | 7%                              | 17%                 | 7%        |

It should be noted that while those entrepreneurs with graduate experience have the highest growth expectations of their new venture (17%), they are in fact relative small in number. On the other hand, while the percentage of those entrepreneurs, with just secondary school completed, that have high growth expectations of their new venture may be lower (10%), the actual numbers of businesses involved is much greater. The same holds true for those with university or college experience. It therefore follows that to concentrate exclusively on those with the highest levels of education as a source of high growth enterprises would be to ignore the sources of the greater number of businesses with high growth potential.

2.6 Entrepreneurial Framework Conditions

The key informants in each country were asked to identify the three framework conditions that, in their opinion, have the most significant impact upon the entrepreneurial sector in their country.

The analysis of the data from each of the 29 countries reveals that the three most important framework conditions identified by the national experts in 2001 were as follows:

- Cultural and Social Norms,
- Financial Support, and
- Government Policies.

The paragraphs that follow examine the overall GEM findings on each of these framework conditions.

2.6.1 Culture and Social Norms

GEM 2000 concluded that in the least entrepreneurial active countries, entrepreneurship has little societal or cultural support and that fear of failure is considered a major deterrent to entrepreneurial endeavour. GEM 2000 observed a significant difference between the characteristics of those countries with high levels of entrepreneurial activity among its adult population and those with less entrepreneurially active populations.

This observation is reinforced by the findings of GEM 2001, which indicates that it is the general attitude toward entrepreneurship that is the most important of the cultural and social norms that influence the level of entrepreneurship within a country. This includes the public’s attitude toward, support for and understanding of the importance of entrepreneurship in society.

The legitimacy of entrepreneurship in a specific culture is important in determining whether or not an individual will choose to become an entrepreneur. Another key determinant is the prevailing attitude of society towards those who have tried and failed.

The key informants agree on the importance of successful role models in positively influencing support for entrepreneurship within a country. The media are perceived as having a powerful role to play here in raising the profile of
entrepreneurs and in influencing a positive attitude towards their activities.

Difficulties arise in those countries in which there is less entrepreneurial activity and where, consequently, fewer role models are available. According to the key informants, these countries are focused on efforts to get society to simply accept entrepreneurship and to appreciate its wider economic benefits in their communities.

In the more entrepreneurially active countries, the focus is on the identification of ways of encouraging women and minorities to be more entrepreneurial, and here again the positive role that role models and the media can play were identified by the key informants. The key informants within these countries also focused on the need for a greater number of new enterprises to be created that have high growth potential.

Table 5 summarizes the views of all the key informants as to the improvements to the cultural and social norms that are required across all countries in order to foster a higher level of entrepreneurial activity. The specific views of the key informants in countries with high or low levels of entrepreneurial activity among their adult population at present are also summarized.

<table>
<thead>
<tr>
<th>Cultural and Social Norms</th>
<th>Differences Between Countries</th>
<th>Common Themes Across Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>More entrepreneurial countries</strong></td>
<td>Encourage women and minorities to be more entrepreneurial</td>
<td>Increase respect for entrepreneurs</td>
</tr>
<tr>
<td></td>
<td>Create mindset of creativity and innovation</td>
<td>Lower fear of failure</td>
</tr>
<tr>
<td><strong>Less entrepreneurial countries</strong></td>
<td>Need for role models</td>
<td>Modify perception of wealth creation</td>
</tr>
<tr>
<td></td>
<td>Instill elementary aspects of entrepreneurial mindset</td>
<td></td>
</tr>
</tbody>
</table>

### 2.6.2 Financial Support

GEM 2000 concluded that the more entrepreneurially active a country is, the more developed the sources of equity funding tends to be. The availability of early-stage financing, either from informal sources such as private individuals or from formal sources such as venture capital funds, is greater among countries that have higher levels of entrepreneurial activity.

Key informants in countries with low entrepreneurial activity highlighted banking and access to debt capital as being of special concern, in particular the strong reliance on asset-based lending and the widely shared risk-adverse investment philosophy. Of particular concern in the experts’ view is the inability of the banks in these countries to appropriately evaluate business deals.

In those same countries, the key informants were also concerned about the financial knowledge and skills of the entrepreneurs, for example the ability of entrepreneurs to assess their capital needs; to identify potential sources of funds; and to negotiate deals.

In the more entrepreneurially active countries, the key informants were more concerned with the ability to provide exit mechanisms for investors and the ability to earn money on investments, even when the deals were initially over-valued.

Table 6 summaries the views of all the key informants with regard to the common changes needed in their opinion across all countries in order to strengthen the financial support available to entrepreneurs if a higher level of entrepreneurial activity is to be encouraged. The specific views of the key informants in countries with high or low levels of entrepreneurial activity among their adult population at present are also summarized.
Table 6: Experts’ Comments: Financial Support

<table>
<thead>
<tr>
<th>Financial Support</th>
<th>Differences Between Countries</th>
<th>Common Themes Across Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>More entrepreneurial countries</td>
<td>Improve the risk investment culture in the financial community</td>
<td>Improve the ability of lending institutions and equity investors to assess entrepreneurial opportunities</td>
</tr>
<tr>
<td>Less entrepreneurial countries</td>
<td>Improve banking and access to debt capital</td>
<td>Lower cost of capital for entrepreneurs</td>
</tr>
<tr>
<td></td>
<td>Improve entrepreneurs’ ability to assess capital needs</td>
<td>Modify inadequate regulation by Government of the supply of capital</td>
</tr>
</tbody>
</table>

2.6.3 Government Policies

The experts in all of the GEM 2001 countries identified government policies in the area of entrepreneurship as being important and in need of attention. In countries with lower levels of entrepreneurial activity, the key informants focused on the need to improve operational efficiencies in terms of the policies and programmes that their governments are already implementing in this area and the need for a greater co-ordination between the various programmes. In the more entrepreneurially active countries, the key informants are more concerned with the need for their governments to take a more strategic approach to policy formulation in order to create the best climate for entrepreneurship.

Key informants across all countries agreed on the need for governments to deepen and extend their understanding of entrepreneurship and its impact on the economy. For experts in the less entrepreneurially active countries, the issue is image and awareness, both in terms of the need to overcome the general sense of mistrust and disrespect that, in the opinion of the key informants, policy-makers have for entrepreneurs and the need to bring about a more supportive attitude towards entrepreneurs and their activities among their general populations.

For experts in the more entrepreneurially active countries, the issue is more about policy effectiveness, including policies that reduce the barriers to growth for young, emerging entrepreneurial enterprises.

Table 7 summarizes the views of all the key informants with regard to the common changes in government policy across all the GEM countries that are necessary, in the opinion of the key informants, in order to foster a greater level of entrepreneurship. The specific views of the key informants in countries with high or low levels of entrepreneurial activity among their adult population at present are also summarized.

Table 7: Experts’ Comments: Government Policy

<table>
<thead>
<tr>
<th>Government Policies</th>
<th>Differences Between Countries</th>
<th>Common Themes Across Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>More entrepreneurial countries</td>
<td>Increase the long-term focus of government support for entrepreneurship</td>
<td>Reduce administrative burden of regulatory compliance</td>
</tr>
<tr>
<td></td>
<td>Deepen government understanding of entrepreneurship</td>
<td>Increase fiscal incentives to stimulate entrepreneurial initiatives</td>
</tr>
<tr>
<td>Less entrepreneurial countries</td>
<td>Increase coordination in governmental support initiatives</td>
<td>Change government negative perception of entrepreneurship</td>
</tr>
</tbody>
</table>

20
2.7 Formal and Informal Business Investment

There is a section in the 2001 GEM Executive Report, specially written by William D. Bygrave, which takes a closer look at the availability of informal finance and venture capital for new enterprises and the relative amounts invested through these means.

Policy makers often overlook the importance of informal sources of finance and underestimate its significance. While venture capital is well known as a source of financing for new enterprises, the flow of informal investment is in fact the source of the largest share of the funds for new businesses. In all GEM 2001 countries, informal investors allocated more money for start-ups and growing businesses than did professional venture capital firms. On average across all GEM countries, for every one Euro of classic or traditional venture capital that was invested, there was an average of about €1.60 of informal capital invested.

It is estimated that informal investors, provide a total of €215 billion in funds per year to start-up and growing companies in the participating GEM countries. In the context of national economies, the total informal investment in the year 2000 was 1.1% of the combined GDP for all GEM countries.

The proportion of adults, within the various GEM countries, that was active as informal investors in 2001 averaged just over 3%, with a range from less than 1% in Brazil to over 6% in New Zealand. The rate of informal investment in Ireland is just above the mid point for all GEM countries.

Figure 7 illustrates the level of informal investment by country.

About 50% of informal funds go to family members and relatives; 30% goes to co-workers, friends and neighbours; and the remainder goes to “strangers with good ideas.” This combined group of informal investors are also known as “Business Angels”.

The impact of classic venture capital is very significant for new and growing enterprises, although it is less important in terms of the total investment pool than informal investment. The companies that receive venture capital funding tend to grow faster and make a greater
contribution to their national economies over time. Accordingly, those economies in which venture capital is the most developed tend to have the highest number of new firms with high growth potential. Figure 8 clearly illustrates the dominance of Israel and the United States, in terms of domestic venture capital invested as a percentage of GDP. South Korea and Canada follow in second position with all the other GEM countries trailing well behind.

Figure 8: Domestic Venture Capital Invested as a Percentage of GDP

The US dominates in terms of (i) the number of companies that received venture capital in 2000 and (ii) the amount invested per company. Nearly 27% of companies that received venture capital in that year were located in the United States and these companies accounted for 81% of the venture capital invested in all participating GEM countries.
CHAPTER 3

How Entrepreneurial is Ireland?

3.1 Introduction

In 2001, with sponsorship from Forfás and Enterprise Ireland, Ireland participated for the second time in GEM.

The paragraphs that follow detail the overall results for Ireland as obtained from the adult population survey carried out in September 2001, from the expert key informant interviews carried out slightly earlier in the year, and from the detailed questionnaires completed by the key informants interviewed in 2000 and in 2001. The environment for entrepreneurship in Ireland relative to the entrepreneurial framework conditions is also examined. Finally, the entrepreneurial characteristics of the Irish adult population are analysed in the light of the GEM findings.

The GEM 2001 Global Executive Report ranks Ireland 6th in terms of the overall entrepreneurial propensity of its adult population across 29 countries. It should be noted that this is a revised result and corrects the very low position that Ireland obtained in GEM 2000. For a full explanation of why the GEM 2000 Executive Report incorrectly reported Ireland's entrepreneurial ranking see Appendix 1.

3.2 Overall Results

On the basis of the adult population survey for 2001, the following results were obtained with regard to the level of entrepreneurial activity in Ireland:

- 7.2% of the adult population are currently engaged in the process of starting a business. This level of activity ranks Ireland in 12th position across the 29 GEM countries.
- 4.8% of the adult population currently partly or fully own and operate a business started since 1998. These are “new firm” entrepreneurs. This level of new enterprise development places Ireland in 6th position.
- 82% of those actively involved in new entrepreneurial activity in Ireland are responding to a perceived opportunity rather than being forced to do so through necessity. Ireland is ranked 5th across the 29 GEM countries in terms of the proportion of its adult population that are pursuing opportunity driven entrepreneurial activity.
- 3% of all nascent entrepreneurs believe that their new venture will have high growth potential. Ireland is ranked joint 10th of the 29 countries in this regard.
- The number of Business Angels identified among the Irish adult population is just under 3.5%. This places Ireland joint 12th and just above the average (3.1%) across all 29 GEM countries.

Ireland’s overall entrepreneurial ranking (TEA) is 6th of the 29 GEM countries. This ranking is based on the number of nascent and new firm entrepreneurs identified in each country’s adult population survey.

In accordance with the general pattern across countries, a greater number of Irish people are planning new enterprises than have yet set up new businesses.

The movement in Ireland’s relative ranking between nascent and new firm entrepreneurs would appear to indicate that either (i) Ireland has a higher conversion rate of nascent entrepreneurs (i.e. those planning new

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17 High growth potential is defined as aspiring to employ 50 within 5 years.
enterprises) into new firm entrepreneurs (i.e., those who have brought their entrepreneurial plans to reality) than is the norm across the GEM countries, or (ii) that there will be fewer firms actually set up in the immediate future and Ireland’s relative position in respect of new firm entrepreneurs will decline as relatively fewer people are actually planning new businesses at present.

From the available data it is not possible to ascertain which is the correct interpretation to place on these figures. The results of the 2002 adult population survey, which will be carried out shortly, should give further clarification in this area.

When the percentage of active entrepreneurs is translated into numbers of people within the adult population, between the ages of 18-64, the results for Ireland indicate the following:

- Over 160,000 adults are currently engaged in the process of starting a business.
- Approximately 110,000 adults currently partly or fully own and operate a business started since 1998.
- Almost 5,000 adults believe that the new venture, which they are currently planning, will employ at least 50 people after 5 years from the start of the new enterprise.

### Table 8: Summary of the Results for Ireland

<table>
<thead>
<tr>
<th>Selective Measures of Entrepreneurial Activity</th>
<th>Highest Rate of all GEM Countries</th>
<th>Average Rate of all GEM Countries</th>
<th>Lowest Rate of all GEM Countries&lt;sup&gt;18&lt;/sup&gt;</th>
<th>Ireland’s Rate</th>
<th>Ireland’s Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Entrepreneurial Activity</td>
<td>18.7% (MX)</td>
<td>9.7%</td>
<td>4.5% (BE)</td>
<td>12.0%</td>
<td>6</td>
</tr>
<tr>
<td>Nascent Entrepreneurs</td>
<td>12.7% (MX)</td>
<td>6.3%</td>
<td>1.2% (IL)</td>
<td>7.2%</td>
<td>12</td>
</tr>
<tr>
<td>High Growth Nascent Start-Ups</td>
<td>7.0% (ZA/NL/NO)</td>
<td>2.6%</td>
<td>0.0%&lt;sup&gt;19&lt;/sup&gt;</td>
<td>3.0%</td>
<td>10(+)&lt;sup&gt;20&lt;/sup&gt;</td>
</tr>
<tr>
<td>New Firm Entrepreneurs</td>
<td>7.2% (AU)</td>
<td>3.4%</td>
<td>0.8% (JP)</td>
<td>4.8%</td>
<td>6</td>
</tr>
<tr>
<td>Opportunity Driven Entrepreneurs</td>
<td>12.8% (NZ)</td>
<td>6.5%</td>
<td>2.0% (IL)</td>
<td>9.2%</td>
<td>5</td>
</tr>
<tr>
<td>Informal Investors</td>
<td>7.0% (NZ)</td>
<td>3.1%</td>
<td>1.0% (NL/BR/JP/PT)</td>
<td>3.0%</td>
<td>12(+)&lt;sup&gt;20&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

The Irish key informants considered the conditions prevailing in Ireland to be relatively favorable to entrepreneurial activity. The questionnaires, completed by 50 Irish key informants, asked the experts to respond in terms of a five point scale from True (5) to False (1). Table 9 summarises for each entrepreneurial framework condition the highest-ranking country, the average score across all experts in all GEM countries, the lowest ranking country, the Irish result and the relative position of Ireland. It also illustrates the experts’ views on the relative entrepreneurial characteristics of the adult population.

---

<sup>18</sup> International Country Codes

<table>
<thead>
<tr>
<th>AR = Argentina</th>
<th>AU = Australia</th>
<th>BE = Belgium</th>
<th>BR = Brazil</th>
<th>CA = Canada</th>
<th>DE = Germany</th>
<th>DK = Denmark</th>
<th>ES = Spain</th>
<th>FI = Finland</th>
<th>FR = France</th>
<th>HU = Hungary</th>
<th>IE = Ireland</th>
<th>IL = Israel</th>
<th>IN = India</th>
<th>KR = Korea</th>
<th>NL = Netherlands</th>
<th>NO = Norway</th>
<th>NZ = New Zealand</th>
<th>PL = Poland</th>
<th>PT = Portugal</th>
<th>RU = Russia</th>
<th>SE = Sweden</th>
<th>SG = Singapore</th>
<th>UK = United Kingdom</th>
<th>US = United States</th>
<th>ZA = South Africa</th>
</tr>
</thead>
</table>

<sup>19</sup> No high growth nascent start-ups were identified in eight countries.

<sup>20</sup> More than one country was on this rank.
### Table 9: Summary of all Experts’ Evaluations

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance — Ease of Access</td>
<td>4.10 (US)</td>
<td>3.12</td>
<td>1.79 (AR)</td>
<td>3.64</td>
<td>5</td>
</tr>
<tr>
<td>Finance — Presence of VC, Business Angel and Other</td>
<td>4.49 (US)</td>
<td>3.02</td>
<td>1.85 (BR)</td>
<td>3.66</td>
<td>3</td>
</tr>
<tr>
<td>Cultural and Social Norms</td>
<td>3.64 (US)</td>
<td>2.43</td>
<td>1.89 (SE)</td>
<td>2.99</td>
<td>3</td>
</tr>
<tr>
<td>Cultural and Social Norms — Acceptance of Career Volatility</td>
<td>4.32 (US)</td>
<td>3.50</td>
<td>2.92 (JP)</td>
<td>3.61</td>
<td>9</td>
</tr>
<tr>
<td>Government Policy</td>
<td>3.20 (DE)</td>
<td>2.71</td>
<td>1.37 (AR)</td>
<td>3.14</td>
<td>6</td>
</tr>
<tr>
<td>Government Policy — Ease, Speed and Lack of Regulatory Burden</td>
<td>3.54 (SG)</td>
<td>2.23</td>
<td>1.22 (AR)</td>
<td>3.24</td>
<td>2</td>
</tr>
<tr>
<td>Government Programme — Efficiency and Effectiveness</td>
<td>3.57 (GER)</td>
<td>2.66</td>
<td>1.42 (AR)</td>
<td>3.16</td>
<td>6</td>
</tr>
<tr>
<td>Education and Training Effectiveness</td>
<td>2.79 (SG)</td>
<td>2.14</td>
<td>1.55 (PT)</td>
<td>2.60</td>
<td>3</td>
</tr>
<tr>
<td>Research and Development Transfer Effectiveness</td>
<td>3.24 (BE)</td>
<td>2.39</td>
<td>1.86 (AR)</td>
<td>2.69</td>
<td>9</td>
</tr>
<tr>
<td>Professional and Commercial Infrastructure</td>
<td>3.89 (US)</td>
<td>3.18</td>
<td>1.94 (JP)</td>
<td>3.49</td>
<td>5</td>
</tr>
<tr>
<td>Market Stability</td>
<td>3.64 (JP)</td>
<td>2.82</td>
<td>2.13 (NOR)</td>
<td>2.45</td>
<td>18</td>
</tr>
<tr>
<td>Relative Lack of Barriers to Market Entry</td>
<td>3.44 (US)</td>
<td>2.63</td>
<td>1.22 (ZA)</td>
<td>2.93</td>
<td>8</td>
</tr>
<tr>
<td>Access to Physical Infrastructure</td>
<td>4.46 (SG)</td>
<td>3.82</td>
<td>2.88 (IN)</td>
<td>3.04</td>
<td>22</td>
</tr>
<tr>
<td>Entrepreneurial Opportunity</td>
<td>4.20 (US)</td>
<td>3.26</td>
<td>2.46 (AR)</td>
<td>3.74</td>
<td>2</td>
</tr>
<tr>
<td>Entrepreneurial Capacity (Skills)</td>
<td>3.13 (US)</td>
<td>2.40</td>
<td>1.77 (JP)</td>
<td>2.71</td>
<td>5</td>
</tr>
<tr>
<td>Entrepreneurial Capacity (Motivation)</td>
<td>4.49 (US)</td>
<td>3.37</td>
<td>2.84 (NO)</td>
<td>3.94</td>
<td>4</td>
</tr>
</tbody>
</table>

### 3.3 Backdrop to Entrepreneurship in Ireland

In common with the other developed countries, the factors that are of particular concern to Ireland are the relative competitiveness of its environment for business relative to other countries; the level of entrepreneurial activity of its adult population; and the proportion of its adult population that are pursuing perceived opportunities.

While Ireland ranks relatively well on the entrepreneurial dimensions, 6th in overall entrepreneurial activity and 5th in terms of proportion of opportunity entrepreneurship, its relative competitiveness rating is under pressure due to infrastructural shortcomings. In the 2002 World Competitiveness Yearbook, Ireland’s relative position on the World Competitiveness Index was 10th, representing a decrease in the country’s relative ranking for the second year in a row (previous rankings were 7th and 5th).

Table 10 illustrates Ireland’s relative ranking for some of the various dimensions that go to make up the World Competitiveness Index. Ireland is well positioned on most of the dimensions that affect the national framework conditions. While the low ranking on infrastructure should come as no surprise, deficits in the availability and relative cost of telecommunications and in the necessary infrastructure for exporting, can be a significant inhibitor of entrepreneurial activity and growth in a country like Ireland. With a small home market, new ventures, if they are to grow, must export at an early stage in their development.

---

Table 10: Ireland’s Relative Position

<table>
<thead>
<tr>
<th>Economic Performance</th>
<th>Highest Ranking GEM Country</th>
<th>Lowest Ranking GEM Country</th>
<th>Ireland’s Ranking (relative to GEM countries only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Domestic Economy)</td>
<td>USA</td>
<td>Argentina</td>
<td>2nd</td>
</tr>
<tr>
<td>Government Efficiency</td>
<td>Singapore</td>
<td>Argentina</td>
<td>4th</td>
</tr>
<tr>
<td>Business Efficiency</td>
<td>USA</td>
<td>Argentina</td>
<td>6th</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>USA</td>
<td>India</td>
<td>17th</td>
</tr>
</tbody>
</table>

3.4 Key Entrepreneurial Framework Conditions: Ireland’s Relative Position

The 36 key informants interviewed in Ireland were asked to highlight the three framework conditions that they considered to have the most important impact on the entrepreneurial sector in Ireland. As was the case in the majority of countries surveyed, these experts cited the following:

- Financial Support,
- Cultural and Social Norms, and
- Government Policy.

The paragraphs that follow summarise Ireland’s standing on each of these conditions as perceived by the key informants.

3.4.1 Financial Support

In terms of adequate availability of debt and equity funding for new and growing firms and the availability of sufficient government subsidies in this area, the Irish experts gave a relatively high rating. As Table 11 illustrates, comparing across countries, Ireland came out 5th in terms of the satisfaction rating of its experts. Experts in the US, Germany and the Netherlands gave the highest ratings to the situation prevailing in their countries in this regard. The experts in Argentina and Mexico considered the situation in their countries to be the most unsatisfactory with regard to entrepreneurs trying to finance their new and growing businesses.

The key informants were also asked for their opinion on the situation in their country with regard to the availability of informal (“Business Angel”) and formal (Venture Capital) risk capital and the relative importance of IPOs as an important source of equity. The Irish experts’ views placed Ireland 3rd in this regard. However, quite a number of countries received a broadly similar rating from their key informants. Not surprisingly, the US scored particularly well and far ahead of the other countries. Once again, it was the experts in the less developed countries, such as Brazil, Hungary and Argentina that considered that their entrepreneurs have major difficulties in this area.

The level of Business Angel investment, however, was much higher among the key informants than it was among the general adult population. Of the key informants, 38% confirmed that they had personally provided funds, in the last three years, for a new business start-up that was not their own. Some experts suggested that much of this business angel activity is going to hi-tech, high-growth firms and that the entrepreneurs with less sophisticated and smaller-scale enterprises find it difficult to get access to this type of informal investment.

Ireland scored well in terms of the financial support available to entrepreneurs in the country as Table 11 illustrates.

23 In Ireland, the thirty-six experts interviewed included government officials, development and support agency executives, private sector providers of advice, supports and finance to new enterprises, academics and successful entrepreneurs.
24 Finance-Ease of Access variables.
25 It should be pointed out that the experts were only asked to comment on the situation within their own country. It is only after all the results are collected and compared across countries that the relative position emerges.
Most of the Irish key informants point out that even in the current more cautious climate, there is more venture capital available now than there was in the past. They do, however, highlight a lack of seed capital as a problem. The difficulty entrepreneurs have in securing relatively small amounts of money is compounded by the amount of paperwork involved.

Some claimed that sources of capital in Ireland, including the banks, are less interested in the numerous smaller-scale new ventures than they are in the relatively small number of hi-tech starts, that are perceived to have high growth potential.

3.4.2 Cultural and Social Norms

In terms of the questions posed to the key informants with regard to cultural and social norms, the first set related to the value placed on self-sufficiency, the relative protection offered by social welfare support and the acceptance of income diversity. The experts from the US considered that self-sufficiency was well developed within their country, while the Nordic counties, particularly Sweden, which have a very well established social support system and a greater culture of equality, were less well positioned. The views of the Irish key informants placed Ireland 3rd highest on this measure.

The second set of questions related to the general value placed on personal initiative and independence, attitudes to working with new and growing firms and with employment volatility. Across all countries, the key informants’ response seemed to affirm that there was a high value placed within their countries on these factors. The experts in the US were the most positive in the expression of their views, while the views of the key informants in Japan indicated a greater conservatism on the part of the general population in that country. The views of the Irish experts placed Ireland 9th of the GEM countries in this regard. In effect, their scoring on this group of questions was just above the average for the GEM countries, as many countries were grouped around a relatively positive score.

Table 12 illustrates the spread in the views of the key informants in respect of both measures for cultural and social norms.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural and Social Norms</td>
<td>3.64 (US)</td>
<td>2.43</td>
<td>1.89 (SE)</td>
<td>2.99</td>
<td>3</td>
</tr>
<tr>
<td>Cultural and Social Norms — Acceptance of</td>
<td>4.32 (US)</td>
<td>3.50</td>
<td>2.92 (JP)</td>
<td>3.61</td>
<td>9</td>
</tr>
<tr>
<td>Career Volatility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Culture was a predominant theme raised by the key informants during the one-to-one interviews. Overall, the Irish expert informants suggested that the cultural and social norms in Ireland have improved over the last decade with regard to their acceptance and support of entrepreneurship and that fear of failure is no longer as much of a deterrent as it was in the past.

Analysing the questionnaires completed by the Irish key informants, fear of failure would deter
only 15% of them from entrepreneurial endeavours. It would, however, deter 42% of the general adult population from becoming entrepreneurs. While this may be a smaller number than in the past, it is still represents a relatively high proportion of the adult population that would be deterred by fear of failure. In this regard, Ireland ranked 5th highest among the GEM countries. For Poland and Germany this is an even greater issue, while in the United States, it offers relatively the lowest barrier to entrepreneurial activity.

Many experts commented that Ireland in effect had been transformed from a country in which entrepreneurial endeavour was very much the exception, and all such ventures were considered high risk, to a much more positive environment brought about by a sustained period of continued economic growth, perceived opportunity and the emergence of high profile successful entrepreneurs. This is confirmed by the results of the adult population survey which indicate that 49% of the general Irish adult population know someone personally who has started a business in the last two years.

In this, Ireland is joint second with Sweden and Australia of all the GEM countries, with Finland in first position. This ranking reflects the significant increase in recent times in the level of entrepreneurial activity in Finland.

Many of the experts commented on the outward orientation of the younger generation and suggested that Ireland now has a young generation who are ambitious, confident and outward focused. However, as one expert warned:

“While young Irish people are more confident than in the past, and that is a good thing, there is an “arrogance” creeping in that the world owes them a living and that would not be healthy. A balance is needed”

One of the problems highlighted by the experts in relation to cultural norms, was the tendency of Irish people to focus on the achievement of the individual entrepreneur rather than on the other broad based economic benefits of entrepreneurship. This is also reflected in the media coverage of entrepreneurship. The key informants stated that the media and Irish people, in general, give almost too much admiration to successful entrepreneurs who have become “seriously” wealthy.

One of the key informants summed it up in this way:

“Entrepreneurial success is measured purely in terms of the personal wealth of individuals with no focus or emphasis as to the wider contributions of entrepreneurs. Often it is the “money” that is admired, not the achievement.”

There is an inherent danger in this. Some of the experts were concerned that the current wave of tribunals and investigations might add to the general sense of unease surrounding the manner in which certain entrepreneurs have become successful. If the goodwill that is increasing towards entrepreneurship is based on a culture of personality, then should any of these individuals “fall from grace” for whatever reason, the goodwill and general support towards entrepreneurship could evaporate.

3.4.3 Government Policies

In an overall measure of Government policy support for entrepreneurship, the key informants across all countries were generally neutral in their views. Germany received the most positive rating from its experts in this regard, while those in Argentina were the least positive. The views of the key informants in Ireland ranked the country 6th across the 29 GEM countries.

With regard to the ease and speed with which new and growing firms can interact with Government and regulatory authorities, and their relative fiscal burden, there was considerable variation across countries. The key informants in Ireland rated Ireland’s position second only to Singapore with regard to its positive support for new and growing firms in these areas. The key informants in
Argentina considered that in general their Government’s policies towards entrepreneurship were the least supportive of all the GEM countries.

Table 13 illustrates the spread in the views of the key informants across all GEM countries in respect of the effectiveness of the support offered by government policy, in their countries, to supporting entrepreneurs and nurturing entrepreneurship.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Policy</td>
<td>3.20 (DE)</td>
<td>2.71</td>
<td>1.37 (AR)</td>
<td>3.14</td>
<td>6</td>
</tr>
<tr>
<td>Government Policy — Ease, Speed and Lack of Regulatory Burden</td>
<td>3.54 (SG)</td>
<td>2.23</td>
<td>1.22 (AR)</td>
<td>3.24</td>
<td>2</td>
</tr>
</tbody>
</table>

In their one-to-one interviews with members of the Irish GEM team, several of the key informants commented that they believed that there was a poor understanding of entrepreneurship among the policymakers and the agencies delivering programmes. In general, they felt that the agencies had stagnated; had become too bureaucratic; and were not prepared to take the risks that are associated with supporting and encouraging entrepreneurship.

They also suggested that enterprise policy does not focus sufficiently on encouraging the growth of the entrepreneurial sector. They claimed that as a result of both government regulations and the very dominant position held by the established incumbents in many sectors of the Irish economy, it was very difficult for new entrants to establish themselves in the market. This, they believe, tended to be anti-competitive and militated against new opportunities opening up for entrepreneurs.

Another of the issues which the experts raised was their belief that there was a lack of a real understanding of issues facing growing export orientated business. They commented that the small size of Irish home market necessitated exports from an early stage and that it is vital to help those with export potential to become exporters of substance.

3.5 The Other Entrepreneurial Framework Conditions

There are six other entrepreneurial framework conditions about which GEM questioned the key informants, both in the one-to-one interviews and in the questionnaires that they completed. These are as follows:

- Government Programmes,
- Education and Training,
- R&D Transfer,
- Commercial and Professional Infrastructure,
- Internal Market Openness, and
- Access to Physical Infrastructure.

The paragraphs that follow briefly examine the views of the expert informants with regard to these framework conditions.

3.5.1 Government Programmes

This framework condition is obviously closely related to government policy. It relates to the relative effectiveness of the development agencies, access to their programmes, the knowledge of their executives and the relative support offered to new and growing firms by business parks.

There was a great degree of variation in the views expressed by the various national key
informants in this area. Most positive about their government policy in this area, the German key informants were also the most positive in their overall assessment of the operation of their programmes. Argentina, in the view of its key informants, was once again the least effective. The views of the Irish key informants placed Ireland well within the top quadrant in this regard. Table 14 illustrates the spread of opinion among the GEM national experts with regard to the efficiency and effectiveness of their national government’s programmes supporting entrepreneurship.

Table 14: Experts’ Evaluations: Government Programmes

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Programme – Efficiency and Effectiveness</td>
<td>3.57 (GER)</td>
<td>2.66</td>
<td>1.42 (AR)</td>
<td>3.16</td>
<td>6</td>
</tr>
</tbody>
</table>

Several Irish informants expressed concern that certain new enterprises may be “falling between the development agencies”, being too small in scale and growth potential for Enterprise Ireland to be interested in them and too large to be assisted by the County Enterprise Boards. Some experts also felt that the proliferation of agencies and programmes may cause confusion.

The role, which mentors with the relevant degree of experience and skills, can bring to a new and growing enterprise, is widely recognised. Several of the key informants suggested that there is a shortage of good guidance from suitably experienced mentors for the more sophisticated, high-tech, high growth new ventures.

3.5.2 Education and Training

GEM 2000 indicated that the general level of education within a population had a close correlation with the relative rate of entrepreneurial activity within a country. GEM 2001 has further added to this finding. In those countries in which opportunity entrepreneurship is the dominant motivator, the greatest level of entrepreneurial activity takes place among those who have completed second level education. For women, those with the highest levels of education were the most active in pursuing entrepreneurial opportunity. Moreover, the scale of the aspirations for their new ventures increases for both men and women, as the educational attainment level of entrepreneurs increases.

GEM 2001 has shown that those who believe that they have the particular skills to be successful in setting-up and running a new business are six times more likely to become entrepreneurs, than are those who feel that they lack the necessary skills. This highlights the importance of entrepreneurial specific education and training.

This entrepreneurial framework condition received the lowest satisfaction rating from all the national experts. The key informants across all the GEM countries were simply not impressed with the quality and effectiveness of their education and training systems to foster, encourage and empower new entrepreneurs and a spirit of entrepreneurship within their countries. In Singapore, the rating by the experts was the most positive, while that within Portugal was perceived to be the most inadequate. Table 15 illustrates the spread of national expert opinion in this regard.

Table 15: Experts’ Evaluations: Education and Training

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and Training Effectiveness</td>
<td>2.79 (SG)</td>
<td>2.14</td>
<td>1.55 (PT)</td>
<td>2.60</td>
<td>3</td>
</tr>
</tbody>
</table>
Many of the key informants within Ireland emphasised the positive role that education could play in developing a more entrepreneurially receptive culture and in highlighting entrepreneurship as a real career option. It was also considered that the second level system, with its emphasis on the points system, does not give sufficient attention to the development of innovation and creativity among students.

Many of the key informants mentioned a shortage of people with the right mix of skills, expertise and experience to create and develop significant new businesses in Ireland. In particular, there was considered to be a shortage of experienced marketing managers with experience in global markets. Another shortage identified was with regard to managers capable of managing the growth phase of recently created businesses, pointing out that often a different set of skills were required to grow a business than were required to initiate it.

3.5.3 R&D Transfer

This framework condition relates to the access that new firms have to new technology and the degree to which third level research is transferred from academia to new entrepreneurial firms and commercialised.

There was a variety in the views among the key informants from the GEM countries with regard to how effectively research and new technical developments are made available to new and growing firms within their countries. Key informants from Belgium, the US and Finland were the most positive in respect of their countries, while those from Argentina and Mexico were the least positive with regard to such transfer taking place.

It should also be pointed out, however, that in these latter countries, the type of necessity entrepreneurship, which predominates, does not have much need of sophisticated technology transfer.

The Irish key informants were less than enthusiastic with regard to the level of R&D transfer taking place within the country. This is a matter of concern given the large RTDI investment currently being made and the profile of high growth, hi-tech new and growing companies that are being supported.

Table 16 illustrates the spread in the views of the experts in all the GEM countries in relation to national R&D transfer effectiveness as it relates to entrepreneurial activity.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>3.24 (BE)</td>
<td>2.39</td>
<td>1.86 (AR)</td>
<td>2.69</td>
<td>9</td>
</tr>
</tbody>
</table>

3.5.4 Professional and Commercial Infrastructure

For the most part, the key informants were relatively satisfied with the level of access and availability of professional and commercial infrastructure within their countries. The opinion of the Irish key informants placed Ireland in fifth position in this regard behind the US, Belgium, Singapore and Israel. Japan significantly trailed behind the other GEM countries.

Table 17 illustrates the spread of views of all the key informants with regard to the provision of appropriate professional and commercial infrastructure for new and emerging businesses.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional and Commercial Infrastructure</td>
<td>3.89 (US)</td>
<td>3.18</td>
<td>1.94 (JP)</td>
<td>3.49</td>
<td>5</td>
</tr>
</tbody>
</table>
3.5.5  **Internal Market Openness**

GEM combined two sets of measures to ascertain the relative openness of the internal national market to entrepreneurial ventures. The first measured the relative stability for the market for consumer and business goods and services. A high score here reflected a high degree of volatility in the market and rapid change. Japan’s market in the opinion of its experts was the most prone to rapid change, while Ireland’s was much less volatile and more predictable. On this measure Ireland was ranked 18th of all GEM countries.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Stability</td>
<td>3.64 (JP)</td>
<td>2.82</td>
<td>2.13 (NOR)</td>
<td>2.45</td>
<td>18</td>
</tr>
<tr>
<td>Relative Lack of Barriers to</td>
<td>3.44 (US)</td>
<td>2.63</td>
<td>1.22 (ZA)</td>
<td>2.93</td>
<td>8</td>
</tr>
<tr>
<td>Market Entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.5.6  **Access to Physical Infrastructure**

Singapore, in the view of its key informants, has the most accessible, affordable and supporting physical infrastructure of all the GEM countries. New enterprises in Finland, New Zealand and the United States are all well provided in this respect in the view of their national key informants. The key informants from the less developed economies were those who highlighted major deficiencies in this area, with India being ranked the least favourable in this regard by its key informants.

Again and again in their interviews, the Irish key informants drew attention to national infrastructural deficiencies. Mentioned in particular were the shortage and excessive cost of appropriate infrastructure for exporters (communications and transport). This is particularly inhibiting in a small island state whose small domestic market gives rise to the need for the majority of companies to export from an early stage. The subject of the cost and availability of sites and accommodation for new enterprises was also mentioned repeatedly, as was the availability and cost of telecommunications infrastructure.

The second measure focused in particular on assessing the relative national barriers to new firm formation and growth. The views of the national experts placed Ireland in 8th position in this regard. The country with most open access for entrepreneurial activity in the views of its key informants was the US, followed by the UK and the Netherlands.

The spread of the views of all the experts in terms of the relative openness of their national markets is illustrated in Table 18. This table illustrates both measures separately.

Table 19 illustrates the spread of opinion among national experts in relation to the accessibility by entrepreneurs to appropriate physical infrastructure within their countries. In this regard, Ireland is given a relatively low rating by the key informants. This rating ranks Ireland 22nd of all the 29 GEM countries.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Physical Infrastructure</td>
<td>4.46 (SG)</td>
<td>3.82</td>
<td>2.88 (IN)</td>
<td>3.04</td>
<td>22</td>
</tr>
</tbody>
</table>

3.6  **Entrepreneurial Characteristics among the Irish People**

The adult survey, and the interviews/questionnaires completed by the experts or key informants when taken together give an interesting insight into the entrepreneurial characteristics of the Irish people, particularly with regard to the perception of entrepreneurial opportunity, and the capacity of the Irish people, in terms of
motivation and skills, to avail themselves of these perceived opportunities. They also give an insight into attitudes to failure as an inhibitor of entrepreneurial activity. The adult survey is also very useful as a means of identifying the age and gender of those currently active as entrepreneurs. The paragraphs that follow explore each of these issues in turn.

3.6.1 Entrepreneurial Opportunity

The adult population survey clearly shows that Ireland has a high level of entrepreneurial activity among its adult population and that the majority of this endeavour is driven by the desire to capitalise upon a perceived opportunity.

GEM has demonstrated that those who believe that there are good opportunities to create a new business are three times more likely to do so than are those who do not have such a belief. In response to a specific question put to all those questioned in the adult population, one in three of the general adult population in Ireland indicated that they believed that there would be good opportunities to start a new business, within the next six months, in the area in which they were living. A similar proportion of adults in the US expressed a similar view. This placed Ireland 13th of the 29 GEM countries in this regard. Of all GEM countries, the most positive in their view of the opportunities that would exist in the near future to start a new business were the adults in the Nordic countries, in particular in Norway (59%) and in Finland (55%).

The national experts were also asked for their opinion as to the opportunities that existed to create and develop successful new enterprises within their countries. In their questionnaires this issue of entrepreneurial opportunity was addressed in five separate questions, which were then combined, to give a single measure to reflect their considered opinion.

In general, these experts were very positive with regard to the existence within their countries of opportunities for entrepreneurial activity. By the strength of their response, the Irish experts placed Ireland second only to the United States of all the GEM countries in terms of the positive environment that exists within this country at present for entrepreneurial endeavour.

Table 20 illustrates the spread of the views of the key informants with regard to the existence of entrepreneurial opportunity within their respective countries.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Opportunity</td>
<td>4.20 (US)</td>
<td>3.26</td>
<td>2.46 (AR)</td>
<td>3.74</td>
<td>2</td>
</tr>
</tbody>
</table>

Echoing the comments expressed by many of the Irish key informants during their interviews, the key informants’ opinion placed Ireland first in terms of the experts’ views as to whether good opportunities for new firms had considerably increased in their respective countries in the last five years.

3.6.2 Entrepreneurial Capacity

Entrepreneurial capacity consists of both the skills and experience of the adult population to successfully create and run new enterprises and of their degree of motivation to do so.

GEM has demonstrated that those who believed that they have the necessary skills to successfully create and run new enterprises were six times as likely to be active as entrepreneurs as were those who believed that they lacked the necessary skills.

Each person interviewed as part of the adult survey was asked whether they believed that they had the knowledge, skill and experience required to start a new business. The average positive response across all GEM countries was that 40% of adults indicated that they believed that they had the required mix of skill and experience to set up a new business. Just under half of the Irish adults surveyed (46%) responded positively to this question. This
placed Ireland in 10th position with the UK in terms of those within the adult population that believed that they had the necessary capacity to start a new business. Almost two in every three adults in New Zealand (66%), the United States (61%) and Australia (60%) believe that they have the necessary skills. Adults in Japan have by far the least confidence in their abilities in this regard, as only 11% of adults responded to this question in the affirmative.

The expert informants in each country were asked a series of questions with regard to the general level and appropriateness of education and training within their respective countries. Their views in this regard were outlined in Section 3.5.2 above.

They were also asked a series of specific questions to ascertain their views with regard to the relative availability of people within their respective countries who had the necessary skills and experience to successfully create and run a new enterprise. In general, the national experts were not very positive with regard to the availability of people with such skills in their countries, as the average score was only 2.40 on the five-point scale.

The most positive in their view were the US experts, followed by the Italian and Finnish experts. Those least positive were the Japanese, South African, French and German experts. The view of the Irish experts placed Ireland in 5th position. This may seem promising, but in fact their response was just above the average as many countries were bunched closely together around the centre point.

Table 21 illustrates the spread of opinion among the experts with regard to the entrepreneurial capacity (skills) of the adult population within their respective countries.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Capacity (Skills)</td>
<td>3.13 (US)</td>
<td>2.40</td>
<td>1.77 (JP)</td>
<td>2.71</td>
<td>5</td>
</tr>
</tbody>
</table>

The other aspect of entrepreneurial capacity that is important, according to GEM, is the relative degree of motivation that exists within the adult population to avail themselves of the opportunities identified and actually create new enterprises. GEM goes further to differentiate between the drivers of that motivation, whether it is opportunity or necessity. Within Ireland, 82% of the entrepreneurial activity which takes place is in response to perceived opportunities.

When one examines the degree of motivation, regardless of type, the key informants across all countries are very positive in their view that the creation of new enterprises has high acceptability within their countries and that many adults are well motivated to start new businesses. This is reflected in the average score (3.37) of the international expert/key informant group to five related questions in this regard on the five-point scale.

The experts in the US and Israel were the most positive in their view with regard to the degree to which the adult population within their respective countries are positively motivated to create new businesses. The views of the Irish experts placed Ireland in 4th place in this regard. Those in Norway were the least positive.

Table 22 illustrates the spread of expert opinion with regard to the entrepreneurial capacity (Motivation) of the adult population within their respective countries.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
<th>Ireland Score</th>
<th>Ireland Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Capacity (Motivation)</td>
<td>4.49 (US)</td>
<td>3.37</td>
<td>2.84 (NO)</td>
<td>3.94</td>
<td>4</td>
</tr>
</tbody>
</table>
Fear of failure is considered to be a factor in lowering the motivation of people to become entrepreneurs. This factor is closely associated with the social and cultural norms of a particular society. All of the adults questioned as part of the adult population surveys were asked whether fear of failure would prevent them from starting a new business.

One in three of the adult populations across all GEM countries indicated that fear of failure would prevent them from trying to start a new enterprise. Those least deterred by the fear of failure were in the US, while for those for whom it was the strongest demotivator were in Poland and Germany, where more than one in two indicated that that fear of failure would prevent them even trying to become entrepreneurs. A high level of cautiousness was also detected in Ireland, where 42% of the adults interviewed indicated that fear of failure would prevent them from starting a new business. There were only four countries that had a higher response rate to this question than Ireland. Obviously, a fear of failure is still very pervasive in this country among the general adult population, despite the boost to the national confidence that the recent years of growth and prosperity have given.

Within the key informant group, however, this emotion is much less an inhibitor of entrepreneurial activity. Less than 15% of the Irish key informants indicated that fear of failure would prevent them from becoming entrepreneurs. This is broadly in line with the US key informants expressed position. The experts in 21 of the GEM countries indicated higher levels of concern concerning the power of failure as an inhibitor of entrepreneurial activity than did those in Ireland.

### 3.6.3 Age and Gender of Entrepreneurs

Section 2.5 above details the results of the GEM research with regard to the personal characteristics of entrepreneurs, including that related to gender and age. Drawing upon the adult population survey, this section describes the characteristics of Irish entrepreneurs in these terms.

Across the 29 GEM countries, 70% of all adults identified, as being entrepreneurially active, were men. The same pattern prevails in Ireland with regard to gender representation among active entrepreneurs. There is, however, a slightly higher percentage of women nascent entrepreneurs (32.5% of all nascent entrepreneurs, i.e. those actively planning new businesses in Ireland), than there are new firm entrepreneurs (27% of all new firm entrepreneurs, i.e. those who have established a new enterprise in the 42 months prior to the adult survey). This may be an indication that increasingly more women will become active as entrepreneurs. It is also true, however, that more people plan to become entrepreneurs that in fact realise their ambition. Research in Denmark has shown that women seek more advice and support in their efforts to become entrepreneurs than do men. Hence, a greater level of support may be necessary to convert these nascent female entrepreneurs into new firm entrepreneurs i.e. entrepreneurs who have taken their entrepreneurial endeavours beyond the planning stage.

There are indications that the most entrepreneurially active age group in Ireland for both men and women is that between 18 and 34. This holds true in Ireland for both nascent and new firm entrepreneurs. This is somewhat unusual. The younger age group is usually the more entrepreneurially active in the less developed countries where those active tend to be less educated and are driven by necessity into entrepreneurial activity.

The 2001 adult survey for Ireland does not contain information on the educational attainment level of those interviewed. Hence, it is not possible to analyse the gender/age/educational attainment level of those interviewed. Hence, it will facilitate further analysis of this nature.

### 3.7 Conclusion

GEM suggests that entrepreneurial activity in Ireland has four important features. These are as follows:

(i) Entrepreneurial activity in Ireland is characterized by the response of entrepreneurs to perceived
opportunities ("pull"). Ireland is ranked 5th of the 29 GEM countries in this regard;

(ii) Irish entrepreneurs tend to come from a younger age group than would be expected for a country characterized by a developed economy and opportunistic entrepreneurship;

(iii) Ireland's relative ranking (6th) is much higher for those who have actually started new businesses in the 42 months prior to the adult survey, than those who are actively planning new business (12th); and

(iv) Fear of failure is a powerful deterrent discouraging entrepreneurial activity in Ireland among a considerable proportion of the general adult population.26

GEM reports in the years ahead will indicate if these features of entrepreneurial activity in Ireland will continue. It will be particularly interesting to see which is the correct explanation for (iii) above, i.e. whether it indicates the occurrence of a higher conversion rate of nascent to new firm entrepreneurs or whether the lower proportion of nascent to new firm entrepreneurs in Ireland will have a negative impact on the number of new business which will come into being in Ireland in the years ahead.

With regard to the number of nascent entrepreneurs who believe that their new ventures will have high growth potential, Ireland is ranked joint 10th across the 29 GEM countries. This is not a particularly high ranking, considering that it is within the more developed economies, which are characterized by opportunity entrepreneurship, that can be found the majority of entrepreneurs who have high growth expectations of their new venture. Hence, the number of GEM countries with similar characteristics, against which Ireland can realistically compare itself on this measure, are greatly reduced.

It should be noted that not all new enterprises, perceived to have high growth potential by their promoters, fall within the high technology sectors. Hence, the concentration of the development agencies primarily on high technology new ventures as a source of high potential growth may be too restrictive. Excluding from their help and support a significant proportion of innovative new enterprises that may also have high growth potential, but are not within the high technology sectors, may have negative consequences on the scale and rate of development of these new enterprises.

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26 42% of the adults that were interviewed in Ireland indicated that fear of failure would prevent them from starting a business. There were only four other countries that had a higher response rate to this question than Ireland. See 3.6.2.
CHAPTER 4

Making Ireland More Entrepreneurial

4.1 What GEM Has Achieved for Ireland

Many facets of social and economic life in Ireland have experienced profound transformation in recent years. There is evidence from the popular press that these social and economic transformations include changing attitudes towards entrepreneurs and entrepreneurial endeavor in general.

Even ten years ago the climate in Ireland for entrepreneurs was very difficult and, in many cases, hostile in the extreme. There were few celebrated successful role models and the conservative pursuit of secure paid employment was lauded over the more adventurous pursuit of entrepreneurship as a legitimate career aspiration.

Media profiling of business and entrepreneurial success stories in more recent times suggests that there has been a marked change in the career choices and work patterns of Irish people. Within the business press there has been extremely positive coverage of entrepreneurial activity in the technology sectors, particularly in the software sector. There was little evidence until now, however, as to whether the nature and extent of entrepreneurial activity in the software sector in Ireland represents a ‘paradigm shift’ for business organization and career choices in Ireland, or whether the software sector is an isolated and exceptional occurrence.

GEM 2001 has benchmarked the entrepreneurial propensity of the Irish adult population against 28 other countries and examined in-depth the relative position of Ireland on each of the factors, environmental and personal, considered to be important in the development of a high level of successful entrepreneurial endeavor among a nation’s population. It is intended that this process will be repeated on an annual basis, so that the results and lessons, which can be taken from one year’s research and analysis, can be greatly strengthened when the process is repeated over many years.

4.2 The Focus of the Recommendations

A very favorable picture of the extent of entrepreneurial activity in Ireland is portrayed by the Irish adult population survey, by the views expressed in the in-depth one-to-one interviews with key informants and in their completed detailed questionnaires. These also suggest some economic explanations as to why Ireland is a relatively favorable environment for entrepreneurial activity. Given such favorable findings the reader might well ask why the Irish GEM team is suggesting a number of further recommendations with regard to encouraging and promoting entrepreneurial activity. There are two reasons for this.

First, among the positive indicators outlined in this report, there are a number of factors where Ireland’s relative position is weak. Critically for Ireland, some of these factors appear to be important determinants of the rate of entrepreneurial activity. Second, we believe that economic success at a national level will increasingly be associated with entrepreneurial capabilities. That is, in the new economic order of the 21st century, the capability and motivation to engage in
entrepreneurial and innovative activity, among a broad section of the population, will be an important determinant of the ability of a nation state to create new wealth.

Therefore, we make a number of recommendations with regard to the promotion of entrepreneurial activity in Ireland based on the following:

(i) The results of the GEM 2001 adult population survey,
(ii) The in-depth one-to-one interviews with key informants in Ireland (36 in each of 2001 and 2000), and
(iii) The comparison of the results of the adult population survey and the key informant interviews across all 29 countries in GEM 2001 and all 21 countries in GEM 2000.

Overall, the GEM 2001 study suggests that the economic environment in Ireland is broadly supportive of entrepreneurial activity. Accordingly, the focus of these recommendations is less on the general economic environment and is directed specifically at the challenge of making Ireland more entrepreneurial.

In summary, the recommendations that are being proposed for Ireland by the Irish GEM team are as follows:

- The availability of pre- and start-up seed capital for different types of business needs should be reviewed and any gaps in the availability of financing should be addressed. The relative attractiveness for investors of investing in early stage enterprises should also be examined and the risk/reward of such investment made more attractive through fiscal incentives.

- Means of transferring the significant research, technological development and innovation (RTDI) investment, currently being implemented, into new entrepreneurial initiatives should be actively encouraged and any barriers to its transfer should be identified and removed.

- The inefficiencies and shortcomings in the country’s physical and telecommunications infrastructure should be addressed with a real sense of urgency.

The paragraphs that follow set out the rationale behind these recommendations and suggest specific means by which they might be implemented.

### 4.3 Championing Entrepreneurial Activity

While Ireland’s overall entrepreneurial ranking is high, the ranking for nascent entrepreneurship is more modest, with Ireland ranking only 12th among the 29 countries in terms of those actively planning a new enterprise. Furthermore, a “fear of failure” is still relatively high among the adult population in Ireland (only four countries reported a higher fear of failure among their adult populations). The Irish GEM team believes, therefore, that entrepreneurial activity needs to be encouraged and that the benefits of the apparent increased levels of entrepreneurial activity in Ireland must be articulated to a very broad section of the Irish population. As such, entrepreneurial activity should be articulated as an important component of our national ability
to create wealth; as a way of encouraging innovation; and as an important mechanism for increasing economic efficiency.

There needs to be a greater understanding by the adult population of the broad benefits of entrepreneurial activity to the individual, benefits that include alternative career options, increased personal autonomy, and a way of creating personal wealth. The Irish key informants also expressed a view that the celebration of certain entrepreneurial personalities was driving the greater acceptance of entrepreneurial activity within the country. They considered that while it was important to have celebrated role models, it was also necessary that the benefits of entrepreneurial activity be more clearly understood in their own right, so that the rise and fall in popularity of individual entrepreneurs would not negatively affect the perception of entrepreneurship.

It is recommended, therefore, that both entrepreneurial activity and the benefits of entrepreneurial activity to society, and to economic development generally, be championed, celebrated and encouraged at the highest levels within society. The development agencies can play a key role in this area if they take up the challenge to do so.

4.4 Actively Encouraging More Women Entrepreneurs

Each year the Executive GEM International Report highlights the far greater proportion of new and active male entrepreneurs to female entrepreneurs in nearly all of the countries surveyed. As a result, each year GEM has drawn attention to the fact that countries that do not fully encourage women to engage in the creation and growth of new businesses may not be fully realising their fullest entrepreneurial potential. In 2001, the GEM Executive Report once again makes a very clear statement.

“There is perhaps no greater initiative a country can take to accelerate its pace of entrepreneurial activity than to encourage more of its women to participate (in entrepreneurial activity).”

Against this background, the low number of women participating in the Graduate Enterprise Programme/Enterprise Platform Programme in various centres around the country is a matter of concern, as it is one indicator of a continuing low level of female entrepreneurial participation in Ireland.

While the Irish GEM team is aware that there are some tentative initiatives being planned in Ireland in this area, the team considers that coherent policy initiatives need to be brought forward in the short term. These have proven to be successful in the US and in Canada. In those countries, a relatively high and growing proportion of women are active as entrepreneurs. Ireland can learn from the experience of these other countries. Research in Denmark has found that women seek greater levels of advice and support in their efforts to become entrepreneurs than do men. It is important that a focused support network be put in place to encourage more women to consider entrepreneurial initiatives in the first place. The challenge then is to convert more of the ensuing women nascent entrepreneurs into new firm entrepreneurs.

The Irish team, having highlighted this issue in the 2001 Irish GEM Report as one needing to be addressed, considers that once again attention should be drawn to this issue, as little has happened in the meantime. The barriers preventing a greater involvement by women in entrepreneurial activity must be systematically identified and their participation must be actively encouraged and supported.

4.5 Building Entrepreneurial Capacity

The evidence from GEM suggests that perceived entrepreneurial capability is an important determinant of the level of entrepreneurial activity. GEM 2001 suggests that a relatively large percentage of the Irish population does not believe that they have the capability to start a new business. Ireland ranked joint 10th of the 29 GEM countries in
this regard. Therefore, there is a strong case for interventions that will increase the perceived entrepreneurial capability of the Irish population.

This widespread perception among the Irish population that they lack the required mix of skill and experience to set up a new business might reflect a variety of factors: (i) the historically relatively low level of entrepreneurial activity, and therefore, the lack of accumulated capability across all sections of the population; (ii) a weakness in the education system or the established firm base at engendering specific entrepreneurial capabilities; and/or (iii) it may simply be a misunderstanding of the particular skills required and a failure to realise that they may already have been acquired. This lack of perceived capability, however, should not be overstated as a relatively high percentage of the general adult population in Ireland has actually engaged in entrepreneurial activity in recent times, and has thereby demonstrated their capability. Specifically, GEM suggests that as many as 110,000 adults currently partly or fully own and operate a business started since 1998.

The most obvious way for the Government to influence entrepreneurial capability is through initiatives within the general education system and within vocational training programmes. Therefore, we recommend that the Government consider a series of educational and training initiatives that will develop both the required entrepreneurial skills and confidence in individuals. In putting forward this recommendation, we suggest that the entrepreneurial skills that the general education system can engender should be defined in the broadest possible terms, e.g. developing a sense of independence and self-determination, the ability to think creatively and to be innovative. Many of these skills can be engendered through changes in approaches to learning and do not necessarily require the introduction of new course content. We caution, however, that such changes represent no trivial task in terms of the demands on teaching style and emphasis.

4.6 Making Seed Funding More Accessible

GEM has consistently demonstrated that the availability of finance is a critical determinant of entrepreneurial activity. In the context of national economies, the total informal investment was 1.1% of the combined GDP for all GEM countries. GEM has emphasized that in many countries informal investment, so called ‘Business Angels’, represent an important source of finance for entrepreneurial activities. The proportion of adults, within the various GEM countries, that was active as informal investors in 2001 averaged just over 3%.

The rate of informal investment in Ireland is just above the mid point for all GEM countries. The availability of venture capital and the level of funds provided by venture capitalists has increased significantly in Ireland in recent years, and has now reached a stage of development similar to that of many other GEM countries. It is, however, significantly behind that available in the US and in Israel. Research has clearly shown that new enterprises which have adequate equity funding from the outset are more likely to weather the unexpected turmoil that most firms encounter in their early years. Moreover, those firms that have received VC equity funding tend to grow more quickly and to a greater scale than do other new firms.

The key informants recognized the sea change that had taken place in Ireland with regard to the availability and cost of finance for new business ventures. They welcomed the arrival of the VC funds but expressed the view that these were primarily interested in second or third stage investment, when the new venture was already established and seeking funds to develop further. Even in the current more

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27 54% of those surveyed in the adult population in Ireland indicated that they believed that they did not have the necessary knowledge, skill and experience to start a new business.

28 In 2001 Ireland ranked 6th of the 29 GEM countries, in terms of the total entrepreneurial activity (TEA) of its adult population.
cautious climate, the general belief was that funds could be found for the more attractive ventures, although the valuation of the businesses had been negatively affected by recent developments.

The concerns raised by the key informants interviewed in relation to the cost and availability of finance related in particular to the availability of pre- and start-up seed capital for different types of business’ needs. Accordingly, the Irish GEM team recommends that the availability of funds for these purposes should be reviewed and any gaps in the availability of early stage financing should be addressed. Specifically, the relative attractiveness for investors of investing in early stage enterprises should also be examined and the risk/reward of such investment made more attractive through fiscal incentives. It should be recognised that early stage investment is not without risk, and, if it is to be actively encouraged and promoted, the potential for reward must be greater than that available from “no risk” savings schemes.

4.7 Commercializing Publicly Funded Research

High technology entrepreneurship already has an established position in Ireland in terms of both policy and perception. The challenge is to increase the number of new enterprises being initiated in high technology areas and to support their subsequent growth and development.

The Government has emphasized the need for Ireland to move to a knowledge society as the basis for sustained growth and development. High technology new enterprises are recognized as having a key role to play in achieving this objective. Accordingly, the development agencies are focused on implementing policies designed to support and encourage new high potential enterprises in new and emerging high technology sectors.

High-tech entrepreneurs have also had another important role to play in bringing about a positive change in the culture and attitudes within Ireland towards entrepreneurship. They have acted as the principal catalyst to the awakening of a pro-enterprise culture among the general population, as many of their number, who have created new high growth ventures, have received very positive media coverage. Through their success they themselves have demonstrated what can be achieved. Thus they are fulfilling an important national requirement for entrepreneurial role models.

Moreover, many of the current “generation” of high tech entrepreneurs have been initiated by former employees of an earlier “generation” of indigenous high-tech firms.

In recognition of the strong link between investment in the research and innovation base of the economy, sustained economic growth and the initiation of new high potential growth enterprises, the government has already begun to invest the funding of €2.4 million which has been earmarked to be invested in the period 2000 to 2006 to bring about a major accelerated increase in Research, Technological Development and Innovation (RTDI) and to leap frog Ireland to a new level of RTDI activity. All the key informants considered this to be a very necessary and important initiative, given the historically low level of R&D investment in the country.

International evidence suggests that investment in scientific research will not on its own result in entrepreneurial activity. The history of high tech regions such as Silicon Valley clearly shows that knowledge creation in public institutions is only one of many prerequisites to the emergence of dynamic clusters of high technology firms. Therefore it is imperative that means of transferring the significant RTDI investment, currently being implemented, into new entrepreneurial initiatives must be actively encouraged and any barriers to its transfer must be identified and removed.

4.8 Removing Infrastructural Inefficiencies

The low ranking on infrastructure in both the World Competitiveness Index and in the views
articulated by the key informants should come as no surprise. They are of particular concern to entrepreneurs, however, as deficits in the availability and relative cost of telecommunications and in the necessary infrastructure for exporting, can be a significant inhibitor of entrepreneurial activity and growth. This is particularly the case in a country like Ireland, which has a small home market. This obliges new ventures, if they are to grow, to export at an early stage in their development.

Therefore the Irish GEM team echoes the call of many of the key informants interviewed that the inefficiencies and shortcomings in the country’s physical and telecommunications infrastructure should be addressed with a real sense of urgency.
Ireland participated in GEM for the first time in 2000. The result of the adult population survey carried out by Lansdowne Market Research as part of the GEM 2000 study appeared to indicate a very low level of entrepreneurial activity among the Irish adult population.

This result was at odds with the opinion of the Irish expert informants who had also been questioned as part of the 2000 GEM Irish study. The Irish experts were much more positive in their opinion of the positive conditions for entrepreneurship that prevailed within the country and of the general level of entrepreneurial activity that was taking place.

Given that GEM ranks the various countries on the basis of the entrepreneurial propensity of their adult populations, despite the views expressed by the Irish key informants, Ireland was ranked by GEM among the “Low” group of the 21 countries participating.

Preliminary results from the adult survey carried out for the 2001 study, which was carried out in June/July 2001 by the same market research firm, appeared to confirm the outcome of the 2000 survey and once again GEM was preparing to place Ireland in the “Low” group of countries, in terms of the entrepreneurial propensity of its adult population.

During September 2001, alarm bells began to ring, however, as there were indications that the Irish population survey might be fundamentally flawed. In the words of the principal GEM central co-ordinator, it quickly became apparent that “the worst-case scenario” had occurred and that Ireland was in the centre of it.

This situation arose as a result of the response of the Irish adults to the first statement in the population survey. The adults surveyed were first asked to say if the following statement applied to them:

“You are, alone or with others, currently trying to start a new business, including any type of self-employment”.

It had been assumed that the majority of the respondents would provide a simple “yes” or “no” response, with a small percent refusing to answer. A category of “don’t know” response was also available to respondents. Those that provided a “don’t know” or “refuse” response were asked no further questions and no information is available about these individuals.

In fact, in the pre-test completed in the US, and the subsequent US interviews, no respondents were coded as “don’t know.” This assumption is reflected in the skip pattern in the interview schedule; only those respondents, that provided an unequivocal “yes”, were asked the follow-up questions about activity, ownership, and the payment of salaries of wages for 3 or more months.

It was presumed that all survey vendors across the various countries would have about the same low proportion of “don’t know” and “refusals” facilitating cross-country comparisons.

In September 2001, the issue of the “don’t know” responses came to the fore, for an
unrelated reason, and all surveys were re-checked to verify that the ‘don’t know’ responses were uniformly low across countries.

At that stage, it emerged that the level of “don’t know” responses to the central statement in the Irish 2000 and 2001 surveys was much too high. Consequently, the results for Ireland were clearly unusable for serious cross-national comparisons, as the population survey data from Ireland ignored hundreds of people that might qualify as being involved in entrepreneurship.

A decision was taken to re-run the adult population study for Ireland. GEM central coordination agreed to fund the additional costs involved. This time, two different survey firms were used. Each surveyed 1,000 adults each and the interviewers were directed not to accept “don’t know” responses. The surveys were conducted in September 2001.

These surveys gave a quite different outcome for Ireland. The re-run adult population surveys had now placed Ireland in a much higher position within the expanded group of countries, and the adult population data for the year 2000 was clearly perceived to be incorrect and misleading. As a result, GEM substantially revised Ireland’s entrepreneurial ranking upwards.

Following independent expert advise and consultation, the Irish national team decided that, for a variety of reasons, the September 2001 re-run surveys were more likely to be correct than the previously run surveys, and the national team accepted GEM’s revised ranking of Ireland.