

Entrepreneurship in Ireland

2015

Global Entrepreneurship Monitor (GEM)



The Annual Report for Ireland
PAULA FITZSIMONS & COLM O'GORMAN



ENTREPRENEURSHIP IN IRELAND 2015



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The Annual Report for Ireland

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Although data used in this report is collected by the GEM consortium, its analysis and interpretation is the sole responsibility of the authors. The authors, for their part, have attempted to ensure accuracy and completeness of the information contained in this publication. No responsibility can be accepted, however, for any errors and inaccuracies that occur.

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Thanks to the sponsorship of Enterprise Ireland, with the support of the Department of Jobs, Enterprise and Innovation, Ireland is included in the 2015 GEM research cycle. We are very grateful to our sponsors for their support and for the importance they place on entrepreneurship. As the economy begins to recover, policy makers are focused on the contribution that entrepreneurs can make to renewed growth and the creation of employment. GEM research and analysis is in a position to provide important data to inform and shape policy choices.

The Irish GEM team would like to thank all the members of the public who participated in our survey. We are very grateful to them as without their participation, the adult population survey, on which GEM research is primarily based, could not be completed.

We are also grateful to all the entrepreneurs and expert informants that were consulted as part of this research. They gave generously of their time and their insights as always enriched our understanding of the changing environment for entrepreneurship in Ireland.

We thank our colleagues in the National GEM Teams, who undertake the research in each of more than seventy countries. We are also grateful to the coordination team in the Global Entrepreneurship Research Association (GERA). The coordination team manages to skilfully combine complex data from all the national teams, while ensuring robustness and academic rigour.

Finally, our sincere thanks go to the many readers of the GEM annual reports. By your comments it appears that many of you find the information of value in a wide variety of circumstances. We are grateful for your feedback and for your continued interest in the research.

Paula Fitzsimons



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Paula is also the director of Going for Growth, which is focused on peer support as a means of assisting female entrepreneurs who wish to grow their businesses. Designed to address a gap in enterprise development, the Going for Growth initiative has been supported from the beginning by Enterprise Ireland. KPMG has more recently become involved in also sponsoring the initiative. Going was Growth was awarded the European Enterprise Award 2015, Investing in Entrepreneurial Skills, and featured extensively in a book *Inclusive Business Creation – Good Practice Compendium*, published in May 2016 by the OECD and European Commission.

ACORNS was designed, developed and implemented by Fitzsimons Consulting to support early stage female entrepreneurs living in rural Ireland. The innovative initiative was funded under the CEDRA 2015 Rural Innovation and Development Fund through the Department of Agriculture, Food and the Marine. Following the successful conclusion of the pilot, Fitzsimons Consulting has been awarded the contract to further develop and implement the initiative.

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Colm has published in international peer-reviewed journals such as Entrepreneurship and Regional Development, European Planning Studies, Journal of Small Business Management, International Marketing Review, Organisational Dynamics, R&D Management, Small Business Economics, and Venture Capital. He has completed several European Union funded research projects. He is co-author of 'Enterprise in Action', a text book on entrepreneurship for Irish students. He has co-authored eight teaching cases studies on entrepreneurship published by the European Case Clearing House, including several award winning cases.

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EXECUTIVE SUMMARY

In this report the results of the GEM research cycle for 2015 are presented in four sections.

SECTION 1 presents an overview of entrepreneurship in 2015. The information provided is based on GEM research, which draws on an analysis of the facts, views and opinions gathered as part of an adult population study of 2,000 people, aged 18 to 64 inclusive, which was undertaken in mid-year. GEM research was carried out in the same way in each of sixty countries participating in the cycle. Accordingly, the results can be compared across countries and Ireland's relative position ascertained. Appendix 1 outlines in detail the GEM methodology.

In this report, the findings are compared with other developed countries, in particular with those that were included in the GEM 2015 research cycle from Europe and North America.

- In terms of total early stage entrepreneurial activity (TEA Index), Ireland's rate in 2015 was 9.3% with over 260,000 Irish people actively engaged in starting a new business – two-thirds at the early stage of working towards starting a new business (nascent entrepreneurs) and one-third who had started a new business between January 2012 and June 2015 (new business owners).¹
- Ireland ranked seventh (7th) in Europe in 2015 in terms of the TEA Index. The rate is higher in the US, Canada and Australia than it is in Ireland.
- Not all entrepreneurship is carried out by individuals acting on their own account. Intrapreneurs are those that initiate new business activities within their current employment. Ireland is ranked 2nd in the rate of intrapreneurship across Europe.
- Early stage entrepreneurs are twice as likely to be men as women (2.2:1).
- Early stage entrepreneurs are from all age groups from those in their mid-twenties to those in their mid-fifties, with a lower percentage of entrepreneurs coming from the youngest (18-24 years) and oldest cohorts (55 – 64 years). They tend to be well educated, with the rate of entrepreneurial activity increasing as educational attainment levels increase. Predominantly their motivation for their new enterprise is a positive one.
- The majority of early stage entrepreneurs in Ireland are focused on Consumer Services sectors, with Business Services sectors also important.
- The perception of entrepreneurial opportunities in Ireland is low relative to comparator countries and was severely affected during the recession.
- Relative to comparator countries in Europe, the rate at which people in Ireland express confidence in their skills and knowledge to start a business is relatively high.
- In Ireland successful entrepreneurs are held in high esteem by the great majority. This level of respect is mirrored in comparator countries. This reflects a view held by the majority that the media is supportive of entrepreneurs. However, entrepreneurship is considered a good career option by only half of adults in Ireland.
- Early stage entrepreneurs in Ireland have a relatively high job creation expectation compared to the majority of European countries.
- Reflecting Ireland's open economy, early stage entrepreneurs in Ireland are more focused on international markets than is the case for most European countries, the United States or Australia.

¹ On average two individuals (1.9) who are early stage entrepreneurs, are involved in the same start-up. Accordingly the number of businesses is less than the number of early stage entrepreneurs.

- The rate of early stage entrepreneurs in Ireland rated as highly innovative in GEM's high impact market expansion index is the highest across Europe, Canada, the US and Australia.² Moreover, a relatively high proportion of early stage entrepreneurs report that they are operating in medium or high technology sectors.

Section 1 also contains a summary of the main research findings in respect of owner managers of established businesses.

SECTION 2 reports on the results of the 2015 GEM research in terms of male and female early stage entrepreneurs and established owner managers.

- The relatively high rate at which men in Ireland are involved in early stage entrepreneurial activity places them well above the average across the Europe.
- The rate at which women in Ireland are involved in early stage entrepreneurial activity is more at the European norm.
- As the rate of early stage entrepreneurial activity is relatively high among men in Ireland, while among women the rate is more at the average, the ratio of men to women involved in early stage entrepreneurial activity in Ireland is relatively wide (2.2:1).
- In Ireland men are far more engaged as nascent entrepreneurs than are women. This results in a very wide ratio of 2.6:1 between the activity rates of men and women in this respect. When the focus is on new business owners, however, the ratio is considerably narrower (1.6:1).
- Compared to men, fewer women in Ireland have the personal characteristics which are often associated with early stage entrepreneurs.
- Responding to a perceived opportunity is the dominant motive for both men and women.
- The sector of activity of early stage entrepreneurs differs between men and women. Female entrepreneurs are predominantly focussed on Consumer Orientated Services. While Business Orientated Services feature to a greater extent among male entrepreneurs.
- The great majority of male and female entrepreneurs expect to become employers.
- While entrepreneurs who expect to scale are the exception, there is now a very similar rate of male and female early stage entrepreneurs who expect to become significant employers, predicting that they will create 20 or more jobs within five years.³
- A higher rate of male compared to female entrepreneurs already has, or expect to have, customers in overseas markets.
- The rate of informal investors in early stage business being started by someone else is considerably higher among men than it is among women.

Moving beyond the findings of a single year, the section also draws on the results of the GEM research for the years 2012 to 2015 inclusive to give a gender perspective on entrepreneurial activity in Ireland among men and women.

The GEM policy brief on Ireland, published in 2016, which focuses in particular on female entrepreneurship is also reproduced for the information of the reader.

Finally, we briefly examine the development agencies support from a gender perspective. In general, female entrepreneurs tend to be over-represented in terms of soft supports and under-represented in terms of financial support.

² GEM has created a market expansion index based on the perception of early stage entrepreneurs as to the relative novelty of their product/service, their relative number of competitors and whether the new business uses or expects to use the latest technology. Very few early stage entrepreneurs are within the very highest category.

³ Given the higher rate of men who are early stage entrepreneurs compared to women the ratio of male to female high expectation entrepreneurs reflects the relative rate at which they are starting new businesses (2.2:1).

SECTION 3 focuses on entrepreneurial activity in the UK. This section gives an overview of entrepreneurial activity in the UK in 2015 and compares it to Ireland.

- In 2015 Ireland had a higher rate of early stage entrepreneurial activity but a similar rate of established business owners among its adult population.
- In the UK the most entrepreneurial age group was among those aged 35-44, while in Ireland it was among those aged 45-54.
- In both countries it is those with the highest educational attainment levels that are engaged to the greatest extent in early stage entrepreneurial activity.
- In both countries similar rates are prevalent among the adult population in respect of those that perceive an entrepreneurial opportunity; those that perceive that they have the required skills to successfully start a new business; and those that hold successful entrepreneurs in high regard.
- Entrepreneurs in the UK, however, less frequently expect to become an employer and have lower growth aspirations than is the case in Ireland.
- A higher rate of Irish entrepreneurs is focused on customers in export markets.

A policy brief written by the GEM UK team is also included. It highlights in particular (i) the Small Business Charter, whereby Business Schools are encouraged to provide advice and training support to small businesses and (ii) the continued focus on the development of Business Angels.

SECTION 4 presents, in a series of comparative tables, all relevant outcomes that have been compiled from the adult population survey in relevant countries involved in the 2015 GEM research, particularly those from Europe and North America.

The countries included are from Europe - Belgium, Bulgaria, Croatia, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Macedonia, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom and from North America - Canada and the United States.

SECTION 1

ENTREPRENEURSHIP IN IRELAND IN 2015

1.1 INTRODUCTION

In this section an overview of entrepreneurship in Ireland in 2015 is presented.

The information provided is based on GEM research, which draws on an analysis of the facts, views and opinions gathered as part of an adult population study of 2,000 people, aged 18 to 64 inclusive, which was undertaken in mid-year. GEM research was carried out in the same way in each of sixty countries participating in the cycle. Accordingly, the results can be compared across countries and Ireland's relative position ascertained. Appendix 1 outlines in detail the GEM methodology.

In this report, the findings are compared with other developed countries, in particular with those that were included in the GEM 2015 research cycle from Europe and North America.

The countries included are from Europe - Belgium, Bulgaria, Croatia, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Macedonia, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom and from North America - Canada and the United States.

In respect of all relevant outcomes, comparative tables have been compiled from the adult population survey in each of these countries and are available in Section 4.

1.2 ENTREPRENEURSHIP IN IRELAND 2015 AT A GLANCE

SOCIETAL VALUES ABOUT ENTREPRENEURSHIP

	Ireland (% of all Adults)	Europe ⁴ Average (% of all Adults)	Ireland's Rank in Europe	US (% of all Adults)
Success of entrepreneurship has high status	80	66	2	-
Entrepreneurship is a good career choice	53	56	14 *	-
Supportive media coverage of entrepreneurs	67	55	4 *	-

*Joint ranking

SELF-PERCEPTIONS ABOUT ENTREPRENEURSHIP

	Ireland (% of all Adults)	Europe Average (% of all Adults)	Ireland's Rank in Europe	US (% of all Adults)
Perceived opportunities	39	37	10	47
Perceived capabilities	45	43	10 *	56
Fear of failure	41	45	17 *	32
Know a recent entrepreneur	33	33	11 *	30

*Joint ranking

ACTIVITY

	Ireland (% of all Adults)	Europe Average (% of all Adults)	Ireland's Rank in Europe	US (% of all Adults)
TEA: Early Stage Entrepreneurs⁵	9.3	7.8	7	11.9
Nascent Entrepreneurs	6.5	4.8	4	8.3
New Business Owners	3.0	3.1	11 *	4.0
Established Owner Managers	5.6	6.6	15	7.3
Business Exits in last 12 months & Business Discontinued	2.1	1.8	7	2.2
Current Intrapreneur	5.8	3.5	2	5.4
Current Intrapreneur (% of employed adults)	9.1	5.7	2	8.0
Informal Investor⁶	4.0	4.3	11	6.0
Amount Invested in past 3 years	€19,000	€24,100	13 *	€33,700

*Joint ranking

⁴ Belgium, Bulgaria, Croatia, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Macedonia, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

⁵ This rate is slightly less than the combined total for nascent and new business owners. This is because in circumstances where respondents qualify as both a nascent and a new business owner, they are counted only once in the Total Entrepreneurship Activity (TEA) Index.

⁶ Men are much more likely to be an informal investor (5.8%) in Ireland than are women (1.9%).

MOTIVATION

	Ireland	Europe Average	Ireland's Rank in Europe	US
Opportunity Motive				
TEA rate with opportunity motivation (% of all Adults)	7.4	5.8	5	9.8
Early-stage entrepreneurs motivated by opportunity (%)	80	74	7*	82
Necessity Motive				
TEA Rate with necessity motivation (% of all Adults)	1.8	1.7	8*	1.7
Early-stage entrepreneurs motivated by necessity (%)	19	22	14*	14

*Joint ranking

GENDER

	Ireland	Europe Average	Ireland's Rank in Europe	US
Male TEA (% of adult males)	13.0	10.1	4*	14.6
Female TEA (% of adult females)	5.8	5.4	9	9.2
Male/Female TEA ratio	2.2:1	1.9:1	5	1.6:1
Men: Opportunity Motives				
TEA rate (for men with opportunity motives) (% of all Adults)	9.8	7.6	5	12.5
Early-stage male entrepreneurs motivated by opportunity (%)	76	78	15*	87
Women: Opportunity Motives				
TEA rate (for females with opportunity motives) (% of all Adults)	5.1	3.9	5	7.1
Early-stage female entrepreneurs motivated by opportunity (%)	91	75	2	82

*Joint ranking

ENTREPRENEURIAL IMPACT OF EARLY STAGE ENTREPRENEURS

	Ireland	Europe Average	Ireland's Rank in Europe	US
Entrepreneurs that expect to become an employer (%)	77	72	6*	80
Entrepreneurs that expect to create 10 or more jobs in five years (%)	26	16	3	25
Entrepreneurs whose business ideas are in high or medium technology sectors (%)	7.6	6.7	10	6.2
Entrepreneurs who are or expect to be international (25% + customers in overseas markets) (%)	27	21	5	12

*Joint ranking

1.3 IRELAND'S RATE OF ENTREPRENEURSHIP – THE 'TEA-INDEX'

Ireland's TEA rate in 2015 was 9.3%. The TEA Index is a measure of early stage entrepreneurial activity, including those that have recently started a business (new business owners) and those that are actively working on starting a new business (nascent entrepreneurs).

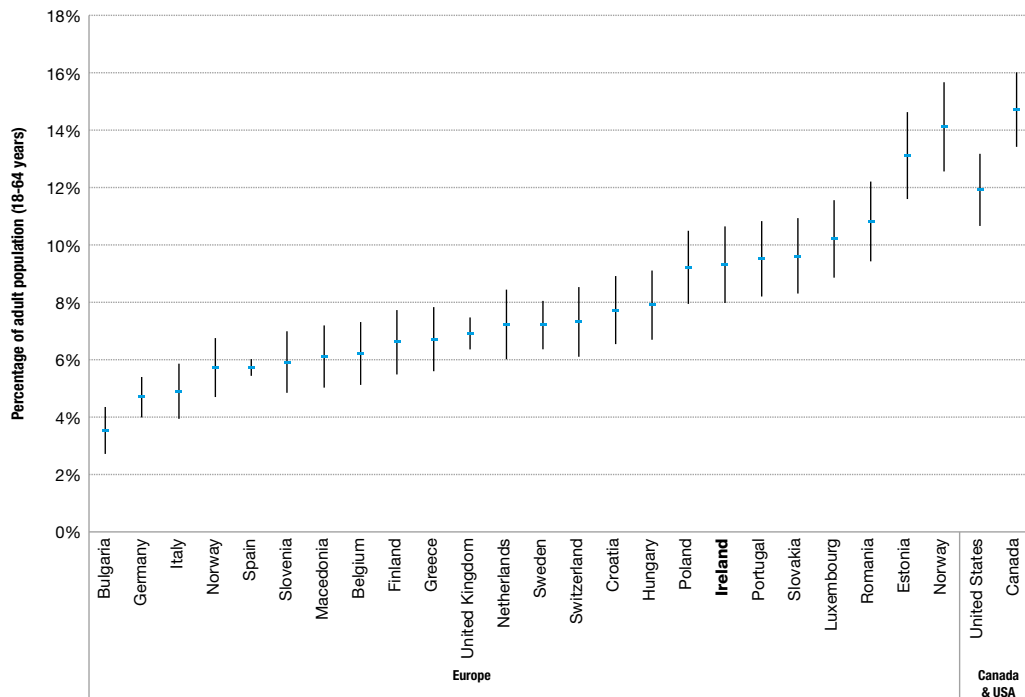
In 2015, GEM reports that over 260,000 Irish people were actively engaged in starting a new business – two-thirds at the early stage of working towards starting a new business (nascent entrepreneurs) and one-third who had started a new business between January 2012 and June 2015 (new business owners) (Table 1).⁷

Ireland ranked seventh (7th) in Europe in 2015 in terms of total early stage entrepreneurial activity, or the TEA Index. The rate of early stage entrepreneurial activity is particularly high in the US (11.9%), Canada (14.7%) and Australia (12.8%) (Figure 1).

TABLE 1: ENTREPRENEURSHIP IN IRELAND IN 2015

Entrepreneurial Activity	% of all Adults in Ireland ⁸	Number of People
Nascent entrepreneurs	6.5%	179,000
New business owners	3.0%	84,000
Total early stage entrepreneurs	9.3%	263,000

FIGURE 1: IRELAND'S EARLY STAGE ENTREPRENEURIAL RANKING - 2015⁹



⁷ On average two individuals (1.9) who are early stage entrepreneurs, are involved in the same start-up. Accordingly the number of businesses is less than the number of early stage entrepreneurs.

⁸ In some instances, this rate is less than the combined totals for nascent and new business owners. This is because, in circumstances where respondents qualify as both a nascent and a new business owner, they are counted only once in the Total Entrepreneurial Activity (TEA) Index.

⁹ The horizontal lines illustrate the margin of error. In Ireland the GEM 2015 survey was of 2,000 people aged between 18 and 64. The margin of error in Ireland is +/- 1.3%.

1.4 IRELAND'S RATE OF INTRAPRENEURSHIP- ENTREPRENEURS WITHIN ORGANISATIONS

Not all entrepreneurship is carried out by individuals acting on their own account. Intrapreneurs are those that initiate new business activities within their current employment. Intrapreneurs have been involved in the development of new activities for their employer, such as developing or launching new goods or services, or setting up a business unit, a new establishment or subsidiary.

In Ireland, 5.8% report that they have been involved in new activities for their employer in the past year. For those currently in employment the rate is higher (9.1%). Focussing on those that have been involved in new activities for their employer in the past three years, the rate is 6.6% and 10.5% respectively.

Ireland is ranked 2nd in the rate of intrapreneurship across Europe (5.8%). This means that Ireland's rank in intrapreneurship is higher than its rank in the TEA-Index (early stage entrepreneurial activity) (7th).

1.5 IRISH ENTREPRENEURS

Early stage entrepreneurs are from all age groups from those in their mid-twenties to those in their mid-fifties, with a lower percentage of entrepreneurs coming from the youngest (18-24 years) and oldest cohorts (55-64 years). They tend to be well educated, with the rate of entrepreneurial activity increasing as educational attainment levels increase. Predominantly their motivation for their new enterprise is a positive one (80%). Early stage entrepreneurs are twice as likely to be men as women (2.2:1).¹⁰

On average there are almost two entrepreneurs for every new enterprise being started (1.9). The majority of early stage entrepreneurs in Ireland are focused on Consumer Services sectors (47%) with Business Services sectors also important (30%). Transformative sectors, comprising in the main construction and manufacturing, are less important (18%).

The rate of business exits in Ireland was 2.1% in 2015 – that is the percentage of all adults reporting that they were involved in a business exit, where the business discontinued, in the previous twelve months. The primary reasons for these exits are (i) that the business was not profitable (42% in Ireland, 34% in Europe) and (ii) family or personal reasons (17% in Ireland and 18% in Europe).

One third of the general public in Ireland know a recent entrepreneur (33%). This rate is fairly typical across other comparator countries.¹¹ In Finland the rate is considerably higher, however (45%).

The perception of entrepreneurial opportunities in Ireland (39%) is very low relative to comparator countries and was severely affected during the recession. Norway (69%) and Sweden (70%) are particularly strong in this regard. While the rate at which those in the adult population perceive opportunities in Canada (53%), US (47%) and Australia (49%) is less high than in these Nordic countries, it is still considerably higher than it is in Ireland.

Relative to comparator countries in Europe, the rate at which people in Ireland express confidence in their skills and knowledge to start a business (45%) is relatively high and is higher than in Finland (37%), Norway (31%), Sweden (37%) and the UK (37%). It is only slightly behind Australia (48%), Canada (50%), and the US (56%).

41% of adults in Ireland report that fear of failure would inhibit them starting a new business. This is a relatively typical rate across comparator countries. While in Norway (31%) and the US (32%) the rate of inhibition is considerably lower, there is a similar rate of adults expressing this view in Canada (43%) and Australia (44%) as there are in Ireland.

In Ireland successful entrepreneurs are held in high esteem by the great majority (80%). This level of respect is mirrored in other comparator countries.¹² This reflects a view held by the majority (67%) that the media is supportive of entrepreneurs. Entrepreneurship is considered a good career option by just 53% of adults in Ireland. While this rate is higher than in Finland (33%), it is considerably lower than in Norway (79%). It is broadly similar to that prevailing in Sweden (53%), the UK (58%) and Australia (56%).

4% of adults in Ireland have invested in a business being started by someone else. Over the last three years they have invested €19,000 in this way. The rate in Ireland is higher than in Norway (2.6%) and in the UK (2.2%) and broadly similar in Finland (3.8%) and in Australia (4.1%). The rates are considerably higher in Sweden (6.3%), the US (6.0%) and Canada (7.1%).

While the rate of informal investors in Australia is broadly similar to Ireland, the average amount invested in that country is more than double (€50,800). In most comparator countries, the average amount invested over the period is higher than it is in Ireland.¹³

¹⁰ Section 3 contains an in-depth look at the differences between male and female entrepreneurs in Ireland in 2015.

¹¹ Norway (31%), Sweden (39%), UK (30%), Canada (32%), US (30%), and Australia (34%).

¹² While this is the case for the majority of those in Norway, the rate is less emphatic, however (65%).

¹³ Finland (€23,200), Norway (€42,800), UK (€28,000) Canada (€32,400) and US (€33,700) (Table J in Section 4).

1.6 IRISH ENTREPRENEURS WITH SIGNIFICANT GROWTH POTENTIAL

The rate of early stage entrepreneurs in Ireland in 2015 was 9.3%. This represents nascent entrepreneurs and those who were actively planning a new business or new business owners and have recently set up a new business.¹⁴

The potential impact of these businesses can be measured in terms of three measures: the growth aspirations of the entrepreneurs, their international orientation, in terms of international customers, and their relative innovativeness.

Growth aspirations

Early stage entrepreneurs in Ireland have a relatively high job creation expectation compared to the majority of European countries.

The majority of early stage entrepreneurs expect to be employers within the next five years (77%). Just 23% expect that they will remain self-employed with no employees. More than one in four entrepreneurs expect to be employing more than ten,¹⁶ while 14% of all entrepreneurs expect high employment growth, leading to twenty or more jobs in five years (Table 2).

TABLE 2: GROWTH ASPIRATIONS OF IRISH EARLY STAGE ENTREPRENEURS

Growth expectations	Percentage of all early stage entrepreneurs
Any jobs now or in 5 years	77%
More than 10 jobs, and 50% growth in jobs, in 5 years	26%
Twenty or more jobs in 5 years	14%

Internationalisation

Reflecting Ireland's open economy, early stage entrepreneurs in Ireland are more focused on international markets than is the case for most European countries, the United States or Australia.

21% of early stage entrepreneurs are focussed exclusively on the Irish market and do not have or do not expect to have international customers. While 79% of new businesses have or expect to have international customers, just 18% have more than 50% of their customers in export markets. Just 6% of early stage entrepreneurs have or expect to have more than 75% of their customers in international markets (Table 3).

TABLE 3: INTERNATIONAL ORIENTATION OF IRISH EARLY STAGE ENTREPRENEURS

International Orientation	Percentage of all early stage entrepreneurs
No international customers	21%
Less than 25% of customers are international	51%
Between 25% and 75% of customers are international	22%
Greater than 75% of customers are international	6%
Total	100%

¹⁴ New business owners are entrepreneurs who at least part own and manage a new business that is between 4 and 42 months old and have not paid salaries for longer than this period. These new ventures are in the first 42 months after the new venture has been set up.

¹⁵ GEM 2015 research indicates that there were 1.9 new business owners on average per enterprise started.

¹⁶ Expecting 10 or more jobs 5 years after the business has started (or 5 years from now on if the business is already operational – in that case an extra requirement is that job growth is at least 50%).

Innovativeness

A very small number of new businesses are truly innovative. This is true in Ireland as it is in other countries. Most new businesses are pursuing opportunities based on existing products/services, existing markets and existing technologies.

GEM has created a market expansion index based on the perception of early stage entrepreneurs as to the relative novelty of their product/service, their relative number of competitors and whether the new business uses or expects to use the latest technology. Very few early stage entrepreneurs are within the very highest category.

7.1% of early stage entrepreneurs in Ireland are rated within the highest category - completely new product/service, few/no competitors and uses technology that is less than 1 year old. This is the highest rate of entrepreneurs within this high impact market expansion index across Europe, Canada, the US and Australia.

Moreover, 7.6% of early stage entrepreneurs report that they are operating in medium or high technology sectors. This is a relatively high proportion.

1.7 IRISH OWNER MANAGERS OF ESTABLISHED BUSINESSES

In 2015 about 158,000 individuals in Ireland were involved as owner managers of businesses, which were more than three and a half years old (5.6%).¹⁷ This rate of established business owners among the adult population is broadly similar to that in the UK (5.3%) but is lower than the average rate cross Europe (6.6%). The greatest prevalence of established business owners in Europe is in Greece (13.1%) with Switzerland in second place (11.3%).

The rate of established business owners in North America and Australia is high relative to the European average.¹⁸

Established owner managers tend to be older than early stage entrepreneurs with 60% of them aged 45 or older. They are drawn from all educational backgrounds and are most frequently found in better off households. As is common in all comparator countries, in Ireland there are more male than female owner managers (7.3% to 3.9%). The ratio, 1.9:1, is similar to the European average, 2.1:1.

The businesses of owner managers are spread across all sectors, with Consumer Services dominating, accounting as it does for more than a third of all established owner managed business (35%). Early stage entrepreneurs are even more focused on this sector (47%), however, and are less focused on the Transformative sector (18%) compared to those with longer established businesses (29%), which includes construction and manufacturing.

A higher rate of early stage entrepreneurs (7.6%) compared to owner managers of established businesses (6.2%) report that their businesses are involved in medium or high technology sectors.

In Ireland 5.1% of established business owners expect to create ten or more jobs within the next five years. This is a higher rate than the European average (4.3%) or in Australia (3.2%), but a lower rate than that which prevails in Canada (6.9%) or the US (6.8%).

The majority of established business owners in Ireland have at least some customers outside the country. Just 27% are exclusively focused on the Irish market. This represents a far higher international orientation than the European norm, as 43% of established owner managers across Europe are exclusively focused on their domestic markets.

The rate of established business owners in Ireland with more than half their customers outside of Ireland (14%), is similar to the average across Europe (11%).

As is the case with early stage entrepreneurs, very few owner managers of established businesses tend to be highly innovative. However the rate among early stage entrepreneurs is considerably higher. 7.1% of early stage entrepreneurs are categorised by GEM as being within the highest market expansion index - completely new product/service, few/no competitors and uses technology that is less than 1 year old. Just 1% of established owner managers are within this category. The relatively higher level of innovation among early stage entrepreneurs is common across all comparator countries.

¹⁷ As is the case with early stage entrepreneurs, established businesses on average have more than one owner manager. Accordingly the number of established businesses is less than the number of owner managers.

¹⁸ The respective rates are Canada 8.8%, the US 7.3% and Australia 8.7% with the European average 6.6%.

SECTION 2

A GENDER PERSPECTIVE

2.1 INTRODUCTION

There has been an increased spotlight on the relatively untapped potential of women as entrepreneurs for several years now among European and national policy makers. A range of initiatives have been developed to encourage a higher involvement of women as entrepreneurs.

This year we report on the results of the 2015 GEM research in terms of male and female early stage entrepreneurs and established owner managers. Looking to the future we also report on those elements of the personal context of men and women in the general population, which collate strongly with entrepreneurial activity, and which suggest those who are more likely to be entrepreneurs than others in the population.

Moving beyond the findings of a single year, we draw on the results of the GEM research for the years 2012 to 2015 inclusive to give a gender perspective on entrepreneurial activity in Ireland among men and women.

We reproduce the GEM policy brief on Ireland, published in 2016, which focuses in particular on female entrepreneurship.¹⁹ Finally we briefly examine the development agencies support for female entrepreneurs and their relative effectiveness.

¹⁹ The information in this has been updated as it was published some months ago.

2.2 RESULTS OF THE 2015 GEM RESEARCH

Male and female entrepreneurs

The relatively high rate at which men in Ireland are involved in early stage entrepreneurial activity (13.0%) places them well above the average across the Europe (10.1%), and well ahead of the UK (9.1%), the Nordic countries (Finland 8.9%, Norway 7.5%, Sweden 9.4%) and not far behind the rates observed in the US (14.6%). The rate of early stage entrepreneurial activity among men in Canada and Australia, however, is particularly high (16.0% and 15.5% respectively) and considerably higher than in Ireland.

The rate at which women in Ireland are involved in early stage entrepreneurial activity (5.8%) is more at the European norm (5.4%). While still ahead of the rate observed in the UK (4.8%) and in the Nordic countries (Finland 4.2%, Norway 3.8% and Sweden 4.8%), it is considerably lower than the rate of early stage entrepreneurial activity among women in the US (9.2%) and Australia (10.1%). In Canada the rate is almost two and a half times as high (13.5%) as it is in Ireland.²⁰

As the rate of early stage entrepreneurial activity is relatively high among men in Ireland and that among women is more at the average, the ratio of men to women involved in early stage entrepreneurial activity in Ireland is relatively wide (2.2:1). This ratio is narrower across Europe (1.9:1), in the UK (1.9:1) and in Sweden (1.9:1). It is similar to Finland (2.1:1) and Norway (2.0:1), however.

The high level of early stage entrepreneurial activity among both men and women in the US results in a relatively narrow ratio (1.6:1). In 2015, Canada had very high rates of early stage entrepreneurial activity among both men and women (16% and 13.5% respectively) and one of the lowest differences in ratios (1.2:1).

Early stage entrepreneurial activity is made up of those who are actively planning a new business (nascent entrepreneurs) as well as those who have recently set up a new business (new business owners). In Ireland men are far more engaged as nascent entrepreneurs (9.5%) than are women (3.6%). This results in a very wide ratio of 2.6:1 between the activity rates of men and women in this respect.

However, when the focus is on new business owners, the ratio is considerably narrower (1.6:1), with 3.7% of men and 2.3% of women reporting that they had set up a new business in the previous 42 months.

The great majority of early stage entrepreneurs in Ireland (80%) report that they are responding to a perceived opportunity rather than engaging in entrepreneurial activity motivated from a sense of necessity, believing that they have no better options to earn a living. Responding to a perceived opportunity is the dominant motive for both men and women.

The sector of activity of early stage entrepreneurs differs for men and women.²¹ For women, two thirds (66%) are focussed on Consumer Orientated Services. For men, entrepreneurial activity is predominately in both Consumer Orientated Services (38%) and Business Orientated Services (36%).

The great majority of entrepreneurs in Ireland expect to become employers (77%) and this is true for both men and women, although a higher rate of male compared to female entrepreneurs have this expectation (79% compared to 71%).

There is now a very similar rate of male and female early stage entrepreneurs who expect to become significant employers (14%), predicting that they will create 20 or more jobs within five years. However given the higher rate of men who are early stage entrepreneurs (13.0%) compared to women (5.8%), the ratio of male to female high expectation entrepreneurs reflects the relative rate at which they are starting new businesses (2.2:1). It should be noted, however, that entrepreneurs who expect to scale in this way are the exception among both men and women.

The relative ambition among male and female entrepreneurs reflected in this employment expectation

²⁰ The rate of early stage entrepreneurial activity reported among women in Canada in 2015 is the highest across Europe, North America and the Asia and Oceania, innovation driven economies of Australia, Israel, Korea and Taiwan.

²¹ For men the division across sectors is as follows: Consumer Orientated Services (38%), Business Orientated Services (36%), Transforming (22%) and Extractive (4%). For women, it is Consumer Orientated Services (66%), Business Orientated Services (17%), Transforming (9%) and Extractive (7%).

has narrowed considerably since 2011. In the GEM report for Ireland 2011 it was noted that male entrepreneurs were considerably more ambitious than female entrepreneurs and that as the ambition increases so did the gender gap. The GEM 2011 report for Ireland reported that there were nine male early stage entrepreneurs who expected to employ twenty or more within five years for every one female entrepreneur. The 2015 outcome is very significant and signals a complete narrowing of the gender gap in terms of aspiration for significant growth. The gap is now not attributable to different rates of ambitious entrepreneurs within the gender cohorts but attributable solely to there being more men than women early stage entrepreneurs.

Aside from those expecting to grow most significantly, there is still a gender gap in terms of those expecting to create ten jobs, when this represents a 50% increase in employment within five years, among male (29%) and female entrepreneurs (19%).

While both men and women are predominately focussed on the domestic market, the international orientation of early stage entrepreneurs differs by gender. Nearly one third of men (32%) already have, or expect to have, more than one quarter of their customers in overseas markets. For women, this is 17%.

The rate of established owner managers is higher among men (7.3%) than it is among women (3.9%), reflecting the fact that the rate of men compared to women starting a business has been higher since GEM research commenced.²²

The rate of informal investors in early stage business being started by someone else is considerably higher among men (5.8%) than it is among women (1.9%).

Personal Context

Compared to men, fewer women in Ireland have the personal characteristics, which are often associated with early stage entrepreneurs:

- Fewer women report that they know a recent entrepreneur (30% compared to 37% for men);
- Women less frequently perceive an enterprising opportunity (33% compared to 46%);
- They are less confident in their ability to successfully start and run a new business (36% compared to 54%); and
- More women report that fear of failure would deter them from starting a business (46% compared to 35%).

In several of these measures, men and women in Ireland are in or about the European norm. However, men in Ireland perceive enterprising opportunities at a higher rate (46%) than is the case across Europe (39%). Men in Norway (72%) and Sweden (70%) report an exceptionally high rate. However, in Finland (48%), the UK (47%), Australia (50%), the US (50%) and Canada (55%) the rate of opportunity recognition reported by men is broadly similar to that in Ireland.

Fear of failure, inhibiting entrepreneurial venturing, is reported less frequently among men and women in Ireland (35% and 46% respectively) than is the case across Europe (41% and 49% respectively). In this respect, men and women in Ireland report broadly similar rates to men and women in Finland, Sweden and the UK.²³ A lower rate of men and women in Norway (30% and 32% respectively) and in the US (29% and 35%) reported that they would be inhibited from starting a business through fear of failure.

²² This represents a ratio of 1.9:1 men to women owner managers of established businesses.

²³ Finland 34% and 46% , Sweden 37% and 46% and UK 34% and 41% respectively.

2.3 AN ENTREPRENEURIAL GENDER PERSPECTIVE 2012-2015

In each year since GEM started reporting on early stage entrepreneurial activity in Ireland, it has been noted that the rate of entrepreneurial activity among men is higher than it is among women. This has not changed in recent years. In the period 2012 to 2015 inclusive, the rate at which men have been active as early stage entrepreneurs has been twice the rate of women (10.6% of the adult male population compared to 5.1% of the adult female population). This represents a ratio of 2:1 male to female early stage entrepreneurs.

As noted previously total early stage entrepreneurial activity is made up of those who are actively planning a new business (nascent entrepreneurs) as well as those who have recently set up a new business (new business owners).

- Men are active as nascent entrepreneurs (7%) at a far higher rate than are women (3%) resulting in a ratio of 2.3:1.
- When the attention is turned to new business owners, the rates are much closer (3.8% and 2.1% respectively), resulting in a ratio of 1.85:1.

There has also been on average a higher rate of men compared to women in Ireland, who are owner managers of established businesses during this period (11.1% compared to 4.5%). This represents a ratio of 2.5:1 male to female established business owners.

Women's Potential to be Entrepreneurs

Compared to men, fewer women in Ireland have the personal characteristics which are often associated with early stage entrepreneurs.

Knowing someone, who has recently set up a new business, is perceived as having a positive influence on the likelihood that an individual is an entrepreneur. Drawing from the GEM research 2012-2015, it is clear that fewer women, compared to men, report knowing a recent entrepreneur.²⁴

The observation of enterprising opportunities declined for both men and women in Ireland considerably during the recession. More recently this situation has been improving as Ireland returns to growth. Year after year, women compared to men less frequently have seen opportunities to start a business. For example, over the period 2012 to 2015 inclusive, on average 36% of men reported observing enterprising opportunities compared to 27% of women.

Women are also less confident than men in their ability to start and manage a business.²⁵ This relative lack of self-belief among women is not unique to Ireland, however. It can be observed in other Europe countries, including across the Nordic countries, and in North America and Australia.

Across the adult population in Ireland, women have a tendency to be more risk adverse than men, with a higher percentage reporting that a fear of failure would prevent them starting a new businesses.²⁶

This should not lead one to underestimate, however, the entrepreneurial activity of women. In any given year, many women will be planning to start a business (nascent entrepreneurs) or will have recently started a business.

²⁴ Average 29% of women compared to 40% of men over the four year period report that they know someone who is an early stage entrepreneur.

²⁵ Average 35% of women compared to 55% of men over the four year period report that they have the knowledge and skills to successfully start a new business.

²⁶ Average 47% of women compared to 38% of men over the four year period report fear of failure as an inhibitor to entrepreneurial activity.

2.4 GEM POLICY BRIEF ON FEMALE ENTREPRENEURSHIP IN IRELAND

In 2016, GEM published for the first time a series of policy briefs from a select number of countries highlighting an initiative in that country which has had a dramatic effect of improving entrepreneurship.²⁷ In publishing these policy briefs the objective was that other countries could learn from these initiatives not necessarily by copying them but adapting them to their own environment.

The policy brief for Ireland related to encouraging female entrepreneurship. It is reproduced here with relevant updates.

IRELAND - ENCOURAGING FEMALE ENTREPRENEURSHIP

The Irish government has developed several programmes to help more female entrepreneurs to startup and grow their businesses.²⁸ These programmes include specific funding lines as well as dedicated networking groups.

Some of these programmes have already begun to make an impact, which has helped address the gap existing between women and men starting and running new businesses.

Ireland's first Global Entrepreneurship Monitor (GEM) Report in 2001 revealed that men are more than twice as likely as women to be engaged in early stage entrepreneurial activity. In light of the GEM findings, Gender Equality of the Department of Justice and Equality, together with the Government Department responsible for Enterprise and Employment directed the development agencies to disaggregate their clients and support provided on the basis of gender and sought to encourage more women to become entrepreneurs.

Networks set up

One of the findings of the GEM research was that women did not have as strong business networks as men. This prompted many of the local government agencies,²⁹ responsible for micro-enterprise development at a local level, to set up specific networks for women entrepreneurs.

The report of the Small Business Forum published in 2004³⁰ recommended to the Irish Government that a National Entrepreneurship Policy be adopted and that the latent entrepreneurial potential identified among women would be one of three specific platforms on which the policy should be built.

Women's Enterprise Day

GEM research indicated that women tend to be less confident in their ability to successfully start and manage a new business, less alert to entrepreneurial opportunities, less networked than men and with lower growth aspirations.

It was against this background that Gender Equality in 2007 sought expressions of interest in relation to organising a national event for women in business to support them to start and grow businesses and to promote best practice in networking. From this National Women's Enterprise Day³¹ was developed and has been organised each year since by the local enterprise support agencies with support funding in most of these years from the Gender Equality Division of the Department of Justice and Equality.

These actions were designed to address the gender gap in the rate at which men and women were active as early-stage entrepreneurs in Ireland and to address some of the additional challenges that women faced.

²⁷ GEM 2016 Policy Briefs are available on www.gemconsortium.org

²⁸ The National Women's Strategy 2007-2016 reflected the Irish Government's priorities in relation to the promotion of gender equality, focuses on initiatives to foster the latent entrepreneurial potential among women.

²⁹ The local enterprise support agencies referred to are the City and Country Enterprise Boards (CEBs). They were replaced by The Local Enterprise Offices in April 2014.

³⁰ <https://www.djei.ie/en/Publications/Publication-files/For%C3%A1s/Enterprise-Strategy-Group-Report-Full-Report.pdf>

³¹ Local Enterprise webpage: (<https://www.localenterprise.ie/Enable-Enterprise-Culture/National-Women-s-Enterprise-Day>)

Going for Growth

GEM research later indicated a shortage of high-growth women entrepreneurs, which if developed could have a higher economic impact on local communities and the country as a whole. Out of this the Going for Growth initiative³² was developed by Paula Fitzsimons, the GEM country coordinator for Ireland, in a bid to boost the proportion of female entrepreneurs that are innovative, have growth ambitions and are internationally focused.

Since it was launched in 2008, the initiative has been supported by Enterprise Ireland, the national development agency. Gender Equality Division, which provided match funding to that made available from the European Social Fund, supported the early cycles of Going for Growth. More recently, KPMG has become a sponsor with Enterprise Ireland. To date, over 500 female entrepreneurs have benefited from taking part in Going for Growth. The eighth cycle was completed in June 2016.³³

A survey of the sixty participants that completed a cycle of Going for Growth in 2016 showed that in addition to a boost in confidence, ambition and motivation the participants' revenues increased by 28% over the six month programme, bringing total sales of the group to over €35.3 million.

Participants were also able to grow their staff complement by 17%, while there was a 43% increase in the number of exporters among the group.

The initiative has been recognised by the EU, the OECD and the European Institute of Gender Equality. It was named as the winner of European Enterprise Promotion Awards 2015, in the investing in entrepreneurial skills category. The awards showcase the most successful promoters of enterprise and entrepreneurship around Europe. In 2016 it was featured extensively in a book "Inclusive Business Creation – Good Practice Compendium", which was published by the OECD and European Commission.³⁴

Dedicated Unit

The need for policy and programmes to focus on growth among female entrepreneurs also brought about a change of approach within the country's main development agency, Enterprise Ireland. In 2012, businesses headed by women accounted for just seven percent of the new high potential start-up businesses in which the agency invested.

That year the Female Entrepreneurship Unit was established within Enterprise Ireland with a target set to double the percentage of innovative new businesses with significant growth potential led by women.

Research was carried out to identify the main challenges faced by female entrepreneurs so that measures could be put in place to tackle the barriers identified. These included lack of role models, less access to finance and lower levels of risk taking, low self-confidence, a shortage of female networking opportunities and a lack of technical expertise.

A range of initiatives were put in place to respond to the identified needs – dedicated competitive funds to support female led businesses teams, including a female-only competitive start fund and a female-only feasibility fund. Identification and promotion of role models and sponsorship of events and awards have become an integral part of the unit's activities, as has supporting existing and new networks and the creation of a dedicated ambitious women section on Enterprise Ireland's corporate website.

Enterprise Ireland has also developed and facilitated a web-based networking programme for their female clients. It was launched in 2014.³⁵ In addition Enterprise Ireland has co-funded

³² www.goingforgrowth.com

³³ A ninth cycle got underway in 2017 supported by Enterprise Ireland and KPMG.

³⁴ <http://www.oecd.org/economy/inclusive-business-creation-good-practice-compendium-9789264251496-en.htm>

³⁵ Enterprise Ireland, January 24, 2014, press release: (<http://www.enterprise-ireland.com/en/news/pressreleases/2014-press-releases/enterprise-ireland-launches-first-online-networking-platform-for-female-entrepreneurs.html>)

four development programmes focused on optimising the business capabilities for women led businesses. Included among these is Going for Growth.³⁶

Results have indicated that female targeted initiatives have had a positive impact. In 2015, 21% of the businesses Enterprise Ireland invested in were run by women, three times the 2012 figure.³⁷

Still challenges

A report by a special committee in Ireland's parliament in July 2015 found that female-led enterprise is growing in Ireland and that the gap with male entrepreneurial start-ups is narrowing and that women entrepreneurs have responded strongly to programmes established for them and directed specifically towards them.³⁸

To further encourage more women entrepreneurs, the committee among other things recommended that tax concessions, increased funding, the promotion of female angel networks, the extension of maternity leave and a child care incentive be included with support to women by Enterprise Ireland.³⁹

³⁶ The other initiatives funded under EI's first Businesswomen 4 International Growth programme were Female Founders, run by the NDRC, <http://www.ndrc.ie/female-founders/> DCU Ryan Academy's High Fliers, <http://www.ryanacademy.ie/what-we-do/female-high-fliers-accelerator/> and CIT's Excel STEM programme, <http://www.rubiconcentre.ie/female-entrepreneurship/>

³⁷ Source: Enterprise Ireland.

³⁸ House of the Oireachtas, July 2015, Report on Key Issues for female entrepreneurs in Ireland and for their participation in the tech sector, (www.oireachtas.ie).

³⁹ Ibid.

2.5 DEVELOPMENT AGENCY SUPPORTS

Given that in Ireland men compared to women are more likely to be early stage entrepreneurs and owner managers of established businesses, it is interesting to note that women entrepreneurs have been the recipients of training, mentoring and networking support from their **Local Enterprise Offices**⁴⁰ (LEOs) to a slightly greater extent than have men over the last four years (Table 4). Accordingly, women relative to men are over represented among the LEO's clients in receipt of "soft" supports.

TABLE 4: LOCAL ENTERPRISE OFFICE SUPPORTS MEASURE 2 (TRAINING & MENTORING) 2012 -2015

Participants	Annual Number of Participants (Average 2012-15)	Percentage of Total
Male	11,470	43%
Female	15,347	57%
Total	26,820	100%

There has been little variation in each of the years 2012 to 2015 inclusive with the ratio of men to women receiving training, mentoring and other soft supports at a rate of 1:1.3. This situation continues the trend observed in the 2011 GEM report, when it was noted that female entrepreneurs accounted for more than half of all County Enterprise Board clients for Training and Mentoring Support (Measure 2) between 2007 and 2011.⁴¹ Accordingly, women compared to men continue to be over represented among those receiving "soft" supports from the Local Enterprise Offices.

Women entrepreneurs, however, are much less likely to have been awarded financial support from these same agencies over this period. The proportion of entrepreneurs receiving financial assistance that are women averaged 26% between 2012 and 2015 (inclusive) (Table 5).

TABLE 5: LOCAL ENTERPRISE OFFICE SUPPORTS MEASURE 1 (FINANCIAL SUPPORT) 2012-2015

Participants	Annual Number of Participants (Average 2012-15)	Percentage of Total
Male	660	74%
Female	235	26%
Total	895	100%

There has been little variation in each of the years 2012 to 2015 inclusive with the ratio of men to women receiving financial assistance at a rate of 2.8:1. This situation continues the trend observed in the 2011 GEM report, when it was noted that a lower proportion of female compared to male entrepreneurs received financial assistance from the CEBs between 2007 and 2011.⁴² Accordingly, women compared to men continue to be under-represented among those receiving financial support from the Local Enterprise Offices.

The eligibility criteria for those enterprises which the Local Enterprise Office will support financially, is set out on its website.⁴³ Among the eligibility criteria, which include job creation, there are certain priorities and restrictions. Among these are the following:

- Priority must be given to enterprises in the manufacturing or internationally traded services sectors, which over time can develop into strong export entities and graduate to the Enterprise Ireland portfolio;

⁴⁰ www.localenterprise.ie (Formally the Country Enterprise Boards).

⁴¹ An average of 52% over that five year period with little variation year on year.

⁴² The average percentage of clients that were female who received financial assistance (22%) was even lower in the years 2007 to 2011 inclusive than in more recent years.

⁴³ <https://www.localenterprise.ie/Discover-Business-Supports/Financial-Supports/Eligibility-Criteria/>

- Salary support may be offered to unique tourism services projects that are focused predominantly on generating revenues from overseas visitors and which do not give rise to deadweight and/or displacement in the local economy;
- This grant aid does not support those areas such as retail enterprises, personal services (e.g. hairdressers, gardeners, crèches etc.), professional services (accountants, doctors, solicitors etc.), construction/local building services, as this is considered to give rise to unacceptable deadweight (where the project would have proceeded anyway) and/or displacement (where the projects simply displace business from other players in the market).

Accordingly, a large part of the explanation for the lower ratio of female to male clients that have received financial support from their Local Enterprise Office, relates to the types of businesses that women are starting and have established. The majority of women are setting up businesses in consumer sectors, particularly services. This reflects the fact that the great majority of women in Ireland are employed in the services sector (90%); a greater proportion of female compared to male entrepreneurs are focused exclusively on the domestic market and a higher proportion do not expect to become an employer.

Microfinance Ireland has been established as a not-for-profit lender to deliver the Government's Microenterprise Loan Fund. Unsecured loans are available from €2,000 up to €25,000. The term is from 3 to 5 years. Most business sectors are eligible to apply, including those trading on the domestic market. Companies may be Sole Traders, Partnerships and Limited Companies with fewer than 10 employees and an annual turnover of less than €2 million. Loans may be used to fund the start-up of a business, the purchase of stock, equipment, machinery and business vehicles and are also available to established enterprises. Accordingly, the same eligibility criteria do not apply to Microfinance Ireland, as to its partners the Local Enterprise Offices.

Notwithstanding this difference, there is a great similarity between the proportion of male to female entrepreneurs that have been approved for support from Microfinance Ireland, since its establishment in 2012 to end September 2015 (Table 6), as have received financial assistance from the LEOs (Measure 1) during this period.

TABLE 6: MICROFINANCE IRELAND (2012 TO SEPTEMBER 2015)

Applications	Male Promoters	Female Promoters	Total
Total Applications Received	76%	24%	100%
Total Applications Approved	73%	27%	100%

The success of the ring fenced initiative by **Enterprise Ireland** to support a greater number of new female led start-ups in which the agency could invest has demonstrated that when responsibility is assigned, research undertaken, resources allocated, targets set and measured and a new range of blended supports introduced, positive outcomes result.

2012 marked a watershed for Enterprise Ireland. That year only 7% of new high potential start-up businesses in which the agency invested were led by women. Enterprise Ireland was determined that that number should increase. That determination was championed from the top of the organisation.

The approach has been highly successful with a strong upward trend in female led businesses receiving investment from Enterprise Ireland. The ring fenced competitions drew a higher number of female applicants than was expected. The agency was pleasantly surprised at both the number and the quality of the applications (Table 7). Total approvals have increased, so that the increase in the rate of female led businesses is not at the expense of male led businesses.

TABLE 7: EI HPSU APPROVED BUSINESSES BY GENDER

	Male led Businesses		Female led Businesses	
2012	89	91%	8	9%
2013	90	87%	14	13%
2014	84	82%	18	18%
2015	82	79%	23	21%
Average 2012-2015	86	85%	16	15%

The challenge for Enterprise Ireland now is to ensure that (i) the rate of strong, innovative export focused ventures led by women continues and that (ii) those that have been supported as *High Potential Start-ups* scale in the years ahead and fulfill the potential for growth that they were judged to have at an early stage.

SECTION 3

ENTREPRENEURSHIP IN THE UK⁴⁴

3.1 INTRODUCTION

The UK has been involved in GEM research since the very inception of the research consortium. The 2015 research cycle represented the 17th year that GEM research has been carried out in the UK. Given the particular interest in the UK at present, given the referendum result to begin negotiations to leave the European Union, this section gives an overview of entrepreneurial activity in the UK in 2015 and compares it to Ireland.

- In 2015 Ireland had a higher rate of early stage entrepreneurial activity, but a similar rate of established business owners among its adult population.
- In the UK the most entrepreneurial age group was among those aged 35-44, while in Ireland it was among those aged 45-54.
- In both countries it is those with the highest educational attainment levels that are engaged to the greatest extent in early stage entrepreneurial activity.
- In both countries similar rates are prevalent among the adult population in respect of those that perceive an entrepreneurial opportunity; those that perceive that they have the required skills to successfully start a new business; and that hold successful entrepreneurs in high regard.
- Entrepreneurs in the UK however less frequently expect to become an employer and have lower growth aspirations than is the case in Ireland.
- A higher rate of Irish entrepreneurs is focused on customers in export markets.

⁴⁴ The UK team is led by Professor Mark Hart, Aston University and Enterprise Research Centre and Professor Jonathan Levie, Hunter Centre for Entrepreneurship, University of Strathclyde. The Global Entrepreneurship Monitor United Kingdom 2015 Report was authored by Mark Hart, Karen Bonner, and Jonathan Levie. <https://www.enterpriseresearch.ac.uk/wp-content/uploads/2016/05/GEM-UK-2015-final-report.pdf>

3.2 OVERVIEW OF ENTREPRENEURIAL ACTIVITY

The UK GEM team carries out a very large adult population survey of almost 9,500 adults to derive the rates of entrepreneurial activity across the UK, which comprises England, Scotland, Wales and Northern Ireland.

Total early stage entrepreneurial activity in the UK was 6.9% in 2015. This rate was lower than the rate observed in 2014, but remains higher than the historical trend to 2010, which was very stable at close to 6%.

Early stage entrepreneurial activity in the UK was highest in England and lowest in Northern Ireland. Wales and Scotland had similar rates reflecting the average across the UK.

4.0% of the adult population in the UK reported that they were actively trying to start a business, while 2.9% were new business owners having started a business in the previous three and a half years.

5.3% of the adult population were the owner managers of established businesses.

There is a higher rate of early stage entrepreneurial activity in Ireland compared to the UK. This is driven by a higher rate of nascent entrepreneurs in Ireland (Table 8). When one considers the entrepreneurial activity of those who have actually set up businesses (new and established), however, the rate in both countries is similar.

TABLE 8: RATE OF ENTREPRENEURIAL ACTIVITY IN IRELAND AND THE UK

Country	Nascent Entrepreneurs	New Business Owners	Early Stage Entrepreneurial Activity	Established Owner Managers
Ireland	6.5%	3.0%	9.3%	5.6%
UK	4.0%	2.9%	6.9%	5.3%

In both the UK and Ireland the great majority of early stage entrepreneurs are responding to a perceived opportunity rather than starting a new business out of a sense of necessity, with no other options available for employment. 74% of early stage entrepreneurs in the UK and 80% in Ireland are motivated by opportunity.

3.3 DEMOGRAPHICS

In 2015 the rate of early stage entrepreneurial activity among men in the UK was 9.1%, while the rate among women was 4.8%. This represents a ratio of 1.9:1. In Ireland the rate of early stage entrepreneurial activity was higher than in the UK for both men (13.0%) and women (5.8%) but the ratio of men to women was wider (2.2:1), given the particularly high level of entrepreneurial activity reported among men in Ireland.

More or less the same rate of entrepreneurial activity is to be observed in Ireland as in the UK among those aged 35-44 (9.1% and 8.9%). This is the most entrepreneurially active age group in the UK, while in Ireland the rate is highest among those aged 45-54. The lowest level of entrepreneurial activity in the UK is among the youngest age group (18-24), while in Ireland it is among the oldest age group (55-64). Across all age groups, the rate of early stage entrepreneurial activity is higher in Ireland (Table 9).

TABLE 9: RATE OF ENTREPRENEURIAL ACTIVITY IN IRELAND AND THE UK BY AGE

Country	Aged 18-24	Aged 25-34	Aged 36-44	Aged 46-54	Aged 55-64
Ireland's rate of entrepreneurship	9.0%	8.4%	9.1%	12.5%	7.6%
UK's rate of entrepreneurship	3.9%	7.3%	8.9%	7.9%	5.4%

In both countries, it is those with the highest educational attainment levels that are the most entrepreneurial. A similar level can be observed in both countries among those with graduate education (11%). There is a general decline in the rates of entrepreneurial activity among the adult population as the educational attainment levels are lower. This decline in activity rates is particularly marked in the UK (Table 10).

TABLE 10: RATE OF ENTREPRENEURIAL ACTIVITY IN IRELAND AND THE UK BY EDUCATION

Country	Highest Educational Attainment Levels			
	Some secondary education	Completed secondary school	Post- secondary education	Graduate education
Ireland's rate of entrepreneurship	6.3%	8.5%	9.8%	11.1%
UK's rate of entrepreneurship	4.8%	5.2%	8.4%	11.1%

3.4 PERSONAL CONTEXT OF ADULT POPULATION

The personal context of individuals in the UK and Ireland, relevant to entrepreneurship, has several similarities.

- About one third of people report knowing someone who has recently set up a business in the UK and Ireland (30% and 33% respectively).
- Similar rates of individuals in the UK and in Ireland believe that they have the required skills and knowledge to successfully start a new business (44% and 45% respectively).

The perception of entrepreneurial opportunities is slightly higher in the UK (42%) than it is in Ireland (39%). Fear of failure inhibiting a person starting a new business is reported less frequently in the UK (37%) than it is in Ireland (41%).

The cultural perceptions among the general population concerning entrepreneurship are broadly similar in the UK and Ireland. This is evident in the rate among the adult population that considers entrepreneurship a good career choice, although this view is slightly more pervasive in the UK than it is in Ireland (58% and 53% respectively). Successful entrepreneurs are held in high regard in both countries with 79% and 80% respectively of the population according them high status. More than half the population in the UK and Ireland consider the media supportive of entrepreneurs. However, this view is less prevalent in the UK than it is in Ireland (61% and 67% respectively).

Informal investors are less prevalent in the UK compared to Ireland but those that invest in businesses started by others tend to invest more money individually than is the case in Ireland. About 2% of adults in the UK invested in this way in the last three years compared to double that rate in Ireland (4%). The majority of these investments would be to family and friends or to individuals already known to the informal investor. The average total amount invested by the informal investors in the past three years was €28,000 in the UK and €19,000 in Ireland.

3.5 IMPACT OF EARLY STAGE ENTREPRENEURIAL ACTIVITY

The economic impact of entrepreneurial activity is underpinned by the creation of employment and increased export sales.

There is a considerable difference in the employment impact of early stage entrepreneurial activity between the UK and Ireland. Entrepreneurs in the UK less frequently employ or expect to employ others, expecting to remain self-employed with no employees. The majority of entrepreneurs in both countries however expect to become employers (73% in the UK and 77% in Ireland). Among those entrepreneurs that expect to move beyond self-employment, the percentage of early stage entrepreneurs with significant growth aspirations is less in the UK than it is in Ireland (Table 11).

TABLE 11: EARLY STAGE ENTREPRENEURS EMPLOYMENT EXPECTATIONS IN IRELAND AND THE UK

Country	Any jobs now or any jobs expected in the next five years	Expects more than 5 employees in next five years	Expects more than 10 employees in next five years	Expects more than 20 employees in next five years
Ireland	77%	37%	26%	14%
UK	73%	22%	16%	9%

Reflecting the large size of their home market, 37% of early stage entrepreneurs in the UK do not currently have and do not expect to have customers in overseas markets. In Ireland there is a much higher export focus with only 22% of early stage entrepreneurs exclusively focused on the domestic market. The percentage of entrepreneurs whose businesses are born global, with more than 75% of their customers in other markets is tiny in both the UK and Ireland (3.3% and 5.6% respectively).

The great majority of new businesses are not highly innovative in that their product or service is already known in the marketplace and many businesses have the same product/service offering. This is true in both the UK and Ireland, although the rate is lower in Ireland.⁴⁵ In addition, although the rate is low in both countries, a higher rate of entrepreneurs in Ireland may be considered highly innovative (7.1% compared to 3.5% in the UK), accordingly to GEM's Market Expansion Index.⁴⁶ Moreover, fewer entrepreneurs in the UK report that their new business uses the very latest technology (8.8%) compared to entrepreneurs in Ireland (16.6%).

⁴⁵ 49% of early stage entrepreneurs in the UK report no attributes associated with innovation in the Market Expansion Index, compared to 39% in Ireland.

⁴⁶ GEM has created a market expansion index based on the perception of early stage entrepreneurs as to the relative novelty of their product/service, their relative number of competitors and whether the new business uses or expects to use the latest technology. Very few early stage entrepreneurs are within the very highest category.

3.6 OWNER MANAGERS OF ESTABLISHED BUSINESSES

The rate of owner managers of businesses, which have been established for more than three and a half years, is similar in the UK and Ireland (5.3% and 5.6% respectively). These owner managers tend to be older than early stage entrepreneurs. In both countries, more than 60% of owner managers of established businesses are aged between 45 and 64.

In GEM research employment creation is used as a proxy for growth. There is a similar percentage of owner managers in the UK and Ireland who expect to have ten or more employed within the next five years (5.4% and 5.1% respectively).

In the UK a very high rate of owner managers are focused exclusively on the home market with no customers outside the country (44%). A high domestic market focus was also observed among early stage entrepreneurs in the UK (37%) but it is even more marked among those with longer established businesses. In Ireland the rate of exclusive home market focus is much less. Among established owner managers it is 27%.

A high level of innovation among established owner managers is very much the exception and far below the rate it is reported among early stage entrepreneurs. 81% of owner managers in the UK are categorised as having the lowest innovation attributes in the Market Expansion Index. While still the majority of owner managers, the rate in Ireland is lower (69%).

3.7 GEM POLICY BRIEF: DEVELOPING A GREAT ENTERPRISE NATION

GEM policy briefs were published for the first time in 2016 from a select number of countries highlighting an initiative in that country which has had a dramatic effect of improving entrepreneurship. Professor Mark Hart of Aston University and Enterprise Research Centre and Professor Jonathan Levie of the Hunter Centre for Entrepreneurship at the University of Strathclyde of the GEM UK team wrote the policy brief that is reproduced below as an insight into policy thinking in the UK. It highlights in particular (i) the Small Business Charter, whereby Business Schools are encouraged to provide advice and training support to small businesses and (ii) the continued focus on the development of Business Angels.

UNITED KINGDOM - DEVELOPING A GREAT ENTERPRISE NATION

The GREAT campaign is a cross-Government initiative designed to deliver trade and tourism benefits to the UK by harnessing the best that Britain has to offer under a single brand and promoting its strengths to the world.

Following the Autumn Statement in November 2013, the UK Government launched the scheme Small Business: GREAT Ambition in December 2013 - a series of measures designed to make it easier for small businesses to expand which dovetail into the national initiative.

Earlier that year in May 2013 Lord Young published the report "Growing your business: A report on growing micro businesses"⁴⁷, following on from a report on entrepreneurship and start-ups published in May 2012. The report makes a number of policy recommendations for businesses employing less than 25 people, including:

- The establishment of a Small Business Charter and an award scheme to incentivise business schools to work alongside small business, both in an advisory capacity and through helping place students with small businesses.*
- A £30 million Growth Vouchers programme to fund "innovative approaches to help SMEs overcome behavioural barriers to increasing growth."*
- An increase in funding available for start-up loans to young people through the Start-up Loan Company (SULCo).*
- The introduction of a pilot scheme for SME Growth Loans as part of the Enterprise Finance Guarantee Scheme.*
- £100 million of new funding to SMEs from the Business Finance Partnership.*
- A new "single market" commitment to ensure a simple and consistent approach is taken across public sector procurement. Government will consult public sector bodies and will make this a legal requirement.*

Two recent initiatives are worth highlighting are the Small Business Charter⁴⁸ and A Nation of Angels.

The Small Business Charter

Launched in 2014 the Small Business Charter (SBC) brings together world-class business schools and SME & Start-Up communities across the UK to create sustainable economic growth. The SBC awards business schools for excellence in supporting SMEs and creates a framework for them to provide small businesses with nationally recognised programmes of expert advice and training to help their business grow. In order to achieve a Small Business Charter award, business schools undergo a rigorous assessment process to validate their business engagement and business support. Currently, 31 business schools in the country have earned a Small Business Charter Award.

With 5.4 million SMEs trading across the UK, the network of business schools awarded with a Small Business Charter are ideally placed to provide growth, enterprise and entrepreneurship support to help maximise SMEs' productivity and their contribution to the UK Economy.

⁴⁷ Lord Young, "Growing your business: A report on growing micro businesses", May 2013.

⁴⁸ <http://smallbusinesscharter.org/>

Through the Small Business Charter SMEs can access business school programmes to help them develop world-class management practice, tailored growth strategies and business plans.

Working collaboratively, the SBC and business schools deliver a number of programmes where practical business education is provided to SMEs in an effective peer learning environment. SMEs are guided through real business problems in a pragmatic manner. Models and techniques are taught in a concise time-efficient style and the SME participants immediately apply these models and techniques in facilitated break-out sessions. The programme attendees establish a network of like-minded individuals who sustain knowledge sharing and collaboration across the established cohorts.

The Small Business Charter business schools and the SME & Start-Up communities establish valuable networks to share best practice, disseminate information and maximise the value of UK SME enterprises.

The Small Business Charter collaborates with a number of stakeholders – SMEs, Start-Ups, Universities, Higher Education and Further Education Students, Entrepreneurs, the Westminster Government, and Devolved Nations' Governments.

A Nation of Angels

In a European context, the UK business angel market is seen as one of the most mature and extensively researched. A recent study of the UK angel market⁴⁹ has highlighted recent Government initiatives to provide tax incentives for angel investment through the Enterprise Investment Scheme (EIS), for individual investors in higher-risk small companies, and the Seed Enterprise Investment Scheme (SEIS) for individual investors in small, early stage companies.

Almost 9 out of 10 angel investors have invested either through the EIS or the SEIS and around 80% of the total investments in angels' investment portfolios were made under these schemes with over half (55%) investing in EIS and a quarter (24%) investing in SEIS. The increased awareness of and use of these schemes in recent years might suggest a changing attitude to risk and it has been the existence and extension of these schemes that have encouraged angels to keep investing in turbulent economic conditions.

⁴⁹ Wright, M; Hart, M and Fu, K (2015) "A Nation of Angels: assessing the impact of angel investing across the UK", ERC, UKBAA and CfE.

SECTION 4

INTERNATIONAL COMPARATIVE DATA ON ENTREPRENEURSHIP IN 2015

TABLE A - RATES OF ENTREPRENEURSHIP

	Aspiring entrepreneurs	Nascent entrepreneurs	New business owners	Early stage entrepreneurs (TEA)	Owner managers of established businesses
	% of Adults	% of Adults	% of Adults	% of Adults	% of Adults
Europe					
Belgium	12.6	4.5	2.0	6.2	3.8
Bulgaria	6.4	1.9	1.5	3.5	5.4
Croatia	20.9	5.1	2.6	7.7	2.8
Estonia	19.0	8.7	4.7	13.1	7.7
Finland	13.3	4.0	2.7	6.6	10.2
Germany	9.2	2.8	1.9	4.7	4.8
Greece	10.7	3.9	2.8	6.7	13.1
Hungary	17.0	5.3	2.7	7.9	6.5
Ireland	18.5	6.5	3.0	9.3	5.6
Italy	9.6	3.2	1.7	4.9	4.5
Latvia	23.5	8.6	6.0	14.1	9.6
Luxembourg	19.1	7.1	3.2	10.2	3.3
Macedonia	24.4	3.0	3.1	6.1	5.9
Netherlands	11.1	4.3	3.0	7.2	9.9
Norway	6.1	2.3	3.3	5.7	6.5
Poland	22.4	5.7	3.5	9.2	5.9
Portugal	18.7	5.6	4.0	9.5	7.0
Romania	31.1	6.1	5.1	10.8	7.5
Slovakia	18.8	6.5	3.4	9.6	5.7
Slovenia	10.0	3.2	2.8	5.9	4.2
Spain	6.1	2.1	3.6	5.7	7.7
Sweden	10.0	4.8	2.6	7.2	5.2
Switzerland	9.5	4.6	2.8	7.3	11.3
United Kingdom	9.4	4.0	2.9	6.9	5.3
Average in Europe	14.9	4.8	3.1	7.8	6.6
Canada & USA					
Canada	17.4	9.7	5.5	14.7	8.8
USA	17.1	8.3	4.0	11.9	7.3

TABLE B - RATES OF INTRAPRENEURSHIP

	Intrapreneur in past 3 years % of Adults	Intrapreneur in past 3 years % of Adults in in Employment	Intrapreneur now % of Adults	Intrapreneur now % of Adults in in Employment
Europe				
Belgium	6.1	9.5	5.0	7.7
Bulgaria	0.4	0.5	0.4	0.5
Croatia	4.9	9.7	4.2	8.2
Estonia	6.3	8.4	5.2	7.0
Finland	5.8	8.9	4.7	7.2
Germany	4.5	6.6	3.3	4.9
Greece	1.0	2.7	0.9	2.2
Hungary	2.1	3.1	1.8	2.6
Ireland	6.6	10.5	5.8	9.1
Italy	1.4	3.7	1.3	3.5
Latvia	3.3	5.1	2.5	3.9
Luxembourg	6.4	9.4	4.4	6.3
Macedonia	2.3	5.3	1.5	3.6
Netherlands	6.3	8.7	4.4	6.1
Norway	9.9	12.1	8.0	9.7
Poland	4.0	7.1	3.3	5.8
Portugal	4.0	6.9	3.3	5.8
Romania	4.6	7.4	3.3	5.2
Slovakia	3.6	6.0	3.1	5.1
Slovenia	5.6	9.5	4.6	7.8
Spain	1.1	2.5	1.0	2.2
Sweden	6.4	8.0	4.6	5.7
Switzerland	6.5	9.2	5.4	7.7
United Kingdom	4.1	12.0	3.3	9.6
Average in Europe	4.5	7.2	3.5	5.7
Canada & USA				
Canada	7.1	10.1	5.2	7.4
USA	7.0	10.2	5.4	8.0

TABLE C - AGE: EARLY STAGE ENTREPRENEURS

	TEA rate for adult population Age 18-24 years %	TEA rate for adult population Age 25-34 years %	TEA rate for adult population Age 35-44 years %	TEA rate for adult population Age 45-54 years %	TEA rate for adult population Age 55-64 years %	Early stage entrepreneurs Age 18-24 years %	Early stage entrepreneurs Age 25-34 years %	Early stage entrepreneurs Age 35-44 years %	Early stage entrepreneurs Age 45-54 years %	Early stage entrepreneurs Age 55-64 years %
Europe										
Belgium	3.4	9.9	9.0	5.0	2.9	8	33	31	19	9
Bulgaria	4.4	3.8	4.9	3.8	0.9	17	23	31	23	6
Croatia	8.0	10.8	10.5	6.4	3.0	14	31	28	19	8
Estonia	14.7	21.5	17.1	7.3	4.6	14	38	29	12	7
Finland	5.2	8.6	9.7	5.2	4.4	11	27	29	18	15
Germany	4.6	6.3	5.0	5.4	2.0	13	25	23	30	9
Greece	2.9	7.3	6.9	9.9	5.7	7	26	23	29	14
Hungary	6.7	10.3	9.2	7.8	5.0	12	27	28	19	13
Ireland	9.0	8.4	9.1	12.5	7.6	12	24	24	27	13
Italy	5.9	6.8	5.1	3.9	3.4	14	26	26	20	14
Latvia	16.0	22.3	17.6	9.6	4.2	15	37	27	15	6
Luxembourg	9.0	12.1	11.4	10.0	7.2	11	27	26	23	12
Macedonia	5.3	9.1	8.7	5.3	0.7	14	35	31	18	2
Netherlands	7.3	9.7	7.8	7.2	4.2	14	26	22	26	12
Norway	n/a	7.3	6.4	7.6	5.2	n/a	28	25	30	17
Poland	9.9	13.1	10.6	8.3	3.9	14	34	26	17	9
Portugal	7.5	12.2	11.4	9.0	6.0	10	28	29	21	13
Romania	14.2	13.6	14.0	6.0	6.2	18	27	33	10	12
Slovakia	12.1	12.7	12.8	7.3	3.5	17	31	30	16	7
Slovenia	2.8	11.4	6.8	5.0	2.0	5	42	26	19	7
Spain	3.4	7.1	8.4	5.0	2.2	6	27	40	21	7
Sweden	5.6	9.3	7.3	7.0	6.0	12	28	22	21	17
Switzerland	3.1	8.8	9.7	7.9	4.9	6	26	30	26	13
United Kingdom	3.9	7.3	8.9	7.9	5.4	9	23	29	25	15
Average in Europe	7.2	10.4	9.5	7.1	4.2	12	29	28	21	11
Canada & USA										
Canada	18.2	16.6	15.8	14.5	9.5	18	23	22	24	13
USA	10.2	13.8	16.7	10.6	7.4	13	25	30	21	12

TABLE D - EDUCATION: EARLY STAGE ENTREPRENEURS

	TEA rate for adult population with some secondary school as highest qualification %	TEA rate for adult population with completed secondary school as highest qualification %	TEA rate for adult population with post- secondary as highest qualification %	TEA rate for adult population with graduate education as highest qualification %
Europe				
Belgium	1.7	4.5	6.3	12.9
Bulgaria	0.7	3.1	5.3	4.7
Croatia	0.8	9.1	9.8	10.7
Estonia	10.7	10.7	16.8	15.6
Finland	1.9	6.8	8.5	6.3
Germany	3.4	3.9	6.5	n/a
Greece	1.2	5.8	10.1	7.7
Hungary	4.8	8.6	9.4	12.3
Ireland	6.3	8.5	9.8	11.1
Italy	4.1	5.3	n/a	5.6
Latvia	4.7	13.3	17.7	15.4
Luxembourg	7.0	6.9	11.7	15.6
Macedonia	3.0	6.0	7.6	10.1
Netherlands	11.7	5.7	2.5	9.3
Norway	1.5	5.1	7.1	n/a
Poland	6.1	6.9	11.8	n/a
Portugal	6.8	9.8	11.7	14.5
Romania	2.5	10.6	11.7	22.2
Slovakia	7.5	7.1	15.6	10.9
Slovenia	2.8	5.8	7.4	6.3
Spain	2.3	5.3	8.6	14.4
Sweden	4.6	6.0	8.6	9.3
Switzerland	1.5	6.9	8.3	13.6
United Kingdom	4.8	5.2	8.4	11.1
Average in Europe	4.3	7.0	9.6	10.4
Canada & USA				
Canada	13.6	10.6	14.9	19.6
USA	5.4	8.9	13.3	14.1

TABLE E - MOTIVES: EARLY STAGE ENTREPRENEURS

	TEA rate for those motivated by opportunity % of Adults	TEA rate for those motivated by necessity % of Adults	Early stage entrepreneurs motivated by opportunity %	Early stage entrepreneurs motivated by necessity %	Early stage entrepreneurs motives not given %	Early stage entrepreneurs primarily motivated by increasing income %	Early stage entrepreneurs primarily motivated by being independent %	Early stage entrepreneurs primarily motivated by mixed motivations %	Early stage entrepreneurs primarily motivated by non-opportunity (either necessity or maintaining income) %
Europe									
Belgium	3.8	1.7	60	27	12	33	17	10	39
Bulgaria	2.3	1.2	67	33	0	12	17	33	38
Croatia	4.6	3.1	59	40	1	28	13	10	49
Estonia	11.1	1.8	85	14	2	30	28	26	16
Finland	5.3	1.0	80	15	5	25	41	10	24
Germany	3.8	0.8	80	17	3	27	39	8	27
Greece	5.1	1.5	75	22	2	20	15	37	27
Hungary	5.7	1.8	72	23	5	30	23	14	32
Ireland	7.4	1.8	80	19	1	25	14	36	25
Italy	3.6	0.9	75	19	7	16	16	44	23
Latvia	11.4	2.4	81	17	2	32	20	27	20
Luxembourg	8.8	0.9	86	9	4	21	34	29	16
Macedonia	2.6	3.2	42	52	6	18	10	14	58
Netherlands	5.9	1.1	82	15	4	38	30	12	21
Norway	4.6	0.6	82	11	8	48	24	13	15
Poland	6.4	2.6	69	28	3	18	29	18	34
Portugal	7.0	2.3	74	24	2	24	12	28	36
Romania	7.5	3.0	69	28	3	16	18	34	32
Slovakia	6.6	3.0	68	31	1	26	26	15	33
Slovenia	4.3	1.4	73	24	3	16	31	26	27
Spain	4.2	1.4	74	25	2	21	25	25	29
Sweden	5.5	0.7	77	9	14	37	24	27	12
Switzerland	6.2	0.7	85	10	5	23	46	16	15
United Kingdom	5.2	1.7	74	24	2	27	25	17	31
Average in Europe	5.8	1.7	74	22	4	25	24	22	28
Canada & USA									
Canada	11.9	2.0	81	14	5	34	25	21	20
USA	9.8	1.7	82	14	3	42	29	9	20

TABLE F - SECTOR OF ACTIVITY: EARLY STAGE ENTREPRENEURS

	Extractive Sectors	Transformative Sectors ¹	Business Service Sectors ²	Consumer Service Sectors ³	Early stage entrepreneurs in high or medium technology sectors only ⁴
	%	%	%	%	%
Europe					
Belgium	3	19	29	49	16
Bulgaria	5	36	9	50	3
Croatia	17	24	24	36	4
Estonia	7	30	28	36	7
Finland	9	21	32	39	8
Germany	4	17	27	53	9
Greece	12	22	19	47	1
Hungary	13	27	13	48	4
Ireland	5	18	30	47	8
Italy	8	16	22	54	4
Latvia	11	36	20	34	7
Luxembourg	3	16	39	42	8
Macedonia	17	34	12	36	5
Netherlands	5	18	34	42	9
Norway	9	19	37	35	6
Poland	2	37	25	36	5
Portugal	3	19	19	60	5
Romania	24	19	18	39	3
Slovakia	4	27	34	34	6
Slovenia	10	26	20	44	6
Spain	5	15	29	51	8
Sweden	9	12	33	46	8
Switzerland	3	22	32	42	10
United Kingdom	2	21	35	42	12
Average in Europe	8	23	26	43	7
Canada & USA					
Canada	4	20	25	52	6
USA	3	17	33	47	6

1 Includes construction, manufacturing, transport, wholesale, utilities.

2 Includes finance, insurance, real estate, all business services.

3 Includes retail, motor, lodgings, restaurants, personal services, health, education, recreation.

4 OECD classifications of sectors.

TABLE G - EXITS AND REASONS FOR EXITS¹

	Individuals that exited in last 12 months and Business CONTINUED % of Adults	Individuals that exited in last 12 months and Business DISCONTINUED % of Adults	Opportunity to sell the business %	Business was not profitable %	Problems getting finance %	Found another job or business opportunity %	Exit was planned in advance %	Retirement %	Reason of personal nature %	Consequence of single incident %	Government/ tax policy/ bureaucracy %
Europe											
Belgium	0.9	0.9	10	26	2	20	2	0	35	0	6
Bulgaria	0.3	1.2	4	48	15	11	0	0	18	0	4
Croatia	1.2	1.7	0	16	21	6	1	8	17	0	31
Estonia	0.6	1.4	3	33	5	15	5	0	23	0	15
Finland	1.2	1.5	0	22	0	18	14	14	24	2	6
Germany	0.6	1.3	8	31	14	4	4	6	27	3	3
Greece	0.4	3.0	0	70	4	0	0	13	11	2	0
Hungary	0.7	2.1	5	27	17	13	6	2	11	2	17
Ireland	1.0	2.1	2	42	11	12	6	2	17	0	7
Italy	0.5	1.4	10	34	18	0	0	0	18	2	17
Latvia	1.0	2.5	9	42	7	4	7	0	16	2	12
Luxembourg	1.2	2.9	4	24	11	13	9	7	22	5	5
Macedonia	0.2	2.1	2	23	28	5	0	2	4	11	26
Netherlands	0.4	1.7	0	51	5	22	1	5	14	0	2
Norway	0.5	1.1	9	21	13	16	6	2	23	7	3
Poland	0.5	2.1	0	31	2	16	4	14	2	6	24
Portugal	0.9	2.3	3	55	13	0	4	2	21	0	3
Romania	0.7	2.6	1	48	11	8	2	0	21	4	5
Slovakia	1.9	3.5	3	33	10	17	3	1	19	7	7
Slovenia	0.6	1.1	0	35	15	9	0	23	15	0	3
Spain	0.5	1.1	1	48	10	13	1	10	13	0	4
Sweden	0.7	1.9	6	23	2	15	17	2	18	6	11
Switzerland	0.7	1.0	11	0	4	8	4	4	19	0	50
United Kingdom	0.8	1.5	3	25	5	27	6	5	22	4	4
Average in Europe	0.8	1.8	4	34	10	11	4	5	18	3	11
Canada & USA											
Canada	2.3	2.7	13	20	4	13	6	6	26	3	9
USA	1.4	2.2	5	30	4	15	5	1	27	4	8

¹ Reasons relate to businesses that were discontinued

TABLE H - PERSONAL CONTEXT OF GENERAL POPULATION

	Know a recent entrepreneur¹ % of Adults	Opportunities in local area² % of Adults	Skills & knowledge to start-up % of Adults	Fear of failure prevent start-up % of Adults
Europe				
Belgium	17	40	32	50
Bulgaria	40	16	35	43
Croatia	25	22	48	45
Estonia	39	51	44	47
Finland	45	49	37	40
Germany	24	38	36	47
Greece	28	14	47	64
Hungary	31	25	39	44
Ireland	33	39	45	41
Italy	28	26	31	62
Latvia	33	35	49	43
Luxembourg	36	48	44	48
Macedonia	35	38	54	44
Netherlands	32	48	41	38
Norway	31	69	31	31
Poland	43	33	56	58
Portugal	28	28	49	45
Romania	32	33	46	49
Slovakia	37	26	52	41
Slovenia	37	21	49	40
Spain	34	26	45	43
Sweden	39	70	37	42
Switzerland	29	42	44	37
United Kingdom	30	42	44	37
Average in Europe	33	37	43	45
Canada & USA				
Canada	32	53	50	43
USA	30	47	56	32

1 Knows someone who has started a business in the past 2 years.

2 Opportunities to start a business in the next six months (July 2014-December 2014).

TABLE I - 'CULTURE': PERCEPTIONS OF GENERAL POPULATION

	Entrepreneurship is a good career choice	Success at entrepreneurship has high status	Supportive media coverage of entrepreneurs
	% of Adults	% of Adults	% of Adults
Europe			
Belgium	54	55	55
Bulgaria	58	72	49
Croatia	61	42	47
Estonia	53	63	49
Finland	33	85	68
Germany	51	76	50
Greece	61	68	38
Hungary	48	68	33
Ireland	53	80	67
Italy	61	69	49
Latvia	58	58	55
Luxembourg	44	69	44
Macedonia	67	57	71
Netherlands	79	65	58
Norway	n/a	n/a	n/a
Poland	60	56	51
Portugal	63	63	72
Romania	72	75	67
Slovakia	51	64	54
Slovenia	54	70	60
Spain	53	48	47
Sweden	53	70	61
Switzerland	40	67	60
United Kingdom	58	79	61
Average in Europe	56	66	55
Canada & USA			
Canada	n/a	n/a	n/a
USA	n/a	n/a	n/a

TABLE J - INFORMAL INVESTORS

	Informal investors¹ % of Adult	Total invested² Euros
Europe		
Belgium	2.8	23,600
Bulgaria	2.5	5,000
Croatia	3.0	23,100
Estonia	6.8	350
Finland	3.8	23,200
Germany	3.9	26,200
Greece	3.5	50,400
Hungary	4.7	8,200
Ireland	4.0	19,000
Italy	1.9	79,800
Latvia	7.8	7,100
Luxembourg	7.0	33,900
Macedonia	4.1	12,700
Netherlands	3.8	34,900
Norway	2.6	42,800
Poland	4.6	6,600
Portugal	2.2	32,300
Romania	5.2	18,300
Slovakia	8.5	12,200
Slovenia	3.6	13,500
Spain	3.3	17,700
Sweden	6.3	19,000
Switzerland	5.8	39,700
United Kingdom	2.2	28,000
Average in Europe	4.3	24,100
Canada & USA		
Canada	7.1	32,400
USA	6.0	33,700

1 Provided funds for a new business in the past three years.

2 Exchange rate US\$1.11023 to Euro.

TABLE K - GROWTH ASPIRATIONS: EARLY STAGE ENTREPRENEURS

	TEA rate with any jobs now or any jobs expected in 5 years % of Adults	TEA rate expect 20 or more jobs within 5 years % of Adults	Expect any jobs now or any jobs expected within 5 years %	Expect more than 5 employees within 5 years %	Expect 10 or more employees within 5 years %	Expect 20 or more employees within 5 years %
Europe						
Belgium	4.1	0.3	64	23	13	4
Bulgaria	2.2	0.1	64	9	6	1
Croatia	6.3	0.8	82	34	24	11
Estonia	10.6	1.7	81	33	22	13
Finland	4.2	0.6	64	18	14	10
Germany	3.5	0.6	75	29	15	13
Greece	5.0	0.2	74	10	4	3
Hungary	6.4	1.3	80	36	24	16
Ireland	7.1	1.3	77	37	26	14
Italy	3.0	0.0	62	9	4	0
Latvia	10.9	2.0	77	36	27	14
Luxembourg	6.2	0.4	61	16	8	4
Macedonia	4.6	0.8	75	27	16	13
Netherlands	4.7	0.9	66	24	16	13
Norway	3.3	0.7	59	25	12	12
Poland	7.3	0.9	79	34	20	10
Portugal	7.2	0.6	76	24	12	6
Romania	9.1	1.9	84	45	31	18
Slovakia	7.2	1.5	75	33	25	16
Slovenia	4.6	0.6	77	24	14	9
Spain	3.5	0.1	61	15	6	2
Sweden	4.7	0.6	65	18	14	8
Switzerland	5.3	0.6	72	25	17	8
United Kingdom	4.6	0.6	73	22	16	9
Average in Europe	5.6	0.8	72	25	16	9
Canada & USA						
Canada	10.9	2.3	74	29	19	16
USA	9.5	2.0	80	36	25	17

TABLE L - INTERNATIONAL ORIENTATION: EARLY STAGE ENTREPRENEURS

	TEA rate expecting more than 50% of customers outside country % of Adults	Expecting more than 50% of customers outside country %	Expecting no customers outside country %	Expecting 1-25% customers outside country %	Expecting 26-75% customers outside country %	Expecting 26-75% customers outside country %
Europe						
Belgium	0.8	12	18	59	14	9
Bulgaria	0.2	6	71	21	5	3
Croatia	2.1	27	10	53	24	14
Estonia	1.6	13	38	42	10	10
Finland	0.3	5	38	54	4	3
Germany	0.8	17	44	31	14	11
Greece	0.9	13	34	43	15	8
Hungary	0.8	10	42	40	14	5
Ireland	1.7	18	22	51	22	6
Italy	0.4	9	51	32	12	4
Latvia	1.7	12	42	38	11	9
Luxembourg	2.0	20	18	42	25	15
Macedonia	0.5	8	68	15	12	4
Netherlands	0.8	11	46	34	12	8
Norway	0.3	5	81	12	2	5
Poland	0.4	5	60	30	8	3
Portugal	1.4	14	18	56	20	6
Romania	1.0	9	40	38	17	5
Slovakia	1.1	12	15	64	15	6
Slovenia	1.3	22	35	31	17	17
Spain	0.2	4	79	15	4	2
Sweden	0.8	11	38	44	10	8
Switzerland	1.6	22	23	39	26	12
United Kingdom	0.8	12	37	45	15	3
Average in Europe	1.0	12	40	39	14	7
Canada & USA						
Canada	2.6	18	17	55	21	7
USA	0.6	5	16	73	9	2

TABLE M – INNOVATIVENESS: EARLY STAGE ENTREPRENEURS

	Product/service is new to none of our customers %	Product/service is new to some of our customers %	Product/service is new to all of our customers %	Many businesses offer the same product/service %	Few businesses offer the same product/service %	No businesses offer the same product/service %	Businesses uses no new technology %	Businesses uses new technology (available 1-5 years) %	Businesses uses the very latest technology (available less than 1 year) %
Europe									
Belgium	44	32	24	44	49	7	64	23	14
Bulgaria	86	12	3	71	29	0	44	27	29
Croatia	72	19	9	50	43	7	33	34	33
Estonia	47	40	13	44	47	9	61	24	16
Finland	58	27	15	65	29	6	80	16	4
Germany	51	36	13	42	49	8	73	19	7
Greece	61	26	14	54	43	2	60	28	12
Hungary	64	25	11	63	25	12	80	11	9
Ireland	45	40	16	25	51	24	57	27	17
Italy	34	37	29	66	30	3	53	26	21
Latvia	59	31	9	49	43	7	83	14	3
Luxembourg	35	52	13	38	51	11	61	24	15
Macedonia	65	30	6	60	31	9	58	19	23
Netherlands	58	21	21	56	34	10	63	23	14
Norway	80	16	4	55	28	17	86	7	6
Poland	39	44	17	67	30	3	76	16	8
Portugal	66	29	5	49	42	8	72	20	8
Romania	56	28	16	51	37	13	56	28	16
Slovakia	52	34	13	62	37	1	44	27	29
Slovenia	52	27	20	47	40	13	73	17	10
Spain	66	24	11	58	34	9	70	18	12
Sweden	55	36	9	49	43	8	74	18	8
Switzerland	47	36	17	47	41	12	73	20	7
United Kingdom	46	34	20	47	40	13	70	21	9
Average in Europe	56	31	14	53	39	9	65	21	14
Canada & USA									
Canada	43	39	18	45	43	12	69	19	12
USA	53	33	14	41	44	15	74	16	10

TABLE N - MARKET EXPANSION INDEX: EARLY STAGE ENTREPRENEURS

	Market Expansion Impact Index (1: Low) %	Market Expansion Impact Index (2) %	Market Expansion Impact Index (3) %	Market Expansion Impact Index (4: High) %
Europe				
Belgium	43	43	12	2
Bulgaria	65	6	28	1
Croatia	51	16	30	2
Estonia	47	38	11	4
Finland	70	27	3	1
Germany	57	36	4	3
Greece	65	23	10	2
Hungary	66	25	6	3
Ireland	39	44	10	7
Italy	50	29	15	6
Latvia	68	29	3	0
Luxembourg	42	44	11	4
Macedonia	60	17	20	3
Netherlands	58	28	8	5
Norway	67	26	5	2
Poland	63	29	6	2
Portugal	67	26	6	2
Romania	58	26	10	6
Slovakia	51	20	28	1
Slovenia	58	32	6	4
Spain	64	24	9	3
Sweden	61	31	6	2
Switzerland	51	42	6	2
United Kingdom	49	43	5	4
Average in Europe	57	29	11	3
Canada & USA				
Canada	50	37	8	5
USA	56	34	7	3

TABLE 0 - AGE AND EDUCATION: ESTABLISHED OWNER MANAGERS

	Owner managers of established businesses Age 18-24 years	Owner managers of established businesses Age 25-34 years	Owner managers of established businesses Age 35-44 years	Owner managers of established businesses Age 45-54 years	Owner managers of established businesses Age 55-64 years	Owner managers rate for those with some secondary education as highest qualification %	Owner managers rate for those with completed secondary education as highest qualification %	Owner managers rate for those with post-secondary education as highest qualification %	Owner managers rate for those with graduate education as highest qualification %
Europe									
Belgium	2	14	27	36	21	1.5	3.7	4.1	4.7
Bulgaria	0	16	25	31	28	1.7	5.4	7.2	6.1
Croatia	5	26	29	17	22	0.9	3.3	3.2	5.5
Estonia	3	15	22	33	26	1.0	7.0	8.8	10.4
Finland	0	17	24	33	25	12.9	9.9	9.4	10.0
Germany	1	9	32	37	22	2.6	4.6	7.4	n/a
Greece	7	9	24	32	28	8.6	10.6	15.1	15.2
Hungary	6	15	26	24	29	3.4	5.7	9.3	13.6
Ireland	1	11	27	33	29	3.9	6.1	5.7	5.5
Italy	3	15	27	33	22	4.6	4.5	n/a	5.7
Latvia	2	14	28	32	24	2.0	8.6	9.6	16.0
Luxembourg	3	7	30	40	20	4.4	3.1	2.3	4.6
Macedonia	9	16	29	30	16	n/a	5.4	6.6	18.0
Netherlands	1	13	24	42	20	13.0	8.9	7.8	7.6
Norway	1	16	23	34	26	9.0	6.6	5.9	n/a
Poland	2	18	32	24	23	2.0	5.6	6.8	n/a
Portugal	2	14	30	30	25	6.0	6.6	7.6	13.7
Romania	6	20	31	22	21	3.4	6.2	10.5	11.1
Slovakia	1	22	28	28	21	5.0	7.1	7.8	15.2
Slovenia	1	10	27	41	21	5.4	2.7	5.1	7.8
Spain	1	9	29	36	26	6.9	7.3	9.6	7.5
Sweden	2	10	20	29	39	4.8	3.9	6.4	8.7
Switzerland	0	12	24	38	26	5.6	8.1	15.1	27.1
United Kingdom	1	11	28	32	28	5.6	4.6	5.5	4.8
Average in Europe	2	14	27	32	25	5.0	6.1	7.7	10.4
Canada & USA									
Canada	1	13	17	43	25	6.0	7.8	8.1	13.8
USA	2	15	19	38	25	8.8	4.7	6.7	12.4

TABLE P - SECTOR OF ACTIVITY: ESTABLISHED OWNER MANAGERS

	Extractive Sectors	Transformative Sectors	Business Service Sectors	Consumer Service Sectors	Owner manager in high or medium technology sectors only
	%	%	%	%	%
Europe					
Belgium	12	16	38	35	11
Bulgaria	8	34	2	57	1
Croatia	15	37	17	31	7
Estonia	12	32	30	26	6
Finland	21	31	29	19	6
Germany	4	19	30	47	6
Greece	12	28	15	45	5
Hungary	10	23	29	38	8
Ireland	12	29	24	35	6
Italy	8	28	34	29	15
Latvia	22	32	18	28	6
Luxembourg	5	19	50	26	13
Macedonia	15	36	14	36	4
Netherlands	20	28	22	30	7
Norway	20	18	30	32	8
Poland	11	35	27	27	11
Portugal	9	21	29	41	6
Romania	21	27	19	33	2
Slovakia	1	42	24	33	6
Slovenia	10	35	28	28	9
Spain	12	24	23	40	7
Sweden	13	17	32	38	3
Switzerland	17	20	28	34	9
United Kingdom	7	30	28	36	9
Average in Europe	12	28	26	34	7
Canada & USA					
Canada	8	24	39	29	14
USA	7	20	40	34	7

TABLE Q - GROWTH ASPIRATIONS AND INTERNATIONAL ORIENTATION: ESTABLISHED OWNER MANAGERS

	Expect 10 or more jobs within 5 years and jobs growth of at least 50% %	No customers outside country %	1-25% customers outside country %	26-75% customers outside country %	76-100% customers outside country %
Europe					
Belgium	4.4	27	51	16	6
Bulgaria	0.0	57	35	2	6
Croatia	9.3	13	44	35	8
Estonia	5.8	39	41	7	13
Finland	3.5	46	48	4	2
Germany	5.0	49	35	12	3
Greece	0.0	48	40	5	6
Hungary	3.5	46	35	11	7
Ireland	5.1	27	50	13	9
Italy	0.8	49	41	7	4
Latvia	3.5	52	27	14	7
Luxembourg	4.5	6	54	25	15
Macedonia	5.1	56	22	12	10
Netherlands	1.7	53	34	4	9
Norway	5.8	81	14	2	4
Poland	9.2	55	30	9	6
Portugal	3.9	16	65	14	6
Romania	10.6	48	36	13	3
Slovakia	6.1	29	47	13	11
Slovenia	3.6	40	30	21	10
Spain	1.3	81	14	3	2
Sweden	2.8	58	32	8	2
Switzerland	2.8	13	64	14	8
United Kingdom	5.8	44	44	7	5
Average in Europe	4.3	43	39	11	7
Canada & USA					
Canada	6.9	25	60	10	5
USA	6.8	15	77	3	5

TABLE R - INNOVATIVENESS: ESTABLISHED OWNER MANAGERS

	Product/service is new to none of our customers %	Product/service is new to some of our customers %	Product/service is new to all of our customers %	Many businesses offering the same product/service %	Few businesses offering the same product/service %	No businesses offering the same product/service %	Business uses no new technology %	Business uses new technology (available 1-5 years) %	Business uses very latest technology (available less than 1 year) %
Europe									
Belgium	65	22	13	59	31	10	89	5	6
Bulgaria	87	9	4	82	17	1	84	15	1
Croatia	75	14	11	59	29	11	49	24	27
Estonia	55	30	15	57	34	9	88	7	5
Finland	67	26	7	74	22	4	94	5	1
Germany	75	20	5	64	33	3	95	3	3
Greece	83	11	5	64	35	0	84	10	6
Hungary	83	14	3	77	21	2	94	5	1
Ireland	64	28	8	50	41	9	79	20	1
Italy	30	45	25	74	23	4	82	13	5
Latvia	74	20	6	65	28	7	97	3	0
Luxembourg	47	37	16	60	35	4	84	12	5
Macedonia	88	10	2	80	15	6	66	15	19
Netherlands	80	13	7	65	32	4	86	9	5
Norway	88	11	1	59	27	14	97	3	0
Poland	50	36	14	76	21	3	88	11	2
Portugal	86	13	1	71	29	0	92	7	1
Romania	66	23	11	62	34	4	70	22	8
Slovakia	64	26	10	72	25	4	59	21	20
Slovenia	67	14	19	65	33	2	89	7	3
Spain	86	10	5	72	23	6	87	9	5
Sweden	73	21	7	60	32	7	89	8	3
Switzerland	67	14	20	63	31	6	93	6	1
United Kingdom	72	20	8	62	34	4	90	9	1
Average in Europe	70	20	9	66	28	5	84	10	5
Canada & USA									
Canada	69	23	8	59	37	4	91	7	2
USA	70	23	6	56	36	8	93	5	1

TABLE S - MARKET EXPANSION INDEX: ESTABLISHED OWNER MANAGERS

	Market Expansion Impact Index (1: Low) %	Market Expansion Impact Index (2) %	Market Expansion Impact Index (3) %	Market Expansion Impact Index (4: High) %
Europe				
Belgium	64	29	6	0
Bulgaria	90	9	1	0
Croatia	54	19	25	2
Estonia	60	35	5	0
Finland	80	19	1	0
Germany	79	18	2	0
Greece	80	13	6	0
Hungary	93	6	0	1
Ireland	69	29	0	1
Italy	61	34	2	3
Latvia	80	20	0	0
Luxembourg	63	32	5	0
Macedonia	72	9	18	1
Netherlands	83	13	3	1
Norway	81	19	0	0
Poland	71	27	2	0
Portugal	89	9	1	0
Romania	73	19	8	0
Slovakia	61	18	18	2
Slovenia	73	24	2	1
Spain	81	14	4	0
Sweden	75	22	3	0
Switzerland	70	29	1	0
United Kingdom	81	18	0	1
Average in Europe	74	20	5	1
Canada & USA				
Canada	78	20	1	1
USA	75	24	0	1

TABLE T - RATES OF ENTREPRENEURSHIP BY GENDER

	Early stage entrepreneurs % of Male Adults	Early stage entrepreneurs % of Female Adults	Ratio of male to female	Owner managers of established businesses % of Male Adults	Owner managers of established businesses % of Female Adults	Ratio of male to female
Europe						
Belgium	7.5	5.0	1.5 : 1	5.9	1.6	3.7 : 1
Bulgaria	4.0	2.9	1.4 : 1	6.3	4.6	1.4 : 1
Croatia	9.7	5.7	1.7 : 1	3.7	1.9	1.9 : 1
Estonia	16.6	9.7	1.7 : 1	9.8	5.7	1.7 : 1
Finland	8.9	4.2	2.1 : 1	14.2	6.1	2.3 : 1
Germany	6.1	3.3	1.9 : 1	6.0	3.7	1.6 : 1
Greece	7.5	6.0	1.3 : 1	16.8	9.4	1.8 : 1
Hungary	10.4	5.5	1.9 : 1	9.0	4.1	2.2 : 1
Ireland	13.0	5.8	2.2 : 1	7.3	3.9	1.9 : 1
Italy	6.9	2.9	2.4 : 1	6.2	2.8	2.2 : 1
Latvia	18.6	9.8	1.9 : 1	11.2	8.0	1.4 : 1
Luxembourg	11.6	8.7	1.3 : 1	4.6	1.9	2.4 : 1
Macedonia	8.6	3.5	2.5 : 1	8.5	3.3	2.6 : 1
Netherlands	10.9	3.5	3.1 : 1	13.1	6.6	2.0 : 1
Norway	7.5	3.8	2.0 : 1	9.7	3.4	2.9 : 1
Poland	12.5	6.0	2.1 : 1	8.2	3.7	2.2 : 1
Portugal	12.4	6.7	1.8 : 1	8.7	5.4	1.6 : 1
Romania	14.2	7.5	1.9 : 1	9.3	5.7	1.6 : 1
Slovakia	13.0	6.5	2.0 : 1	8.2	3.3	2.5 : 1
Slovenia	8.4	3.3	2.6 : 1	6.1	2.2	2.7 : 1
Spain	6.4	5.0	1.3 : 1	9.1	6.3	1.5 : 1
Sweden	9.4	4.8	1.9 : 1	7.1	3.1	2.3 : 1
Switzerland	9.5	5.1	1.9 : 1	14.2	8.4	1.7 : 1
United Kingdom	9.1	4.8	1.9 : 1	6.7	3.8	1.8 : 1
Average in Europe	10.1	5.4	1.9 : 1	8.7	4.5	2.1 : 1
Canada & USA						
Canada	16.0	13.5	1.2 : 1	11.3	6.4	1.8 : 1
USA	14.6	9.2	1.6 : 1	9.1	5.6	1.6 : 1

TABLE U - MOTIVES: EARLY STAGE ENTREPRENEURS BY GENDER

	Motivated by opportunity % of Male Adults	Motivated by opportunity % of Female Adults	Motivated by necessity % of Male Adults	Motivated by necessity % of Female Adults	Male early stage entrepreneurs motivated by opportunity %	Male early stage entrepreneurs motivated by necessity %	Female early stage entrepreneurs motivated by opportunity %	Female early stage entrepreneurs motivated by necessity %
Europe								
Belgium	5.3	2.2	1.6	1.9	77	23	54	46
Bulgaria	2.6	2.0	1.4	0.9	65	35	69	31
Croatia	6.0	3.1	3.5	2.6	63	37	54	46
Estonia	13.9	8.4	2.5	1.1	85	15	89	11
Finland	7.5	3.0	1.1	0.9	87	13	77	23
Germany	5.0	2.5	1.0	0.6	84	16	80	20
Greece	5.8	4.3	1.6	1.4	79	21	75	25
Hungary	8.2	3.2	2.0	1.7	80	20	66	34
Ireland	9.8	5.1	3.1	0.5	76	24	91	9
Italy	4.9	2.4	1.4	0.5	78	22	84	16
Latvia	15.1	7.8	3.2	1.7	83	17	82	18
Luxembourg	10.1	7.4	0.9	1.0	92	8	88	12
Macedonia	3.7	1.4	4.3	2.0	46	54	42	58
Netherlands	8.6	3.2	1.8	0.3	82	18	90	10
Norway	5.9	3.3	0.8	0.4	88	12	67	33
Poland	9.0	3.8	3.3	1.9	73	27	64	36
Portugal	9.9	4.3	2.3	2.4	81	19	73	27
Romania	9.6	5.4	4.0	2.0	71	29	67	33
Slovakia	9.1	4.3	3.9	2.1	70	30	74	26
Slovenia	6.2	2.4	2.0	0.8	76	24	73	27
Spain	4.8	3.5	1.5	1.3	76	24	88	12
Sweden	7.3	3.6	0.8	0.5	90	10	86	14
Switzerland	8.3	4.2	0.8	0.7	91	9	79	21
United Kingdom	6.6	3.8	2.3	1.0	74	26	75	25
Average in Europe	7.6	3.9	2.1	1.3	78	22		
Canada & USA								
Canada	12.5	11.4	2.4	1.6	84	16	88	12
USA	12.5	7.1	1.8	1.6	87	13	82	18

TABLE V - PERSONAL CONTEXT OF GENERAL POPULATION BY GENDER

	Know a recent entrepreneur' % of Male Adults	Know a recent entrepreneur % of Female Adults	Opportunities in local area ² % of Male Adults	Opportunities in local area % of Female Adults	Skills & Knowledge to start-up % of Male Adults	Skills & Knowledge to start-up % of Female Adults	Fear of failure prevent start-up % of Male Adults	Fear of failure prevent start-up % of Female Adults
Europe								
Belgium	21	14	45	35	39	25	46	54
Bulgaria	43	37	17	14	40	31	39	47
Croatia	28	21	25	19	56	39	40	50
Estonia	41	37	49	54	50	38	42	52
Finland	47	43	48	44	44	30	34	46
Germany	26	22	41	35	44	29	40	53
Greece	30	25	16	13	54	40	63	65
Hungary	35	28	26	24	49	28	41	48
Ireland	37	30	46	33	54	36	35	46
Italy	33	23	30	22	38	23	60	64
Latvia	33	32	34	35	54	44	36	49
Luxembourg	39	33	52	44	52	36	46	50
Macedonia	41	30	37	39	62	46	42	46
Netherlands	38	26	57	40	52	29	33	43
Norway	34	29	72	66	41	21	30	32
Poland	47	40	34	32	64	48	52	64
Portugal	32	24	32	24	56	42	39	50
Romania	37	27	36	31	55	37	42	55
Slovakia	39	34	29	24	63	42	37	45
Slovenia	40	34	24	17	55	41	35	45
Spain	35	32	28	24	50	41	39	47
Sweden	42	35	70	71	48	25	37	46
Switzerland	33	25	45	38	54	34	34	40
United Kingdom	33	26	47	37	52	35	34	41
Average in Europe	36	29	39	34	51	35	41	49
Canada & USA								
Canada	33	30	55	52	58	43	38	47
USA	32	27	50	44	62	49	29	35

1 Knows someone who has started a business in the past 2 years

2 Opportunities to start a business in the next six months (July 2015-December 2015)

APPENDIX 1: GEM METHODOLOGY AND DEFINITIONS

The Global Entrepreneurship Monitor (GEM) is the world's foremost study of entrepreneurship. GEM provides unique measures of the involvement of individuals in entrepreneurial activity. The support of Enterprise Ireland, with the support of the Department of Enterprise, Trade and Employment, made possible the inclusion of Ireland in the GEM research cycle in 2015.

Through a vast, centrally coordinated, internationally executed data collection effort, GEM is able to provide high quality information and comprehensive reports, which greatly enhance the understanding of the entrepreneurial phenomenon.

In numbers, GEM at the global level is:

- 17 years of data
- 200,000+ interviews a year
- 100+ countries
- 500+ specialists in entrepreneurship research
- 300+ academic and research institutions
- 200+ funding institutions

In each economy, GEM looks at two elements:

- The entrepreneurial behaviour and attitudes of individuals
- The national context and how that impacts entrepreneurship

The information gained, carefully analysed by local GEM researchers, allows a deep understanding of the environment for entrepreneurship and provides valuable insights.

GEM began in 1999 as a joint project between Babson College (USA) and London Business School (UK). The aim was to consider why some countries are more 'entrepreneurial' than others. 16 years on, GEM is the richest resource of information on the subject, publishing a range of global, national and 'special topic' reports on an annual basis.

This appendix contains information on GEM methodology focusing on the annual GEM research cycle, which involves an adult population survey and a key informant survey and the definitions used in GEM.

ADULT POPULATION SURVEY

The GEM model is primarily based on an adult population survey (APS). Professional survey research firms in each country administer the adult population survey, which are based on a random sample of approximately 2,000 adults.

The main questions in the APS are identical in each country. For the purposes of the research, GEM uses a very comprehensive definition of entrepreneurship, which encompasses any type of entrepreneurial initiative, including self-employment.

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 in terms of key demographics and geographical coverage. In Ireland the survey is confined to those aged 18 to 64 inclusive.

Telephone interviews are utilised in Ireland, as in most of the developed countries.⁵⁰ In 2015 60% of the calls were placed to landlines and 40% to mobile phones. As GEM concentrates on the entrepreneurs themselves rather than their businesses the respondents are interviewed at home rather than in their workplace.

The manner of the running of APS across all countries is coordinated by Global Entrepreneurship Research Association (GERA) based in Babson College, USA. GERA also combines the outputs from the individual country surveys to produce a master dataset. The analysis and interpretation of this data at national level is the responsibility of the national team.

KEY INFORMANT SURVEY

Key informants are experts and entrepreneurs. At least 25% of the key informants are entrepreneurs.⁵¹ Expert informants are chosen by reputation and referrals to represent the nine entrepreneurial framework dimensions in the GEM model. These are Finance, Government Policies, Government Programmes, Education and Training, R&D Transfer, Commercial Infrastructure, Internal Market Openness, Physical Infrastructure and Culture and Social Norms.

The key informants are asked to complete a detailed questionnaire. The questionnaire used is identical in all countries involved in the survey. The questionnaire is similar to the adult population survey and also includes an additional 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.

In Ireland, there are approximately 50 experts and entrepreneurs on the key informant panel and new members are added to the panel as required each year.

⁵⁰ A random telephone survey was carried out in June 2015

⁵¹ In Ireland 58% of the key informants are entrepreneurs

GEM DEFINITIONS

Aspiring entrepreneurs

Aspiring entrepreneurs are those who expect to start a business in the next three years. The rate is for those in the adult population aged 18-64 years inclusive.

Nascent entrepreneurs

Nascent entrepreneurs are those actively planning a new venture. These entrepreneurs have done something during the previous twelve months to help start a new business, that he or she will at least part own. Activities such as organising the start-up team, looking for equipment, saving money for the start-up, or writing a business plan would all be considered as active commitments to starting a business. Wages or salaries will not have been paid for more than three months in respect of the new business. Many of these people are still in fulltime employment. The rate is for those in the adult population aged 18-64 years inclusive.

New business owners

New business owners are entrepreneurs who at least part own and manage a new business that is between 4 and 42 months old and have not paid salaries for longer than this period. These new ventures are in the first 42 months after the new venture has been set up. The rate is for those in the adult population aged 18-64 years inclusive.

Total early stage entrepreneurial activity (TEA rate)

As its name implies, total early stage entrepreneurial activity refers to the total rate of early stage entrepreneurial activity among the adult population aged 18-64 years inclusive. In some instances, this rate is less than the combined percentages for nascent and new business owners. This is because, in circumstances where respondents qualify as both a nascent and a new business owner, they are counted only once.

Owner managers of established businesses

In addition to those people who are currently involved in the early stages of a business, there are also many people who have set up businesses that they have continued to own and manage. These people are included in the established business owner index which captures the percentage of people in the population that have set up businesses that they have continued to own and manage and which has paid wages or salaries for more than 42 months. The rate is for those in the adult population aged 18-64 years inclusive.

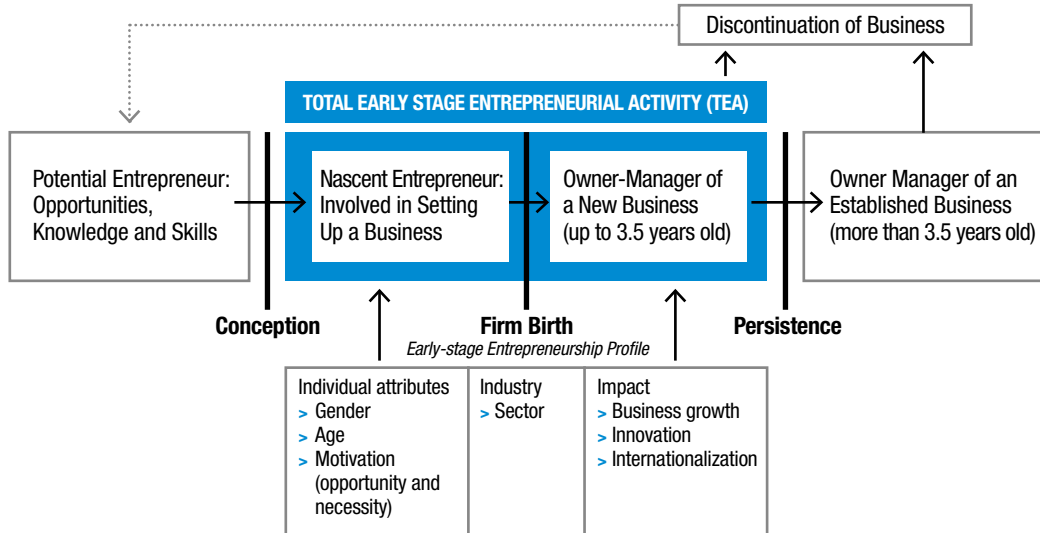
Entrepreneurial employee activities (intrapreneurs)

GEM operationalises entrepreneurial employee activity as a situation in which employees develop new products/ services, or set up a new business entity, but not—for instance—work on optimising internal operations of a firm. Respondents participating in the GEM survey were asked if they, in the past three years, were actively involved in and had a leading role in either idea development for a new activity or in preparation and implementation of a new activity. GEM collects data for measuring intensity of entrepreneurial employee activity.

THE ENTREPRENEURSHIP PROCESS

GEM describes entrepreneurial activity as a process and measures different phases of this process from conception through firm birth to persistence.

FIGURE 2: THE ENTREPRENEURSHIP PROCESS



Source: Global Entrepreneurship Monitor 2015 Global Report

APPENDIX 2: GLOBAL RESULTS

ENTREPRENEURIAL ACTIVITY IN GEM ECONOMIES IN 2015 BY REGION

Region	Economy	Nascent entrepreneurship rate	New business ownership rate	Early stage entrepreneurial activity (TEA)	Established business ownership rate
AFRICA					
	Botswana	23.0	11.9	33.2	4.6
	Burkina Faso	19.7	11.2	29.8	27.8
	Cameroon	16.5	10.0	25.4	12.8
	Egypt	4.0	3.4	7.4	2.9
	Morocco	1.3	3.2	4.4	5.2
	Senegal	24.9	15.0	38.6	18.8
	South Africa	5.5	3.8	9.2	3.4
	Tunisia	5.4	4.9	10.1	5.0
	TOTAL	12.5	7.9	19.8	10.1
ASIA & OCEANIA					
	Australia	7.3	5.8	12.8	8.7
	China	6.8	6.3	12.8	3.1
	India	7.7	3.2	10.8	5.5
	Indonesia	6.1	12.1	17.7	17.1
	Iran	7.9	5.3	12.9	14.0
	Israel	8.4	3.7	11.8	3.9
	Kazakhstan	8.0	3.2	11.0	2.4
	Korea	5.0	4.3	9.3	7.0
	Lebanon	10.8	20.4	30.1	18.0
	Malaysia	0.8	2.3	2.9	4.8
	Philippines	7.6	10.1	17.2	7.3
	Taiwan	2.5	4.8	7.3	9.6
	Thailand	4.5	9.5	13.7	24.6
	Vietnam	1.0	12.7	13.7	19.6
	TOTAL	6.0	7.4	13.1	10.4
LATIN AMERICA & CARIBBEAN					
	Argentina	11.7	6.3	17.7	9.5
	Barbados	11.5	10.7	21.0	14.1
	Brazil	6.7	14.9	21.0	18.9
	Chile	16.5	9.8	25.9	8.2
	Colombia	15.6	7.5	22.7	5.2
	Ecuador	25.9	9.8	33.6	17.4
	Guatemala	10.8	7.6	17.7	8.1
	Mexico	16.2	5.0	21.0	6.9
	Panama	5.2	7.7	12.8	4.2
	Peru	17.8	4.9	22.2	6.6
	Puerto Rico	6.6	1.9	8.5	1.4
	Uruguay	10.6	3.8	14.3	2.1
	TOTAL	12.9	7.5	19.9	8.5

ENTREPRENEURIAL ACTIVITY IN GEM ECONOMIES IN 2015 BY REGION

Region	Economy	Nascent entrepreneurship rate	New business ownership rate	Early stage entrepreneurial activity (TEA)	Established business ownership rate
EUROPE					
	Belgium	4.5	2.0	6.2	3.8
	Bulgaria	2.0	1.5	3.5	5.4
	Croatia	5.1	2.6	7.7	2.8
	Estonia	8.7	4.7	13.1	7.7
	Finland	4.0	2.8	6.6	10.2
	Germany	2.8	1.9	4.7	4.8
	Greece	3.9	2.8	6.7	13.1
	Hungary	5.3	2.7	7.9	6.5
	Ireland	6.5	3.0	9.3	5.6
	Italy	3.2	1.7	4.9	4.5
	Latvia	8.6	6.0	14.1	9.6
	Luxembourg	7.1	3.2	10.2	3.3
	Macedonia	3.0	3.1	6.1	5.9
	Netherlands	4.3	3.0	7.2	9.9
	Norway	2.3	3.3	5.7	6.5
	Poland	5.7	3.5	9.2	5.9
	Portugal	5.6	4.0	9.5	7.0
	Romania	6.1	5.1	10.8	7.5
	Slovakia	6.5	3.4	9.6	5.7
	Slovenia	3.2	2.8	5.9	4.2
	Spain	2.1	3.6	5.7	7.7
	Sweden	4.8	2.6	7.2	5.2
	Switzerland	4.6	2.8	7.3	11.3
	United Kingdom	4.0	2.9	6.9	5.3
	TOTAL	4.8	3.1	7.8	6.6
NORTH AMERICA					
	Canada	9.7	5.5	14.7	8.8
	USA	8.3	4.0	11.9	7.3
	TOTAL	9.0	4.8	13.3	8.1

Source: GEM Global Report 2015.

