

# Global Entrepreneurship Monitor

## United Kingdom 2013 Monitoring Report

Jonathan Levie  
Mark Hart  
Karen Bonner

# List of Figures and Tables

<b>Figure 1:</b> The Entrepreneurial Process and GEM Operational Definitions	7	<b>Figure 15:</b> Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18 to 29 year olds, 2003 to 2013	24	<b>Figure 27:</b> Necessity and Opportunity TEA amongst the 50+ Age Group 2012-13	38
<b>Figure 2:</b> Entrepreneurial attitudes in the UK, 2003-2013: (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statement)	10	<b>Figure 16:</b> Relative frequency of high job expectation early-stage entrepreneurs in the UK, France, Germany and the US, three year rolling averages, 2003-2005 to 2011-2013	26	<b>Figure 28:</b> Awareness of the Prince's Initiative for Mature Enterprise amongst 50-64 year olds, 2009-2013	39
<b>Figure 3:</b> Male and female attitudes towards Good Opportunities and Fear of Failure (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statements "There are good start-up opportunities where I live in the next 6 months"; "Fear of failure would prevent me from starting a business")	11	<b>Figure 17:</b> Relative frequency of high job expectation among established business owner-managers in the UK, France, Germany and the US, three year rolling averages, 2003-2005 to 2011-2013	27	<b>Table 1:</b> Attitudes towards entrepreneurship in participating G7 countries in 2013 - percentage of working age population who are neither nascent entrepreneurs nor existing business owner/managers, who expressed an opinion and agreed with the statement at the top of the column	8
<b>Figure 4:</b> Participation in Entrepreneurship in the UK by most established stage of entrepreneurial activity, 2003 to 2013	13	<b>Figure 18:</b> Percentage of UK nascent entrepreneurs who have reported ever using a type of funding for a business, 2007 to 2013	29	<b>Table 2:</b> Entrepreneurial attitudes in the UK among households in 2011, 2012 and 2013 (% non-entrepreneurially active respondents aged 18-64 expressing an opinion and agreeing with the statement)	9
<b>Figure 5:</b> Total early-stage Entrepreneurial Activity (TEA) in UK, France, Germany and US (2003-2013)	14	<b>Figure 19:</b> Difference in standardized average scores of subjective well-being (based on five items) between TEA entrepreneurs and non-entrepreneurs, between established business owners and non-entrepreneurs, and between female TEA entrepreneurs and male TEA entrepreneurs, by innovation-driven economy, 2013	32	<b>Table 3:</b> Perceptions of entrepreneurship among non-entrepreneurially active individuals in the UK Home Nations, 2013	12
<b>Figure 6:</b> Total early-stage Entrepreneurial Activity (TEA) in the UK, France, Germany and the US by Age Group (2013)	17	<b>Figure 20:</b> Responses by GEM UK 2013 respondents to the statement "I am satisfied with my life", by gender and stage in the entrepreneurial process	33	<b>Table 4:</b> Proportion of UK business owner-managers who stated their business was registered with HMRC (Her Majesty's Revenue and Customs) as an employer or registered for Value Added Tax, 2013	15
<b>Figure 7:</b> Total early-stage Entrepreneurial Activity (TEA) in the UK by Age Group (2011 to 2013)	17	<b>Figure 22:</b> Responses by GEM UK 2013 respondents in employment to the statement "I am satisfied with my current work income, including both salary and non-salary income such as payments in kind and other benefits", by gender and stage in the entrepreneurial process	34	<b>Table 5:</b> Measures of entrepreneurial activity among the working age population in the UK, France, Germany and the US, 2013	15
<b>Figure 8:</b> Necessity and opportunity TEA rates in the UK, France, Germany and the US in 2013	18	<b>Figure 21:</b> Responses by GEM UK 2013 respondents in employment to the statement "The work I do is meaningful to me", by gender and stage in the entrepreneurial process	34	<b>Table 6:</b> Measures of entrepreneurial activity in the UK Home Nations, 2013	22
<b>Figure 9:</b> Necessity and opportunity nascent and new business owner-manager rates in the UK showing 95% confidence intervals, 2011, 2012 and 2013	19	<b>Figure 23:</b> Awareness of and Participation in Enterprise Week/ Global Entrepreneurship Week in UK, 2009-2013	35	<b>Table 7:</b> Measures of entrepreneurial aspiration in the UK, France, Germany and US, 2013	25
<b>Figure 10:</b> Total early-stage entrepreneurial activity by gender in the UK, France, Germany and the US in 2013	20	<b>Figure 24:</b> Awareness of and participation in GEW by stages of the entrepreneurial process, 2013	36	<b>Table 8:</b> Percentage of nascent entrepreneurs expecting funding from different sources, 2007 to 2013	28
<b>Figure 11:</b> Established business ownership by gender in the UK, France, Germany and the US, 2013	21	<b>Figure 25:</b> Total early-stage Entrepreneurial Activity by Age-band 2002-2013	37	<b>Table 9:</b> Percentage of UK nascent entrepreneurs who have reported being refused funding, by type of funding refused, 2007 to 2013	30
<b>Figure 12:</b> Female early-stage entrepreneurial activity in the UK, France, Germany and the US, 2003-2013	21	<b>Figure 26:</b> Total early-stage Entrepreneurial Activity amongst the 50+ Age Group 2012-13	38	<b>Table 10:</b> Percentage of individuals aged 18-64 who have invested in someone else's new business in the last 3 years, and the distribution of relationships to the latest investee, 2007 to 2013	31
<b>Figure 13:</b> Male and Female Total early-stage Entrepreneurial Activity in the UK Home Nations, 2013	23				
<b>Figure 14:</b> Total early-stage Entrepreneurial Activity in the UK Home Nations by Age Group, 2013	23				

## Page

<b>3</b>	<b>Acknowledgements</b>
<b>4</b>	<b>Executive Summary</b>
<b>6</b>	<b>GEM UK 2013 Monitoring Report</b>
<b>40</b>	<b>Conclusion</b>
<b>41</b>	<b>Appendix 1 - GEM UK Sampling and Weighting Methodology</b>
<b>42</b>	<b>Appendix 2 - Additional Tables and Data for Figures</b>

GEM UK 2013 was made possible by funding from BIS Enterprise Directorate, Hunter Centre for Entrepreneurship at the University of Strathclyde, Welsh Government, and Invest Northern Ireland. In addition, Coca-Cola and PRIME sponsored specific questions in the UK.

The vendor for the Adult Population survey was BMG Research Ltd and we would like to thank Steve Lomax for his role in the

timely execution of the survey and the creation of the UK dataset. Marla Nelson and Debra Blisson undertook the NES expert surveys and we would like to thank them for their efforts.

## Disclaimer

This report is based on data collected by the GEM consortium and the GEM UK team; responsibility for analysis and interpretation of the data is the sole responsibility of the authors.

## For further information on the GEM UK project, contact

### Professor Jonathan Levie

Hunter Centre for Entrepreneurship,  
University of Strathclyde,  
Sir William Duncan Building  
30 Rottenrow, 7th Floor  
Glasgow  
G4 0GE  
Email: [j.levie@strath.ac.uk](mailto:j.levie@strath.ac.uk)

### Professor Mark Hart

Economics and Strategy Group  
Aston Business School  
Aston University  
Aston Triangle  
Birmingham  
B4 7ET  
Email: [mark.hart@aston.ac.uk](mailto:mark.hart@aston.ac.uk)

### Karen Bonner

Economics and Strategy Group  
Aston Business School  
Aston University  
Aston Triangle  
Birmingham  
B4 7ET  
Email: [k.bonner1@aston.ac.uk](mailto:k.bonner1@aston.ac.uk)

# Executive Summary

- In 2013, the Global Entrepreneurship Monitor (GEM) research consortium measured the entrepreneurial activity of individuals in 70 economies, making it the world's most authoritative comparative study of entrepreneurial activity in the general adult population. In 2013, 11,017 adults aged 16 to 80 participated in the GEM UK survey.
- This monitoring report compares Global Entrepreneurship Monitor (GEM) measures of entrepreneurial attitudes, activity and aspirations in the UK, France, Germany and the United States, and the four home nations of the UK. It also examines wellbeing measures of both entrepreneurs and non-entrepreneurs, business registration activity by business owner managers and the anticipated and actual funding sources for individuals starting a business in the UK
- The 2013 report shows that although a number of key entrepreneurship metrics declined from the highs reported in 2012, most UK data remain above the longer term trend. For most indicators the UK lags the US but outperforms other innovation-led economies including France and Germany. The UK performs particularly well in terms of established businesses with high growth expectations.
- Despite the backdrop of the short-term fall the 2013 findings show a continued growth in the rate of female entrepreneurship and entrepreneurship amongst the over 50 age group.
- Total early-stage entrepreneurial activity or TEA (the sum of the nascent entrepreneurship rate and the new business owner-manager rate - without double counting) in the UK in 2013 was 7.3%<sup>1</sup>. The UK TEA rate, although significantly lower than the 2012 rate, is significantly higher than the historical trend (2002-2010) which was very stable at close to 6%.
- More widely, one fifth of working age individuals in the UK were engaged in entrepreneurial activity or intended to start a business within the next three years, which again was down from the record high of one quarter in 2012, but around the same level as in 2011 and higher than historical trend to 2010.
- The TEA rate in the UK compares favourably to France at 4.6% and Germany at 5.0% but lags that of the US at 12.7%. Unlike the UK, in which TEA rates have fluctuated over recent years, TEA rates in these countries have remained relatively steady, and for both Germany and the US are around peak levels.
- In 2013, UK levels of female early-stage entrepreneurship (TEA rate of 5.8%) were 66% of male early-stage entrepreneurial activity – up from 57% in 2012 and considerably higher than the long-run rate of 49%. Both male and female TEA rates decreased over the year, the larger drop in the male rate resulting in the higher female to male ratio in 2013. Despite the gap between female TEA rates in the UK (5.8%) and the US (10.4%) in 2013, the female to male ratios are similar.
- The sub-national distribution of TEA rates in 2013 was England: 7.5% (down significantly from 10.3%) and significantly higher than in Wales (5.4%) and Northern Ireland (5.1%), but not significantly higher than Scotland: (6.8%).
- Entrepreneurial activity in the UK is highest amongst the middle age groups, with those aged between 35-44 years displaying the highest rate of early-stage entrepreneurial activity in England, Wales and Scotland in 2013; in Northern Ireland the highest rate was among 25-34 year olds.
- Entrepreneurial activity amongst the over 50s age group has historically been lower than for those in the younger age groups and whilst entrepreneurial activity peaked for the 18-29 and 30-49 age groups in 2012, before dropping significantly, the rate for the over 50s age group continued to increase to stand at its highest ever level (6.5%) in 2013.
- The increase in entrepreneurial activity since 2012 amongst the over 50s age group was a combination of increases in both male and female activity rates; as with entrepreneurial activity in general, the rate for males was significantly higher than the female rate.
- Rates of opportunity and necessity entrepreneurship in 2013 were similar

- to the levels seen in 2011, at 5.8% for opportunity and 1.2% necessity. Notably, both rates were down significantly on 2012 for nascent entrepreneurs, but remained largely unchanged for new business owners.
- Attitudes of non-entrepreneurial individuals to entrepreneurship in the UK remained subdued in 2013, although opportunity perception among non-entrepreneurial men and women both continued to increase towards pre-recession levels.
  - In the UK in 2013, 5.4% of working age adults expected to start a business within the next 3 years. Despite a fall since 2012 this rate is still higher than the longer term trend but remains lower than competitor countries, 16.6% in the US, 13.7% in France and 8.9% in Germany.
  - When surveyed in mid-2013, 3.8% of the adult population in the UK were actively trying to start a business (*nascent entrepreneurs*), compared with 9.2% in the US. Nascent entrepreneurship rates in the UK fell back significantly in 2013, specifically, necessity-driven nascent entrepreneurship which dropped from 1.2% to 0.5%.
  - When surveyed in 2013, 3.6% of the UK working age adult population were owner-managers of a business that was 3 - 42 months old (*new business owner-managers*). This was similar to both the 2011 rate and the current US estimate of 3.7% and compares favourably with the estimates for France (1.8%) and Germany (2.0%).
  - In 2013, the proportion of the adult population who owned and managed a business older than 42 months (*established business owner-managers*) in the UK was 6.4%. Again this was higher than the estimates for France (4.1%) and Germany (5.1%) and relatively close to the US estimate of 7.5%. The estimated proportion of working age people in the UK who discontinued a business (whether through closure or sale) in the past 12 months remained at its low level of 1.3%, while it remained at 2.5% in the US. Discontinuations by entrepreneurs of businesses in France (1.3%) and Germany (1.0%) were also close to levels in previous years.
  - Some 20% of new business owner-managers with employees and 12% of established owner-managers with employees had not registered their business with HMRC as an employer or for Value-Added Tax. In the UK, businesses do not have to be registered with HMRC if they have no employees or if their sales fall below the VAT threshold.
  - Trends in the sources of finance used by nascent entrepreneurs showed that their expectations of funding streams decreased substantially over the year for most categories whilst their experiences of using those sources has fallen below the record low levels seen in 2011.
  - In 2013, the special topic for GEM was entrepreneurship and well-being (general satisfaction with one's life). Subjective well-being on average is positive for innovation-driven countries but neutral across the European Community (EC). Overall, subjective well-being in the UK is relatively high in comparison to other EC countries, and is in the second quartile of innovation-driven countries participating in GEM 2013.
  - In general, for innovation-driven countries and across the EC, subjective well-being tends to be higher for TEA entrepreneurs than the working age population as a whole, and higher again for established business owners. However, in the UK there is little difference between the average subjective well-being of established business owners and the general population; the average subjective well-being of TEA entrepreneurs is lower than that of non-entrepreneurs, and the average subjective well-being of female TEA entrepreneurs is lower than that of male TEA entrepreneurs.

<sup>1</sup> This differs slightly from the 2013 GEM Global Report (7.3 versus 7.1) because the Global report did not weight for ethnicity.

## 1 INTRODUCTION

### 1.1 SCOPE OF REPORT

This report compares Global Entrepreneurship Monitor (GEM) measures of entrepreneurial attitudes, activity and aspiration in the UK with France, Germany and the United States (US). It also summarizes entrepreneurial attitudes, activity and aspiration across the four nations of the UK and reports on business registration activity by business owner-managers, wellbeing measures of both entrepreneurs and non-entrepreneurs, and on changes in business start-up funding expectations through the business cycle in the UK.

### 1.2 GEM: HISTORY, PURPOSE AND MEASURES

The Global Entrepreneurship Monitor (GEM) research consortium has been measuring entrepreneurial activity of working age adults across a wide range of countries in a comparable way since 1998. In 2013, the study conducted surveys in 70 sovereign nations and represented the world's most authoritative comparative study of entrepreneurial activity in the general adult population.

GEM's primary focus is on the study of three areas:

- To measure differences in the level of entrepreneurial activity between countries
- To uncover factors leading to appropriate levels of entrepreneurship
- To suggest policies that may enhance the national level of entrepreneurial activity.

The 2013 GEM global study was based on an analysis of adult population survey (APS) results from 70 economies and more than 198,000 adults across the world. The core of the APS is identical in each country and asks respondents about their *attitudes* towards entrepreneurship, if they are involved in some form of entrepreneurial *activity*, and if so what their *aspirations* for their business are. The global GEM Executive 2013 Report was published in January 2014<sup>2</sup> and can be downloaded from [www.gemconsortium.org](http://www.gemconsortium.org).

From the survey, we examine individual entrepreneurs at three key stages:

- Nascent entrepreneurs (NAE): The stage at which individuals begin to commit resources, such as time or money, to starting a business. To qualify as a nascent entrepreneur, the business must not have been paying wages for more than three months.
- New business owner-managers (NBO): Those whose business has been paying income, such as salaries or drawings, for more than three, but not more than forty-two, months.
- Established business owner-managers (EBO): Those whose business has been paying income, such as salaries or drawings, for more than forty-two months.

In addition, we measure general intention to start a business by asking individuals if they expect to start a business within the next three years (FUT). Finally, we ask individuals

<sup>2</sup> Xavier, S.R., Kelley, D., Kew, J., Herrington, M., and Vorderwülbecke (2014) Global Entrepreneurship Monitor 2013 Global Report. London: Global Entrepreneurship Research Association.

if they have sold, shut down, discontinued or quit a business, in the past year (BC). It is important to understand that the main subject of study in GEM is entrepreneurs rather than the businesses that they run. GEM measures the entrepreneurial activity of people from intention to exit. The first two stages of active business development, the nascent entrepreneur stage and the new business owner-manager stage, are combined into one index of Total early-stage Entrepreneurial Activity, or TEA<sup>3</sup>, which is represented in Figure 1 below.

As much of this entrepreneurial activity is pre-start-up or includes very small new businesses that do not have to register, TEA rates will not necessarily match with published official statistics on business ownership and, indeed, should not be interpreted as such. Rather, GEM enables the measurement of the *propensity* of individuals in particular countries to be entrepreneurial *given* the current social, cultural and economic framework conditions that exist there.

The methodology, sample sizes and weighting systems used for the GEM UK 2013 adult population survey are explained in more detail in Appendix 1. An important change in the sample design was introduced in 2010 when 10% of respondents in each Government Office Region (GOR) were selected at random from households which had mobile phones but not fixed phone landlines. In 2013 the proportion of mobile-only households in the survey (20%) closely matched the OfCom

latest estimates for the UK (15%). This change from a purely landline sampling methodology may be responsible for some of the apparent rise in the point estimates for many UK GEM measures since 2009. Once again in 2013, as in 2011 and 2012, there are no significant differences between landline only data and the full sample which includes mobile only households. Consequently, in this report, comparisons with other countries and time-based trends within the UK are made using the full sample (landline and mobile only households). See Appendix 1 for further details on the implications of the growth in mobile only households for the GEM survey.

<sup>3</sup> TEA is calculated in an identical way in each country. A telephone and/or face-to-face survey of a representative sample of the adult population in each country is conducted between May and September. Respondents are asked to respond to three questions that are the basis of the TEA index:

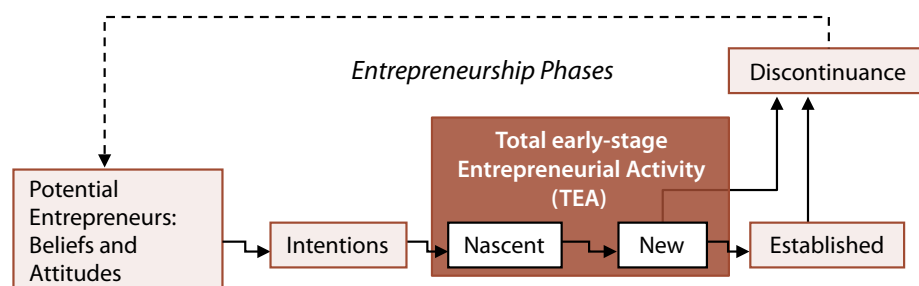
1) "are you, alone or with others, currently trying to start a new business independently of your work?",

2) "are you, alone or with others, currently trying to start a new business as part of your work?", and

3) "are you, alone or with others, currently the owner or manager of a business?" Those who respond positively to these questions are also asked filter questions to ensure they are actively engaged in business creation as owners and managers, how long they have been paying wages to employees, and other questions about cost and time to start up, sources of finance and numbers of jobs created. A distinction is made between two types of entrepreneurs: nascent entrepreneurs (those whose businesses have been paying wages for not more than three months) and new business owner-managers (those whose businesses have been paying salaries for more than three months but not more than 42 months). The TEA index is the proportion of nascent entrepreneurs and new business owner/managers (minus any double counting, i.e. those who respond positively to both are counted once) in the working age population.

**Figure 1: The Entrepreneurial Process and GEM Operational Definitions**

(Source: Xavier et al., 2013, p.13)



## 2 ENTREPRENEURIAL ATTITUDES

### 2.1 ENTREPRENEURIAL ATTITUDES IN THE UK AND BENCHMARK COUNTRIES IN 2013

At least some of the difference in entrepreneurial activity rates between countries may be explained by differences in attitudes of the population towards entrepreneurship. Some researchers have suggested that GEM attitudinal data is best treated at the group rather than individual level, because individuals who are already entrepreneurs may feel compelled to provide positive answers in the APS. Table 1 compares attitudes in the UK, France, Germany and the US for that portion of the working age (18-64) population who are not already nascent entrepreneurs or business owner/managers for participating G7 countries for 2013<sup>4</sup>.

Points of note include the following:

- Rates of awareness of a recent start-up entrepreneur have dropped in France to just above the UK rate, where awareness remains higher than in Germany or the US.
- At 33.2%, the proportion of the UK non-entrepreneurial working age population who perceived that there were good opportunities in the next 6 months was higher than in the benchmark nations of France and Germany but lower than in the US.
- The UK start-up skills perception rate of 37.0% was higher than the skills perception rates of France and Germany but lower than the US by around 10 percentage points.
- Fear of failure among those who perceived opportunities in the UK was slightly lower than in France and Germany but higher than the US.

<sup>4</sup> In Appendix 2, the data on entrepreneurial attitudes and perceptions for all adults aged 18-64, compatible with those in the GEM Global 2013 Report, are presented in Table 1a. Note however that the UK attitudinal data in this table differs slightly from that published in the GEM Global Report for 2013 as that was based on an interim sample of 2,000 submitted in July 2013.

**Table 1: Attitudes towards entrepreneurship in participating G7 countries in 2013 - percentage of working age population who are neither nascent entrepreneurs nor existing business owner/managers, who expressed an opinion and agreed with the statement at the top of the column**  
(Source: GEM APS, 2013)

Note: The UK attitudinal data in this table differs slightly from that published in the GEM Global Report for 2013 as that was based on an interim sample of 2,000 submitted in July 2013 and was based on all respondents, not just those who were not entrepreneurially active.

	I know someone who has started a business in the last 2 years	There are good start-up opportunities where I live in the next 6 months	I have the skills, knowledge and experience to start a business	Fear of failure would prevent me starting a business (for those who agree there are good start-up opportunities)
UK	25.2	33.2	37.0	41.4
France	30.4	21.4	29.3	46.3
Germany	22.1	29.1	32.3	43.0
US	21.2	43.4	47.6	34.7



## 2.2 ENTREPRENEURIAL ATTITUDES IN THE UK IN 2011, 2012 AND 2013

Table 2 shows estimates of changes in attitudes towards entrepreneurship in the UK among the non-entrepreneurially active working age population by gender between 2011 and 2013, and Figure 2 (next page) shows the trend from 2003 to 2013. Two points can be noted here. The first is the

continued increase in the proportion of people that think there will be good start-up opportunities in the local area within the next six months. Secondly, there is still a wide divergence between the proportion of the non-entrepreneurial population in the UK who think that successful business founders have a high status in society (80%), and the proportion who think that most people would agree that starting a business

**Table 2: Entrepreneurial attitudes in the UK among households in 2011, 2012 and 2013 (% non-entrepreneurially active respondents aged 18-64 expressing an opinion and agreeing with the statement)**

(Source: GEM UK APS, 2011, 2012, 2013)

Note: The UK attitudinal data in this table differs from that published in the GEM Global Report for 2013 as that was based on an interim sample of 2,000 submitted in July 2013 and was based on all respondents, not just those who were not entrepreneurially active.

	2011	2012	2013	2011	2011	2012	2012	2013	2013
	All	All	All	Male	Female	Male	Female	Male	Female
I personally know someone who has started a business in the last two years	28.2	27.1	25.2	30.1	26.5	29.3	25.1	26.8	23.7
There will be good start-up opportunities where I live in the next six months	27.9	30.5	33.2	29.7	26.4	34.6	26.8	37.6	29.0
I have the skills, knowledge and experience to start a business	36.7	38.7	37.0	45.0	29.3	47.3	31.2	43.9	30.8
Fear of failure would prevent me from starting a business (for those who agree there are good start-up opportunities)	41.4	43.3	41.4	38.7	44.0	40.5	46.4	40.1	43.0
Most people consider that starting a business is a good career choice	50.4	49.9	54.5	50.6	50.2	51.7	48.3	55.8	53.3
Those successful at starting a business have a high level of status and respect in society	81.4	77.1	79.5	82.2	80.7	76.2	78.1	79.7	79.3
You will often see stories about people starting successful new businesses in the media	44.2	45.5	48.8	45.5	42.9	48.6	42.6	52.2	45.6

is a good career choice (55%). The UK is not unique in this respect and a similar gap is observed in France, Germany, Norway, Luxembourg, Finland and Ireland. However, these countries contrast with Spain, Macedonia, Romania and Belgium where the proportions of the non-entrepreneurial population who agree that starting a business is a good career choice are as high as those who regard successful business founders as having a high status in society<sup>5</sup>.

portrayed in the media as role models that might spur them to try setting up their own business or indeed encourage their children to do so.

Table 2 (page 9) shows that in 2013 men still tend to have more positive entrepreneurial attitudes than women. The gap is particularly marked in skills self-perception, although the gap in 2013 has narrowed somewhat compared to previous years. In 2013 there was a marginal though statistically insignificant decrease in self-perception of the skills, knowledge and experience to start

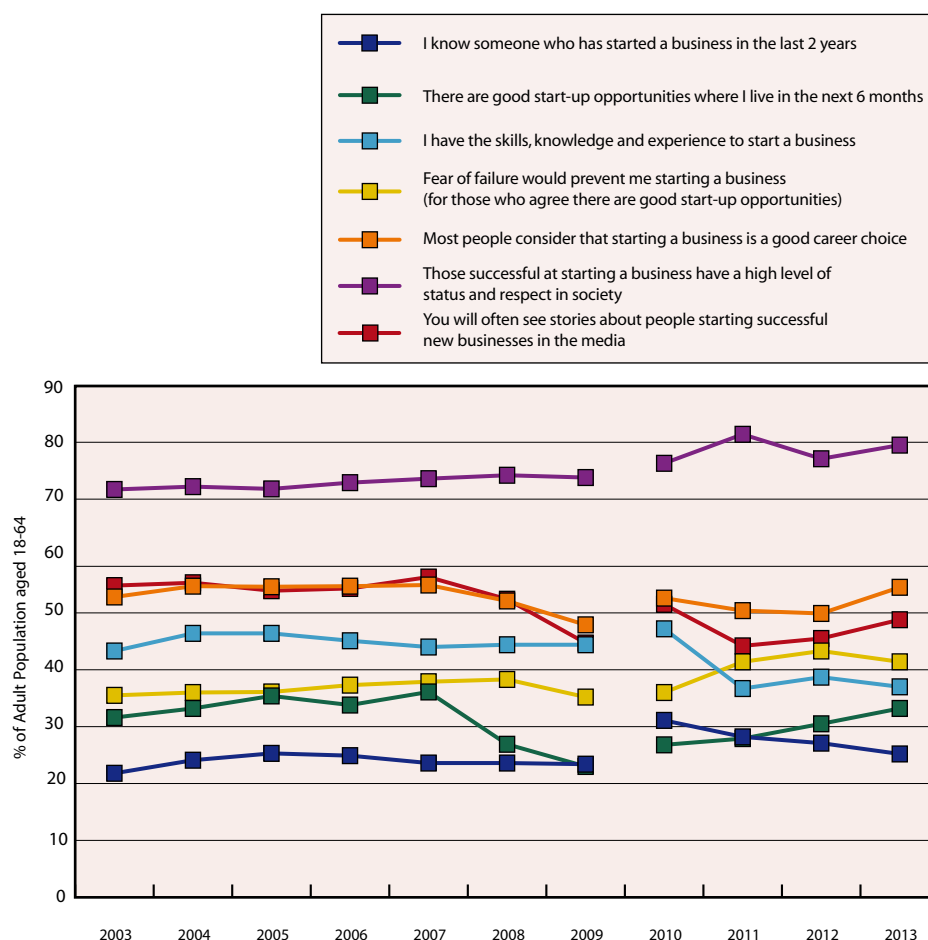
<sup>5</sup> Global Entrepreneurship Monitor (GEM): 2013 Global Report. [www.gemconsortium.org](http://www.gemconsortium.org)

One possible implication is that some people in the UK do not see successful entrepreneurs

**Figure 2: Entrepreneurial attitudes in the UK, 2003-2013: (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statement)**

(Source: GEM UK APS, 2003-2013)

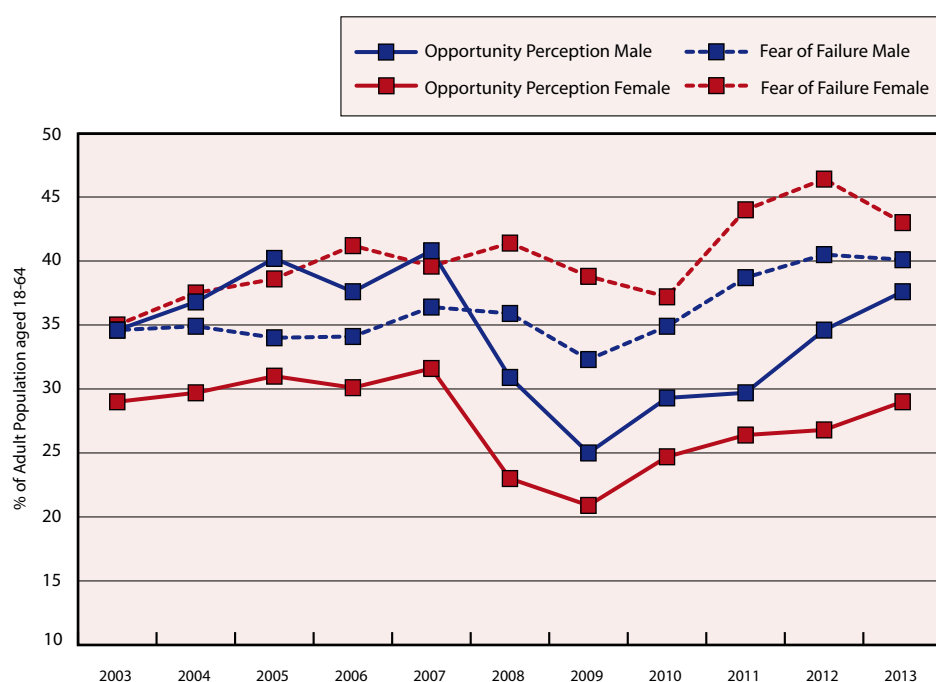
Note: the gap between 2009 and 2010 is a reminder that from 2010, mobile-only households were included in the sample as well as households with landlines.



a business. The gap in fear of failure between women and men is not statistically significant; notably the overall fear of failure rate is the same in 2013 as it was in 2011. Interestingly, opportunity perception (among non-entrepreneurs) rose among men and women between 2012 and 2013, although the rate for women was considerably, and significantly, lower than for men. Taken together, these trends over time support the view that when it comes to entrepreneurship, women may be more risk-aware than men.

Male and female attitudes towards good

opportunities in their local area in the next 6 months have followed the same trend since 2002, with both experiencing a drop in confidence in 2008 and a record low perception in 2009. Since 2011 increases in male attitudes towards opportunity have risen faster than females, leading to a widening of the gap between the two (Figure 3). Fear of failure amongst females has been consistently higher than males across the same period; however the drop in female rates in 2013, coupled with an unchanged male rate has narrowed the gap between the two to just 3 percentage points.



**Figure 3: Male and female attitudes towards Good Opportunities and Fear of Failure** (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statements "There are good start-up opportunities where I live in the next 6 months"; "Fear of failure would prevent me from starting a business")

(Source: GEM UK APS, 2003-2013)

## 2.3 ATTITUDES TOWARDS ENTREPRENEURSHIP IN THE UK HOME NATIONS

The self-reported attitudes of the non-entrepreneurially active working age population towards entrepreneurship in the four UK home nations in 2013 are presented in Table 3. The key findings are as follows:

- The item "I personally know someone who has started a business in the last two years" may reflect the prevalence of new business start-up in a nation as well as the amount of networking by individuals in a nation. In 2013 there were no significant differences in the proportions across the four UK nations.

- A significantly lower proportion of the non-entrepreneurially active population reported that there were good start-up opportunities in their local area in the next 6 months in Wales (25%) and Northern Ireland (20%) than in England (35%).<sup>6</sup>
- The proportion of non-entrepreneurially active respondents who thought they had the skills to start a business was not significantly different between home nations.
- The point estimate for fear of failure for Northern Ireland is between 7 and 13 percentage points higher than in the other three UK nations; this difference was statistically significant in 2013.

- The proportion of non-entrepreneurial individuals who agreed that you will often see stories about people starting successful new businesses in the media was broadly similar across the home nations in 2013 as was the proportion of non-entrepreneurial individuals in the home nations who agreed that those successful at starting a business have a high level of status and respect in society. There were also no significant differences in the proportion of non-entrepreneurial individuals in the home nations who agreed that most people consider that starting a business is a good career choice.

<sup>6</sup> The 2002-2012 home nation data for the 'Good Opportunities' attitude variable in the GEM UK pooled dataset is included in the Appendix (Table 3b)

**Table 3: Perceptions of entrepreneurship among non-entrepreneurially active individuals in the UK Home Nations, 2013**  
(Source: GEM UK APS, 2013)

	England	Wales	Scotland	Northern Ireland	United Kingdom
I know someone who has started a business in the last 2 years	25.0	24.6	27.3	23.1	<b>25.2</b>
There are good start-up opportunities where I live in the next 6 months	34.6	25.1	29.1	20.2	<b>33.2</b>
I have the skills, knowledge and experience to start a business	37.5	35.5	34.7	33.4	<b>37.0</b>
Fear of failure would prevent me from starting a business (for those who agree there are good start-up opportunities)	41.8	39.2	36.6	49.5	<b>41.4</b>
Most people consider that starting a business is a good career choice	55.2	53.0	49.7	50.8	<b>54.5</b>
Those successful at starting a business have a high level of status and respect in society	79.5	80.7	78.9	80.2	<b>79.5</b>
You will often see stories about people starting successful new businesses in the media	48.7	47.6	49.0	51.8	<b>48.8</b>

## 3 ENTREPRENEURIAL ACTIVITY

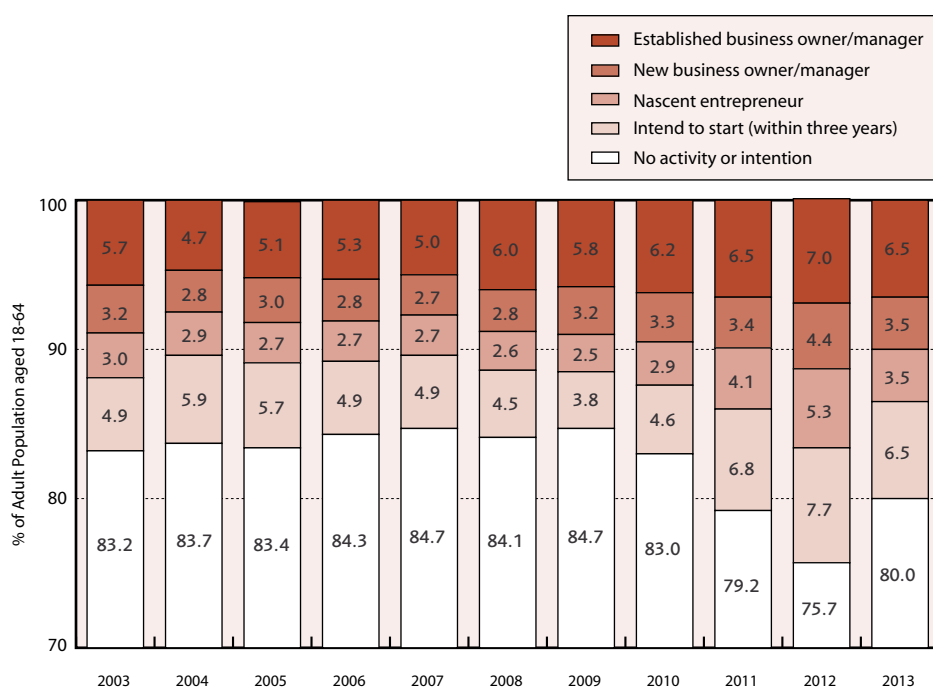
### 3.1 ENTREPRENEURIAL ACTIVITY IN THE UK AND BENCHMARK COUNTRIES

GEM views entrepreneurship as a process in which individuals become increasingly engaged in entrepreneurial activity. Figure 4 illustrates the proportion of respondents by stage of entrepreneurial activity in the UK over the period 2003 to 2013. In this figure, individuals who engaged in more than one stage of the process at a time are included in **their most established stage** (see Figure 4a in Appendix for gross rates for each stage).

In the UK in 2013, one fifth of working age individuals were engaged in entrepreneurial activity or intended to start a business within the next three years, which represented

a decrease from around one quarter of individuals in 2012. Significant decreases from 2012 to 2013 were recorded in the rate for expecting to start a business at 6.5% (compared to a record 7.7% in 2012) and the nascent entrepreneurship rate at 3.5% (compared to 5.3% in 2012). An additional 3.5% (4.1% in 2012) were new business owner/managers. Finally, 6.5% (7.0% in 2012) were established business owner/managers. The decrease in rates in 2013 actually represented a drop back to 2011 levels, and in fact rates remained above pre-recession levels.

Total early-stage Entrepreneurial Activity (TEA) is the sum of the nascent entrepreneurship rate and the new business



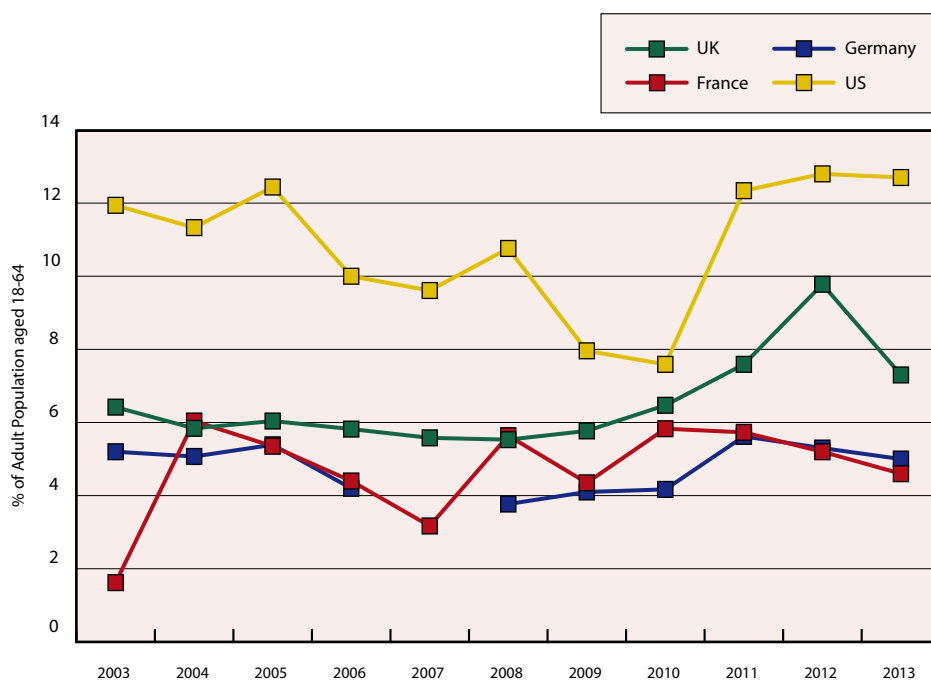
**Figure 4: Participation in Entrepreneurship in the UK by most established stage of entrepreneurial activity, 2003 to 2013**  
(Source: GEM UK APS, 2003-2013)

owner/manager rate. Figure 5 shows trends in TEA rates of the UK, France, Germany and the US between 2003 and 2013. Between 2012 and 2013, no significant changes in the TEA rate were recorded in France, Germany or the US. The TEA rates in France and Germany are also close to levels recorded in the 2005 – 2006 period. However, the significant decline in the UK TEA rate over the year to 7.3% brings it back down to the 2011 rate, suggesting that 2012 may in fact have been somewhat of an exceptional year.

have owned or managed a business for more than 42 months. Finally, GEM measures the proportion of individuals of working age who closed down a business in the last 12 months, one that did not continue under a different form of ownership.

The ratio of established business ownership to early-stage entrepreneurship gives a proxy measure of transition rates from early stage entrepreneurship to established business ownership<sup>7</sup>. This can be interpreted as a proxy survival measure. The ratio of closure to business ownership (new plus established) gives a proxy of entrepreneurial dynamism or "churn". The 2013 results for the UK, France, Germany and the US are given in Table 5.

<sup>7</sup> This measure assumes that early-stage entrepreneurship and established business ownership does not fluctuate over time.



**Figure 5: Total early-stage Entrepreneurial Activity (TEA) in UK, France, Germany and US (2003-2013)**

(Source: GEM Global Adult Population Survey (APS) 2003-2013)

GEM is a survey of individuals and not a survey of registered businesses. Therefore, the figures reported for business ownership will not necessarily tally with official statistics on the size of the registered business stock in GEM participant countries. For the past two years, the GEM UK survey contained a question about business registration. Table 4 shows the proportion of owner-managers of new and established businesses in the UK who said their business was registered with

HMRC (Her Majesty's Revenue and Customs) as an employer (i.e., PAYE) or registered for Value Added Tax (VAT).

Not surprisingly, because the businesses of nascent entrepreneurs were not up and running yet, only 77% of them had registered their business. Perhaps more surprisingly 22% of new and 14% of established business owner-managers with between one and five employees, representing around 6% of all

	New Business Owners	Established Business Owners
No jobs	63.5%	71.9%
1-5 jobs	78.4%	85.6%
6-19 jobs	100.0%	97.8%
20+ jobs	72.0%	92.5%
All	70.9%	81.4%

**Table 4: Proportion of UK business owner-managers who stated their business was registered with HMRC (Her Majesty's Revenue and Customs) as an employer or registered for Value Added Tax, 2013**  
(Source: GEM APS, 2013)

**Table 5: Measures of entrepreneurial activity among the working age population in the UK, France, Germany and the US, 2013**  
(Source: GEM APS, 2013)

	I expect to start a business in the next 3 years (FUT)	Nascent Entrepreneurial Activity rate (paying wages for 3 months or less) (NEA)	New Business Owner-manager rate (4-42 months) (NBO)	Nascent + New business owner-manager rate (TEA)	Established Business Owners (>42 months) (EBO)	Business closure rate (Business closed in the last 12 months that has not continued) (BC)	Proxy early-stage business survival rate (EBO/TEA)	Proxy business churn rate BC/(NBO+EBO)
	(FUT)	(NEA)	(NBO)	(TEA)	(EBO)	(BC)	(EBO/TEA)	BC/(NBO+EBO)
UK	5.4	3.8	3.6	7.3	6.4	1.3	0.9	0.1
France	13.7	2.7	1.8	4.6	4.1	1.3	0.9	0.2
Germany	8.9	3.1	2.0	5.0	5.1	1.0	1.0	0.1
US	16.6	9.2	3.7	12.7	7.5	2.5	0.6	0.2

business owner-managers had not registered their business. Many of these businesses may be trading below the VAT threshold and/or their employees may be self-employed (exclusive) contractors. Almost all business owners with more than 5 employees had registered their business. Overall, however, 20% of new business owner-managers with employees and 12% of established owner-managers with employees had not registered their business. This is somewhat surprising and indeed a higher proportion than was reported in 2012 and we can only assume that this reflects the fact that there are a higher proportion of businesses with self-employed contractors this year being erroneously reported as actual employees.

New business owner-managers who were immigrants were more likely to have stated their business was registered than non-immigrants, even if they had no employees. However, ethnic minority new and

established owner-managers were less likely to state their business was registered; neither of these were statistically significant. There were also no differences by gender.

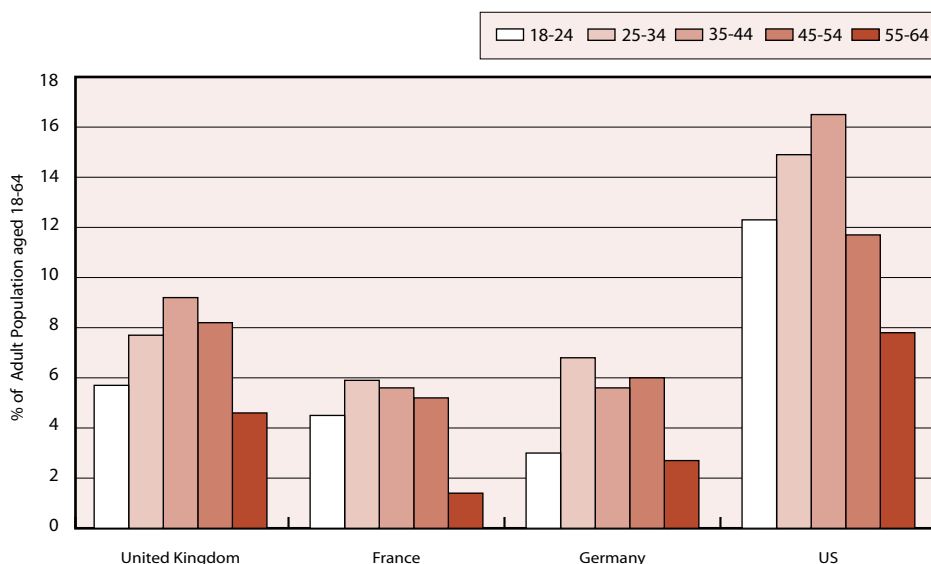
The 2013 estimates of entrepreneurial activity show decreases in all measures for the UK, while the US estimates largely remain the same (Table 5). The estimates for France and Germany vary compared to 2012. Other points of note include:

- On almost all these measures and ratios, rates for the UK fall between France and Germany on the one hand and the US on the other. An exception is business intention rates, which for the first time since records began are lowest in the UK. This may reflect improvements in the labour market in the UK.
- France has relatively high business start-up intention rates, but low established business owner rates



Figure 6 compares the TEA rate by age group of the UK, France, Germany and the US in 2013. TEA rates are highest in the middle years. The UK profile is midway between the US and France and Germany.

Figure 7 shows the trend in TEA rates in the UK by age group over the three years 2011 to 2013. Compared to 2011 it shows a decline in TEA rates amongst adults aged under 35 and over 55.

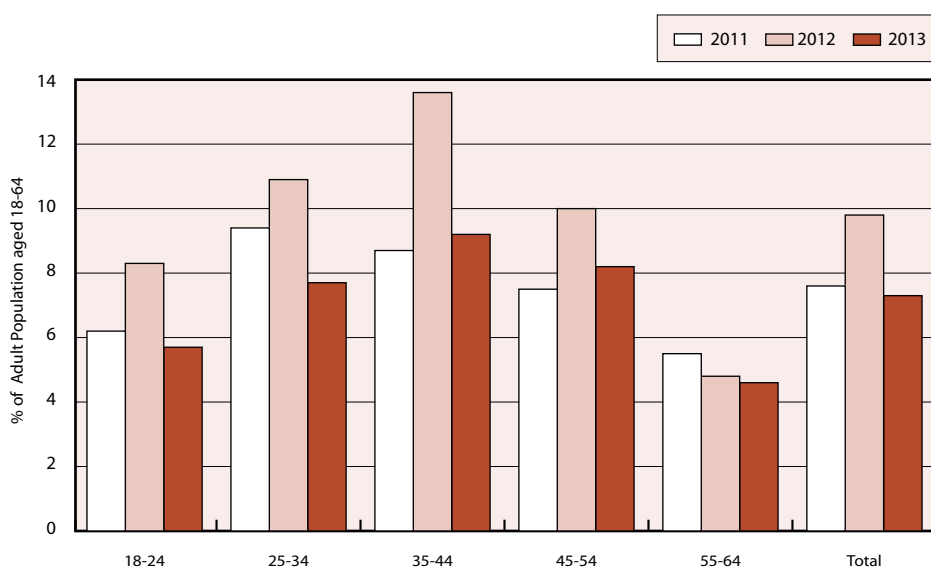


**Figure 6: Total early-stage Entrepreneurial Activity (TEA) in the UK, France, Germany and the US by Age Group (2013)**

(Source: GEM Global Adult Population Survey (APS) 2013)

**Figure 7: Total early-stage Entrepreneurial Activity (TEA) in the UK by Age Group (2011 to 2013)**

(Source: UK Adult Population Survey (APS) 2011, 2012, 2013)

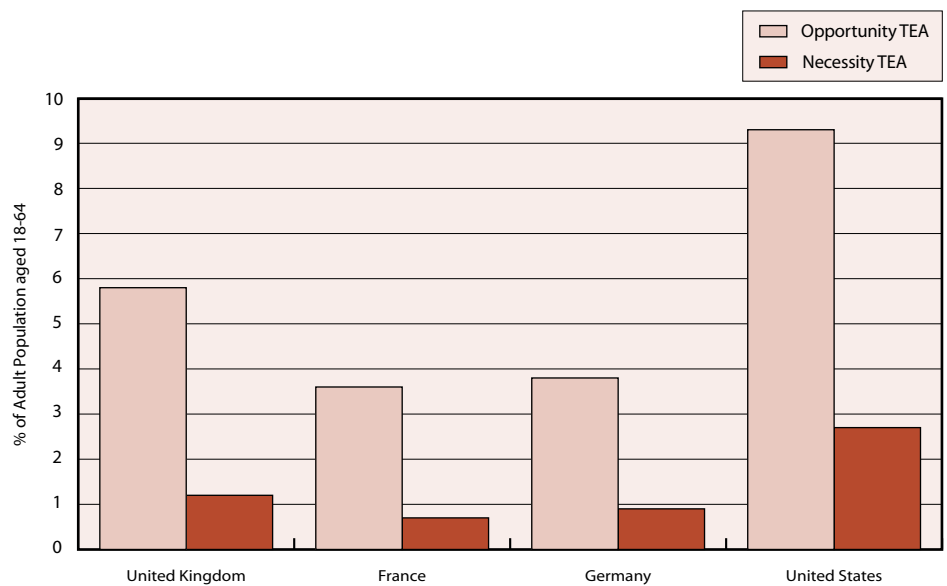


### 3.2 OPPORTUNITY AND NECESSITY-BASED ENTRY INTO ENTREPRENEURSHIP

Different people may have different motivations to enter into entrepreneurial activity. For example, in some cases, the motivation to start a business may be based on necessity, i.e. there are no better alternatives for work. Others may be motivated to start a business by opportunity, or the potential for new market creation. GEM identifies early-stage entrepreneurs

according to their original motivation to start: opportunity or necessity. Most early-stage entrepreneurs can be classified into either of these two groups.

Opportunity-motivated early-stage entrepreneurship rates (Opportunity TEA) and Necessity-driven early-stage entrepreneurship rates (Necessity TEA) for the UK, France, Germany and US in 2013 are presented in Figure 8. In all four countries, levels of necessity TEA in 2013 were lower



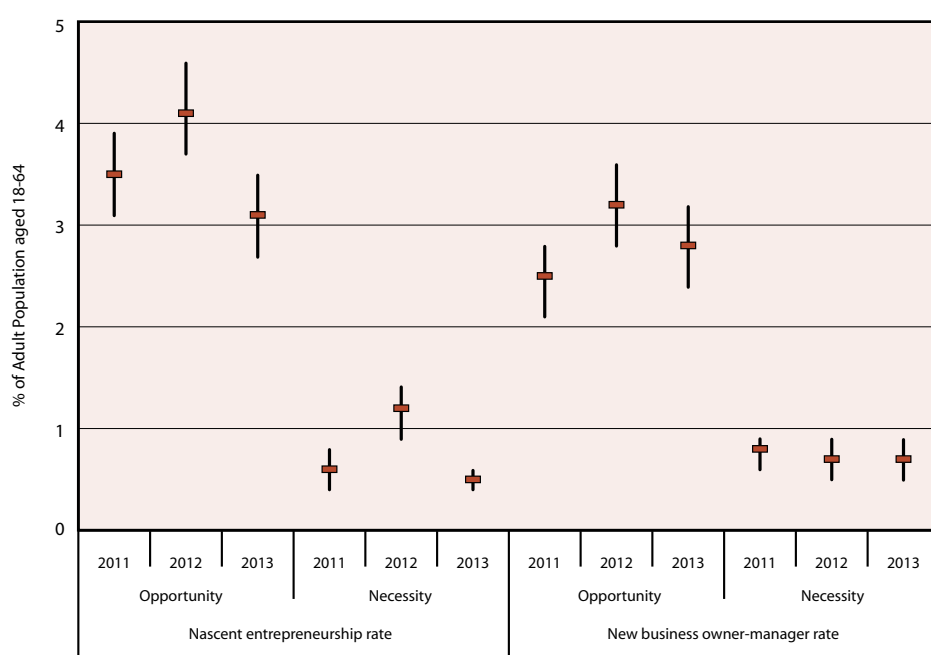
**Figure 8: Necessity and opportunity TEA rates in the UK, France, Germany and the US in 2013**

(Source: GEM APS, 2013)

than levels of opportunity TEA. In the UK, 5.8% of the working age adult population were opportunity-motivated early-stage entrepreneurs, compared with 5.1% in 2010, and 1.2% were identified as necessity-driven early-stage entrepreneurs, up significantly from 0.7% in 2010.

Both the UK necessity and UK opportunity-driven TEA rates lie midway between France

and Germany on the one hand and the US on the other, as shown in Figure 8. Figure 9 shows that there was a significant decline in both necessity and opportunity-based nascent entrepreneurial activity in the UK between 2012 and 2013. The opportunity-driven entrepreneurial activity rate for new business owners also fell, although this drop was not significant, whilst the necessity-driven rate remained unchanged.



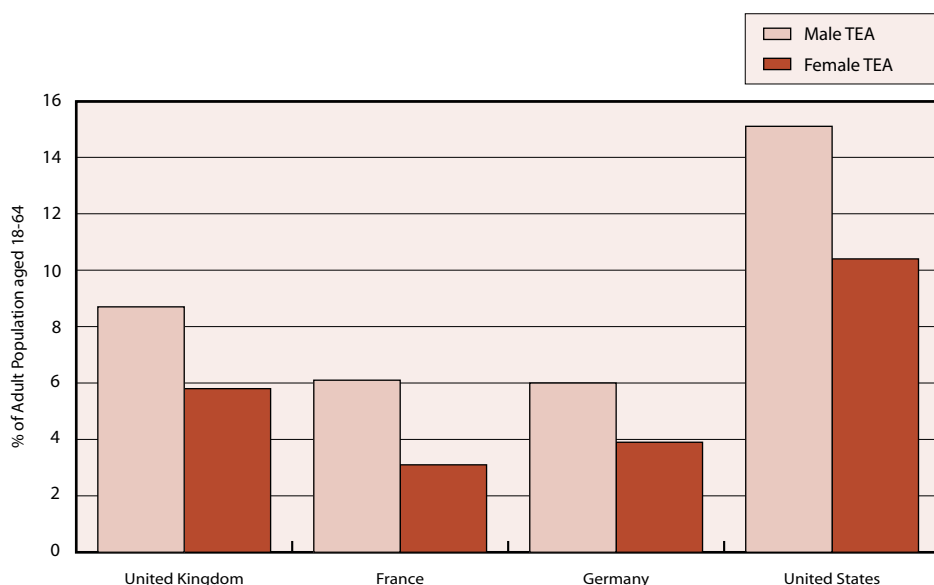
**Figure 9: Necessity and opportunity nascent and new business owner-manager rates in the UK showing 95% confidence intervals, 2011, 2012 and 2013**

(Source: GEM APS, 2011, 2012 and 2013)

### 3.3 MALE AND FEMALE ENTREPRENEURIAL ACTIVITY COMPARED

Figure 10 presents a summary of Total early-stage Entrepreneurial Activity (TEA) rates for the UK, France, Germany and the US by gender. In most high income countries, men are around twice as likely to be entrepreneurially active as women, and this was the case for France in 2013. But in Germany, the UK and the US, female TEA rates were around two-thirds of the male TEA rate. In the UK the level of female TEA was 66% that of males, up from 57% in 2012 and 49% in 2011: 5.8% compared to 8.7% for men.

In the US the ratio of female to male TEA was 69% in both 2012 and 2013 compared with 73% in 2011. The gap between UK and US early-stage entrepreneurial activity widened in 2013 for both males and females; the UK female TEA rate decreased significantly from 7.1% to 5.8% but the US female TEA rate remained static at 10.4% (10.5% in 2012), resulting in a female UK to US ratio of 55.8%. The US male TEA rate also remained unchanged at 15.1% in 2013 (15.2% in 2012), while the UK male TEA rate fell significantly from 12.4% to 8.7%, resulting in a male UK to US ratio of 58%.

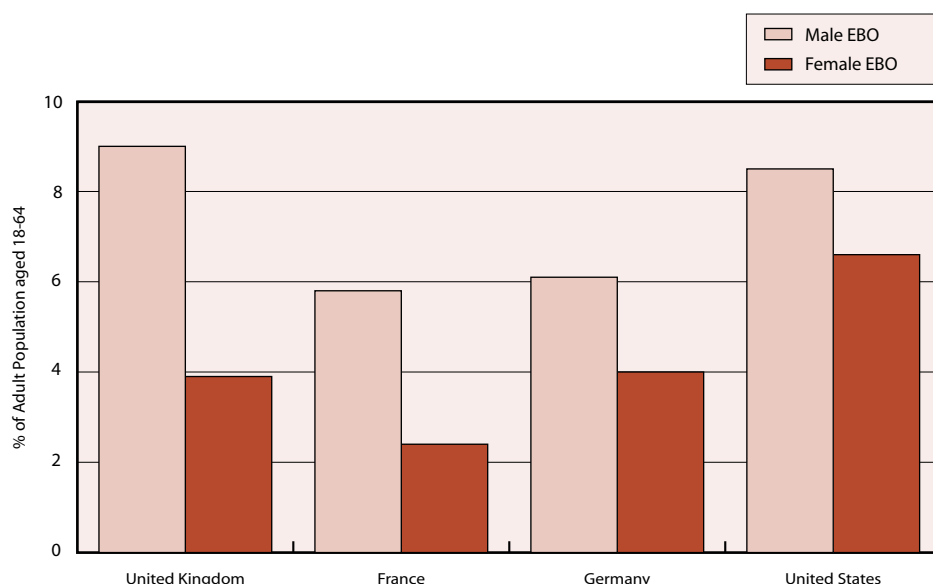


**Figure 10:** Total early-stage entrepreneurial activity by gender in the UK, France, Germany and the US in 2013

(Source: GEM APS, 2013)

Comparing Figures 10 and 11, the difference in participation rates between men and women is wider among established business owner-managers (EBO) than among early-stage entrepreneurs (TEA) in the UK and France in 2013. For example, the UK female early stage entrepreneurial activity was 66% of male activity, while female established business ownership at 3.9% was 43% that of males (9.0%). The equivalent ratios for France are 51% and 41% respectively. In the US the difference in participation is narrower for established business owner-managers, with female established business ownership at 78% that of males compared to 69% for female early-stage entrepreneurship. In Germany the rates are virtually identical, with female entrepreneurial activity 65% that of males, and female established business owner-manager activity 66% that of males.

Figure 12 shows that female TEA rates in the UK and France in 2013, like male rates, fell back towards those in 2011. Female rates were stable in Germany and the US.

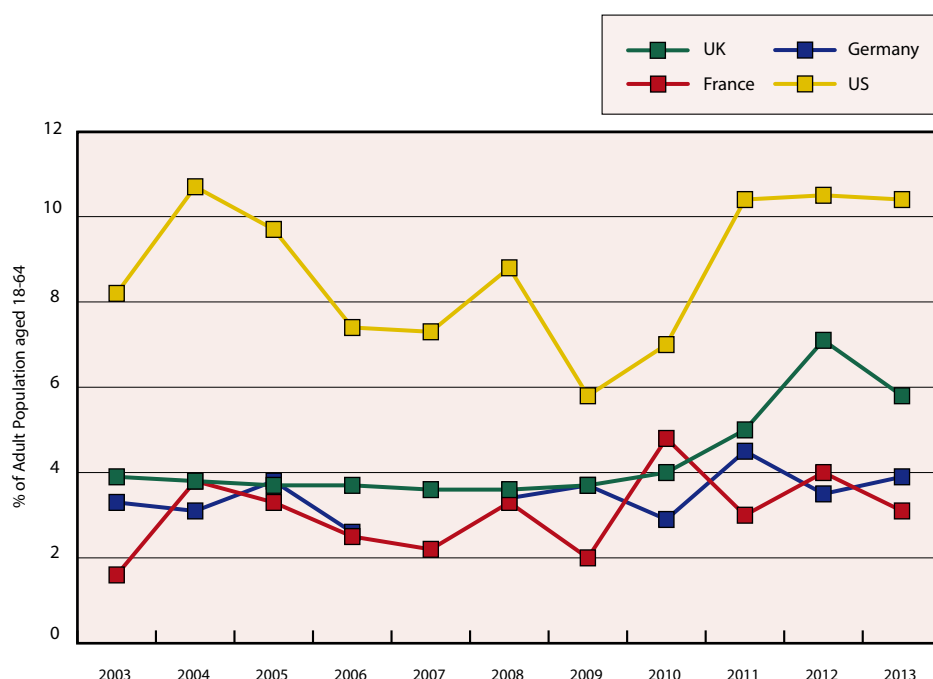


**Figure 11: Established business ownership by gender in the UK, France, Germany and the US, 2013**

(Source: GEM APS, 2013)

**Figure 12: Female early-stage entrepreneurial activity in the UK, France, Germany and the US, 2003-2013**

(Source: GEM APS, 2003-2013)



### 3.4 ENTREPRENEURIAL ACTIVITY IN THE UK HOME NATIONS

Table 6 displays different measures of entrepreneurial activity in the four home nations of the UK for 2013. Together, these measures allow us to assess the degree of dynamism and stability across different parts of the UK.

The proportion of people who expected to start a business in the next three years (intention rate) fell significantly in all the home nations in 2013 whilst the nascent entrepreneurship rate was also significantly lower in England in 2013 compared to 2012. The TEA rate in England, Wales and Northern

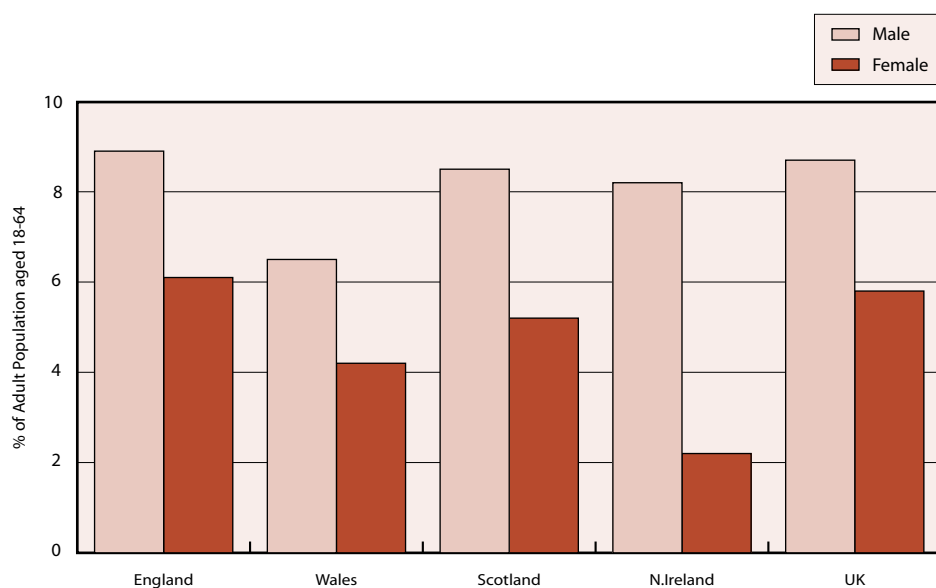
Ireland fell significantly in 2013. The rate in England dropped from 10.3% to 7.5%, although this remained significantly above the TEA rate in Wales and Northern Ireland. This was also the case for the new business owner-manager rate however there was no significant difference between home nations in the established business owner-manager rate.

Female early-stage entrepreneurial activity in the UK in 2013 was 6%. Across the home nations, the English female TEA rate was significantly higher than the female TEA rate in Northern Ireland, while there were no significant differences in male TEA rates. Females had significantly lower TEA rates than males in England and Northern Ireland,

**Table 6: Measures of entrepreneurial activity in the UK Home Nations, 2013**

(Source: GEM APS, 2013)

	I expect to start a business in the next 3 years (FUT)	Nascent Entrepreneurial Activity rate (paying wages for 3 months or less) (NEA)	New Business Owner-manager rate (4-42 months) (NBO)	Nascent + New business owner-manager rate (TEA)	Established Business Owners (>42 months) (EBO)	Business closure rate (Business closed in the last 12 months that has not continued) (BC)	Proxy early-stage business survival rate (EBO/TEA)	Proxy business churn rate BC/(NBO+EBO)
England	5.7	3.9	3.7	7.5	6.5	1.4	0.9	0.1
Wales	3.9	3.5	2.0	5.4	6.5	0.9	1.2	0.1
Scotland	4.3	3.2	3.7	6.8	5.1	1.0	0.8	0.1
Northern Ireland	3.4	3.2	1.9	5.1	7.3	0.5	1.4	0.1
<b>UK</b>	<b>5.4</b>	<b>3.8</b>	<b>3.6</b>	<b>7.3</b>	<b>6.4</b>	<b>1.3</b>	<b>0.9</b>	<b>0.1</b>



**Figure 13: Male and Female Total early-stage Entrepreneurial Activity in the UK Home Nations, 2013**

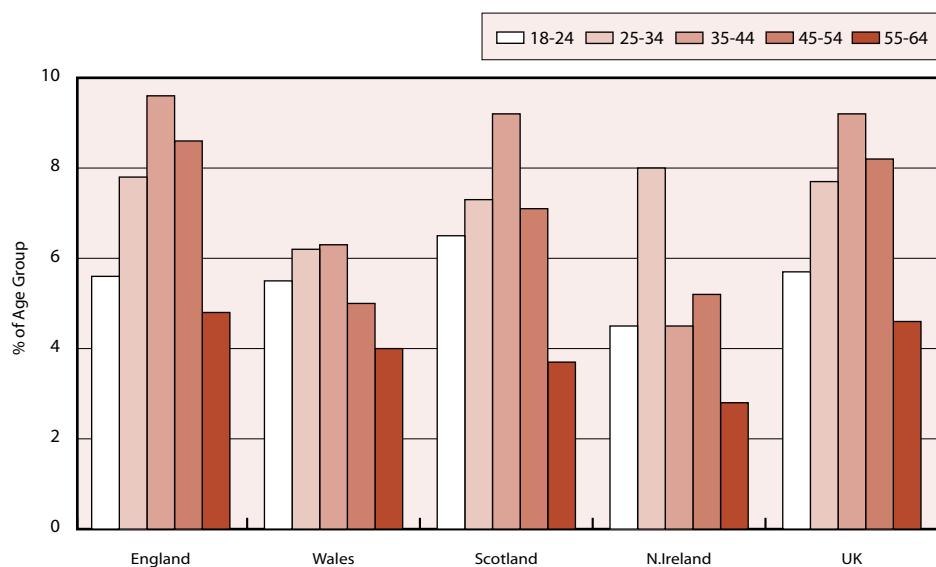
(Source: GEM APS, 2013)

as Figure 13 shows. Northern Ireland, as in previous years, has the lowest ratio of female to male TEA rate (27%) which was 39 percentage points lower than in the UK as a whole. England had the highest ratio at 68%,<sup>8</sup> the ratio for Wales and Scotland was also around two thirds.

Figure 14 shows that individuals aged between 35-44 years displayed the highest

rate of early-stage entrepreneurial activity in England, Wales and Scotland in 2013, but in Northern Ireland the highest rate was among 25-34 year olds. The TEA rate in the 25-34 age groups was also relatively strong in Wales. The pattern in Wales in 2013 is more akin to that of England than in previous years in which the TEA rate in Wales was shown to decrease with age.

<sup>8</sup> Caution should be taken in interpreting annual changes in ratios such as these. Margins of error may be larger in ratio measures.



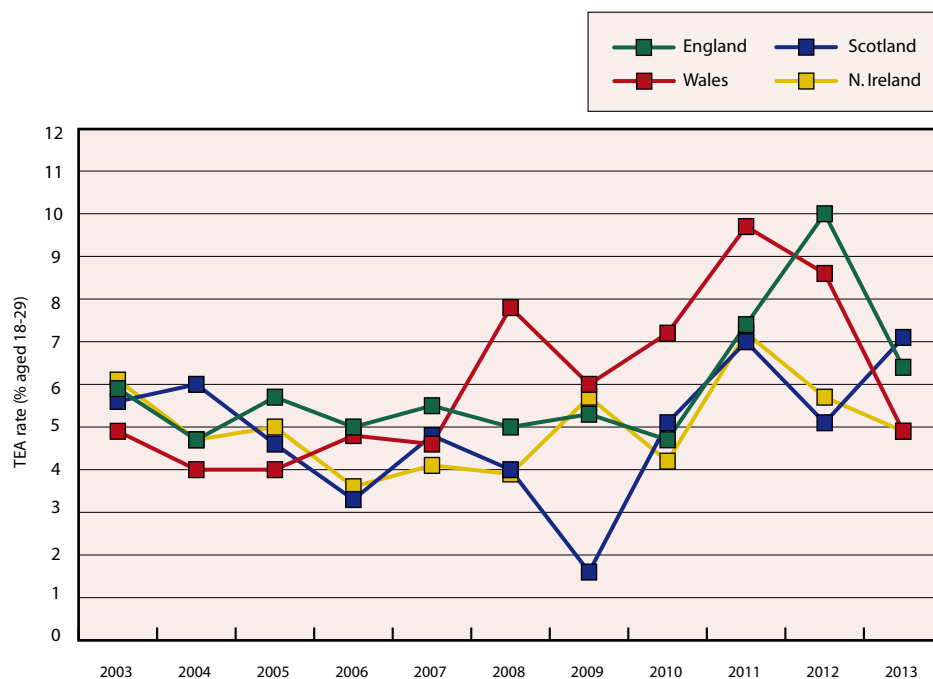
**Figure 14: Total early-stage Entrepreneurial Activity in the UK Home Nations by Age Group, 2013**

(Source: GEM APS, 2013)

The TEA rate for 35-44 year olds was significantly higher in England than it was in Northern Ireland. The only statistically significant differences within home nations were between 55-64 year olds and both 35-44 and 45-54 year olds in England; and between 25-34 year olds, and 55-64 years olds in Northern Ireland. However, when 18 to 29 year olds are grouped together, a clear decrease in activity is apparent in all

home nations except Scotland between 2012 and 2013; the latter increasing from 5 to 7% (Figure 15). The drop in activity in Wales, to pre-recession levels, is notable.

There was considerable variation across the home nations in the TEA rate among 55 to 64 year olds, with England displaying the highest rate (4.8%) and Northern Ireland (2.8%) the lowest.



**Figure 15: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18 to 29 year olds, 2003 to 2013**

(Source: GEM APS, 2003-2013)



## 4 ENTREPRENEURIAL ASPIRATION

The potential of entrepreneurial activity to promote regeneration and growth will reflect the types of business being established. If an entrepreneur expects to create a large number of jobs, or if the product market is new, then his or her potential contribution to growth and regeneration through entrepreneurship may be greater. The complex nature of the contribution of firms of different age and size to job creation in the UK has been highlighted in recent research<sup>9</sup>.

To identify individuals who expect to create a relatively high number of jobs, GEM created a variable which measures the percentage of all

early-stage entrepreneurs who have created more than ten jobs and who expect more than 50% growth in jobs in the next five years<sup>10</sup>.

The results are illustrated in Table 7 for early-stage entrepreneurs (nascent and new business owners) and established business owner-managers. Table 7 also shows the proportion of early-stage entrepreneurs and established business owner-managers who state they operate in new product markets<sup>11</sup>, operate in "high" or "medium" technology sectors (according to OECD definitions), and have more than 25% of their customers from outside the country, for the UK, France, Germany and the US.

<sup>9</sup> See, for example, Hart, M. and Anyadike-Danes, M. (2014) Moving on from the vital 6%; Enterprise Research Centre Insight Report, February

<sup>10</sup> The OECD defines HGFs as: 'enterprises with average annualised growth in employees or turnover greater than 20 per cent per annum, over a three year period, and with more than 10 employees in the beginning of the observation period'. By contrast, the GEM measure is a measure of expected, not realised, growth and of 50% over five years.

<sup>11</sup> Where the product is new to all or most customers and where there is little or no competition.

**Table 7: Measures of entrepreneurial aspiration in the UK, France, Germany and US, 2013**

(Source: GEM APS, 2013)

	(% of TEA or EBO Entrepreneurs)							
	High Job Expectation: More than ten jobs and growth more than 50%		New Product-Market		High or Medium tech sectors		Exporting: More than 25% of customers outside the country	
	TEA	EBO	TEA	EBO	TEA	EBO	TEA	EBO
<b>UK</b>	<b>15.9</b>	<b>3.2</b>	<b>26.3</b>	<b>9.3</b>	<b>4.8</b>	<b>5.7</b>	<b>16.3</b>	<b>10.2</b>
France	15.9	1.7	27.6	18.2	9.6	3.9	18.6	13.2
Germany	16.4	3.0	26.0	8.5	6.1	9.6	16.1	10.1
US	23.3	2.2	34.2	12.7	7.5	3.1	11.3	6.7

Sixteen per cent of UK early stage entrepreneurs had high job expectations in 2013; this proportion has changed little since 2007. Figure 16 shows the trend in the relative frequency of high job expectation TEA, i.e. the percentage of TEA entrepreneurs who had high job expectations for the UK, France, Germany and the US, using a three year rolling average presentation that smooths out random fluctuations from year to year due to small sample sizes. It demonstrates that the relative frequency of high job expectation among early-stage entrepreneurs was relatively high in the UK in the early part of the last decade at around 25%, but it steadily declined to stabilise in recent years around 17%. In the US, it has increased slightly in the past decade from 19% to settle at around 23% since 2009.

In Germany it has increased slightly, and in France it doubled to reach 20%.

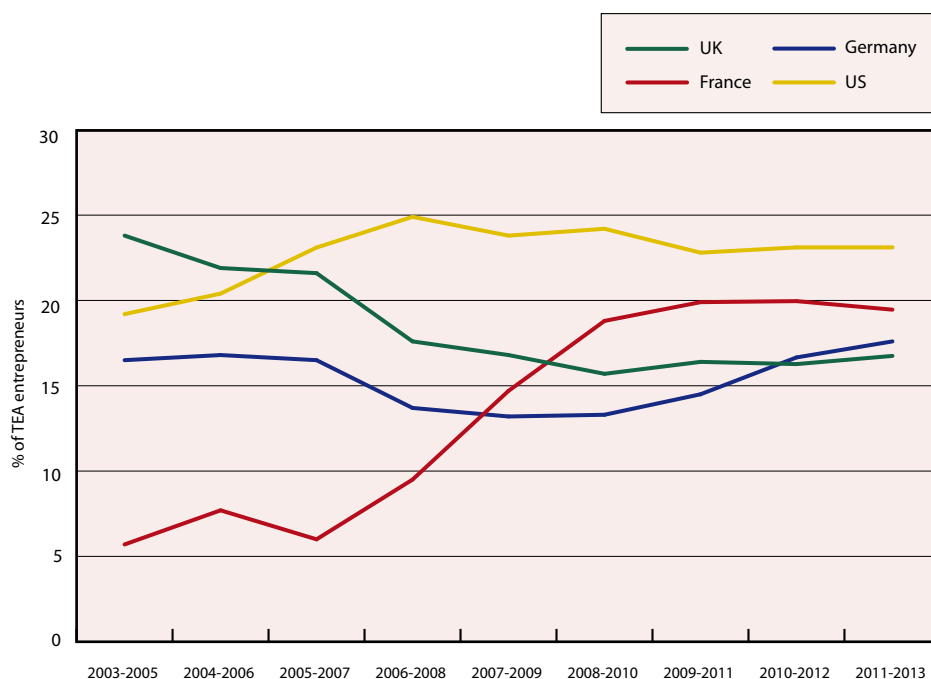
Figure 17 shows the trend in relative frequency of high job expectation among established business owner-managers, using the same presentation as for Figure 16. Note that the relative frequency of high job expectation among established business owner-managers is less than one quarter that of early-stage entrepreneurs. The long term trend is down for the UK and US, towards German levels.

Table 7 (page 25) shows that in 2013 the UK is remarkably similar to Germany in most of the entrepreneurial aspiration metrics; 26% of early-stage entrepreneurs in both countries reported new product-market creation but only 9% of

established business owners. The rate for new product-market creation amongst established business owners was double this in France at 18% whilst in the US the rate was 13%.

The third variable in Table 7 illustrates the percentage of early-stage entrepreneurs and established business owner-managers who were active in high or medium-tech sectors according to OECD definitions<sup>12</sup>. In 2013 the UK had, at 5%, the lowest proportion of early-stage entrepreneurs in high or medium tech sectors compared to its benchmark countries. The rate for established business owners, at 6%, was halfway between Germany on one side and France and the US on the other.

The final variable in Table 7 shows the proportion of early-stage entrepreneurs



**Figure 16:** Relative frequency of high job expectation early-stage entrepreneurs in the UK, France, Germany and the US, three year rolling averages, 2003-2005 to 2011-2013

(Source: GEM APS, 2003-2013)

and established business owners who have (or expect to have, in the case of nascent entrepreneurs) over one in four customers from outside the country. At 16% and 10% respectively, the UK is not out of line with its benchmark nations.

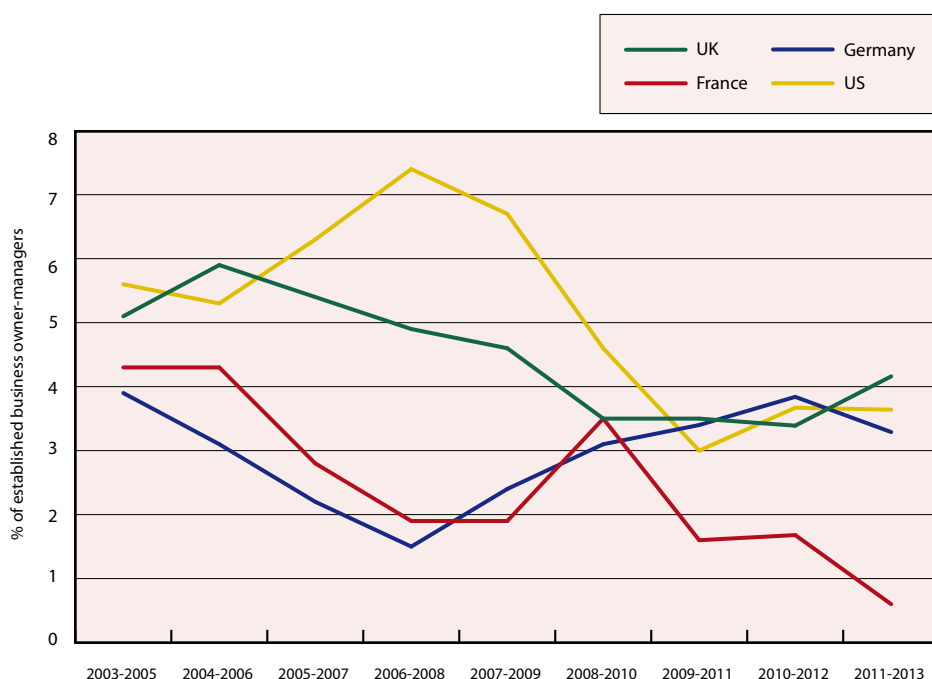
Further analysis of the growth ambitions of business owners reveals the reasons for the difference in the US and UK rates<sup>13</sup>. First, there has been an increase in the UK and a decrease in the US in the number of new self-employed (with no employees). With little change in the number of new employers in both countries, this means that the proportion of new business owner-managers that are employers has declined in the UK but increased in the US. Secondly, the number of established employers has almost doubled in the US but

increased by only a quarter in the UK. Again, this has the effect of increasing the relative proportion of employers among the pool of established business owner-managers in the US, since the number of established self-employed is similar in both countries. Thirdly, although employers in the US and the UK are equally likely to be ambitious, employers are much more likely to be ambitious than the self-employed, particularly in the UK.

Overall, it was found that business owners in the UK who employ people are just as likely to be ambitious as their counterparts in the US. It is the combination of rising self-employment in the UK, declining self-employment in the US, and a much faster rise in the number of employers in the US that has caused the ambition gap.

12 GEM collects data for high, medium and low technology sectors according to OECD definitions and also asks if their technology was available one year ago, 2-5 years ago or longer than that. The latter set of variables have been reported in the past but these only give an indication of the newness of the technology in the perception of the respondent. The measure in Table 6 uses OECD definitions of technology.

13 Levie, J. (2014) "Explaining the US-UK ambition gap", Enterprise Research Centre Insight Report, June



**Figure 17: Relative frequency of high job expectation among established business owner-managers in the UK, France, Germany and the US, three year rolling averages, 2003-2005 to 2011-2013**

(Source: GEM APS, 2003-2013)

## 5 ANTICIPATED VERSUS ACTUAL SOURCES OF FUNDING FOR START-UPS

Obtaining funding remains a major issue for many start-up businesses, with over half of nascent entrepreneurs reporting they require external funding. Since 2006, GEM has tracked the mix of funds that nascent entrepreneurs expect to use; sources of funds that they state they have actually used; and, finally those sources which they tried but failed to access.

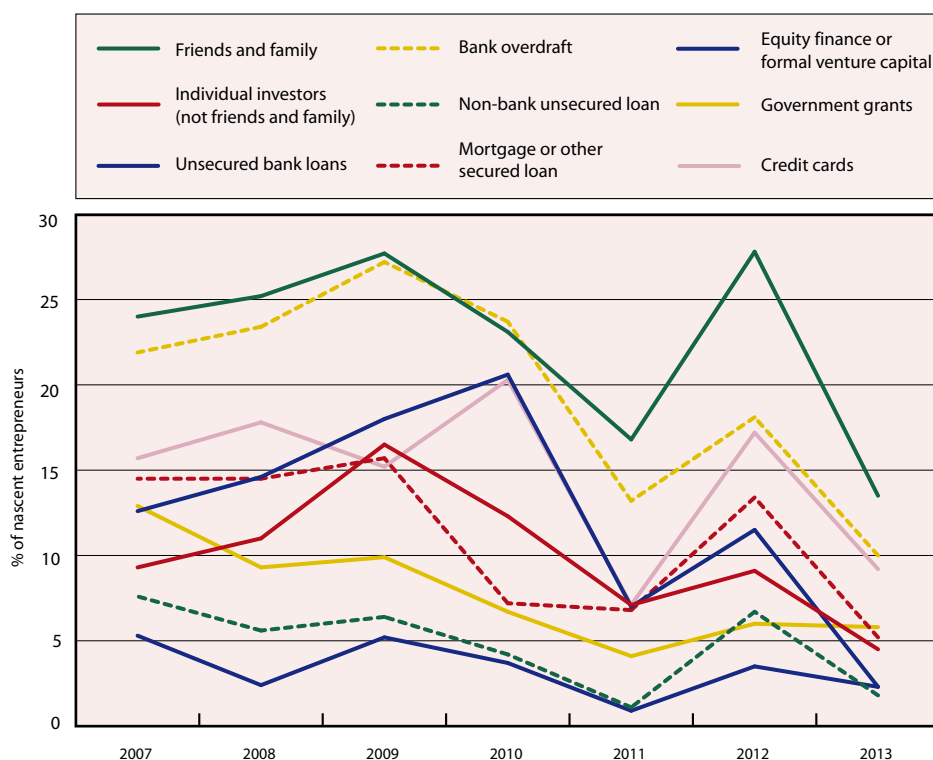
Table 8 shows trends in expected funding sources for start-ups for the 2007 to 2013 period. Overall, the results suggest that on

the one hand more entrepreneurs expect to self-fund and on the other a wide range of funding sources from those who expect to get external funding. Expectation of funding from banks has decreased significantly to its lowest level, from around one fifth of start-up entrepreneurs to one tenth. Expectations of funding from individual investors, particular from relatives, and from government programmes were also down significantly on previous years. This suggests an overall dampened expectation of wider availability of funding.

	2007	2008	2009	2010	2011	2012	2013
<b>Type of funding expected</b>							
No funding needed	5.1	5.1	5.0	10.3	6.2	4.4	6.0
All funded by entrepreneur	54.7	51.2	50.7	43.8	47.0	39.0	40.5
None funded by entrepreneur	2.8	2.2	3.9	8.5	4.9	6.7	1.1
Close family member (spouse, parent, sibling)	8.8	12.1	10.1	8.6	3.5	8.9	3.2
Other relatives, kin or blood relations	4.3	8.0	6.0	1.7	2.0	8.2	2.3
Work colleagues	6.1	9.9	6.8	5.0	10.1	8.3	6.4
A stranger	2.2	3.6	3.7	0.7	1.1	5.0	2.9
Friends or neighbours	3.2	6.1	4.5	6.9	2.5	5.6	6.7
Banks or other financial institutions	19.3	18.6	20.0	18.2	18.6	22.3	11.1
Government programmes	12.1	17.2	15.1	17.7	11.1	15.9	9.6
Any other source	6.4	5.9	8.8	5.0	7.2	13.2	8.9

**Table 8:** Percentage of nascent entrepreneurs expecting funding from different sources, 2007 to 2013  
(Source: GEM UK APS, 2007-2013)

It is instructive to compare the funding expectations of nascent entrepreneurs with their experience. Figure 18 shows trends in the sources of finance that nascent entrepreneurs report that they have ever used to fund a business. Changes over the 2007 to 2013 period may reflect changes in funding preferences and in perceived as well as actual availability of funding. Most sources experienced a fall in use between 2009 and 2011, a partial recovery in 2012 and a further decline in 2013.



**Figure 18:** Percentage of UK nascent entrepreneurs who have reported ever using a type of funding for a business, 2007 to 2013

(Source: GEM APS, 2007-2013)

Finally, we consider the types of funding that nascent entrepreneurs report they sought *and failed to secure*. Table 9 shows an apparent return to a more "normal" profile in 2013 with refusal rates at or below their 2007 levels; this was particularly the case for family and unsecured bank loans after jumps in both rates in 2009 and 2010 respectively.

	2007	2008	2009	2010	2011	2012	2013
<b>Type of funding sought and refused</b>							
Friends and family	3.0	4.8	10.8	3.1	6.5	6.2	2.2
Individual investors (not friends and family)	2.6	4.5	10.1	3.1	3.6	7.5	1.1
Unsecured bank loans	4.4	6.1	9.5	17.0	4.2	6.9	1.9
Bank overdraft	5.1	5.6	9.4	12.3	4.5	8.0	3.2
Non-bank unsecured loan	1.9	2.7	4.2	3.1	3.5	3.3	2.9
Mortgage or other secured loan	5.5	4.7	4.0	3.1	2.5	4.9	0.2
Equity finance or formal venture capital	2.3	2.1	2.4	1.3	3.0	1.7	0.6
Government grants	8.1	6.1	7.8	7.0	5.7	6.3	2.2
Credit cards	4.6	4.7	4.9	8.4	2.0	6.6	2.1
Grants from local authorities or local enterprise organisations	n.a.	n.a.	n.a.	n.a.	6.1	5.0	1.7

**Table 9: Percentage of UK nascent entrepreneurs who have reported being refused funding, by type of funding refused, 2007 to 2013**  
(Source: GEM APS, 2007-2013)

These trends fit with recent changes in informal investment, or investment by individuals in other people's new businesses in the last three years shown in Table 10. The informal investment rate stood at around 1.3% between 2007 and 2009, but rose to almost 3% in 2010. By 2013 it had fallen back somewhat to 2.1% with investment focused more on close family members than friends, despite a decrease in the former and an increase in the latter. This rate is less than half the average rate (4.7%) across 67 participating economies in 2013.

	2007	2008	2009	2010	2011	2012	2013
<b>Informal investment rate</b>							
% aged 18-64 who have invested in someone else's new business in the last 3 years	1.3	1.4	1.2	2.9	2.4	2.6	2.1
<b>Relationship of latest investee (% of latest investments)</b>							
Close family member (spouse, parent, sibling)	45.9	39.8	41.0	37.0	50.2	57.5	46.8
Other relative, kin or blood relations	5.5	4.5	4.5	7.5	6.2	2.2	6.6
Work colleague	8.9	15.7	8.3	2.2	7.4	8.9	3.9
Friend or neighbour	34.3	32.3	35.5	48.5	28.4	23.4	38.7
A stranger with a good business idea	3.8	7.1	8.6	4.5	7.9	4.1	4.0
Other	1.7	0.6	2.1	0.4	0.0	3.8	0.0

**Table 10:** Percentage of individuals aged 18-64 who have invested in someone else's new business in the last 3 years, and the distribution of relationships to the latest investee, 2007 to 2013

(Source: GEM UK APS, 2007-2013)

## 6 MEASURES OF WELL-BEING

In 2013, the special topic for GEM was entrepreneurship and well-being. A set of previously validated measures related to subjective well-being (general satisfaction with one's life), with optional measures of work-life balance, satisfaction with one's job and exposure to excessive stress at work, were included in the 2013 GEM Adult Population Survey<sup>14</sup>.

Subjective well-being on average is positive for innovation-driven countries but neutral across the European Community (EC), with negative scores (dissatisfaction with one's life) in Eastern and Southern Europe and higher scores (satisfaction with one's life) in Northern Europe. Overall, subjective well-being in the UK is relatively high in comparison to other EC countries, and it is in the second quartile

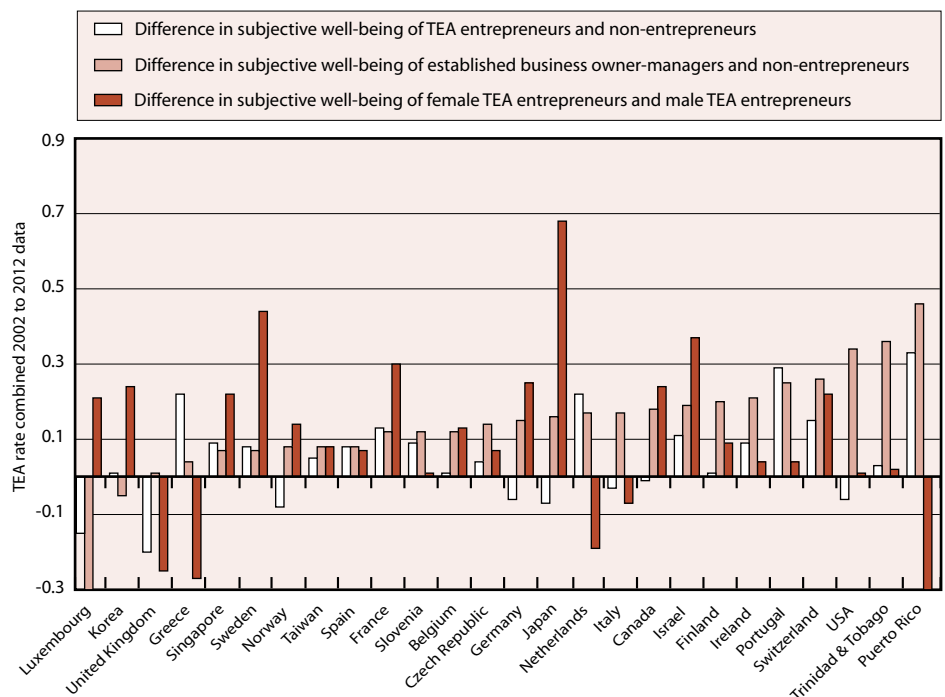
of innovation-driven countries participating in GEM 2013.

In general, for innovation-driven countries and across the EC, subjective well-being tends to be higher for TEA entrepreneurs (i.e., nascent and new business owners) than the working age population as a whole and higher again for established business owners. It also tends to be higher for opportunity-motivated TEA entrepreneurs than for necessity-motivated TEA entrepreneurs and higher for female TEA entrepreneurs than for male TEA entrepreneurs.

However, the UK does not fit this general pattern, as Figure 19 shows. There is little difference in the UK between the average subjective well-being of established business

<sup>14</sup> These measures are explained in detail in the GEM 2013 Global report, page 63, which is downloadable from [www.gemconsortium.org](http://www.gemconsortium.org). The 5-item measure of subjective well-being is taken from Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71-75.

**Figure 19:** Difference in standardized average scores of subjective well-being (based on five items) between TEA entrepreneurs and non-entrepreneurs, between established business owners and non-entrepreneurs, and between female TEA entrepreneurs and male TEA entrepreneurs, by innovation-driven economy, 2013  
(Source: GEM APS, 2013)





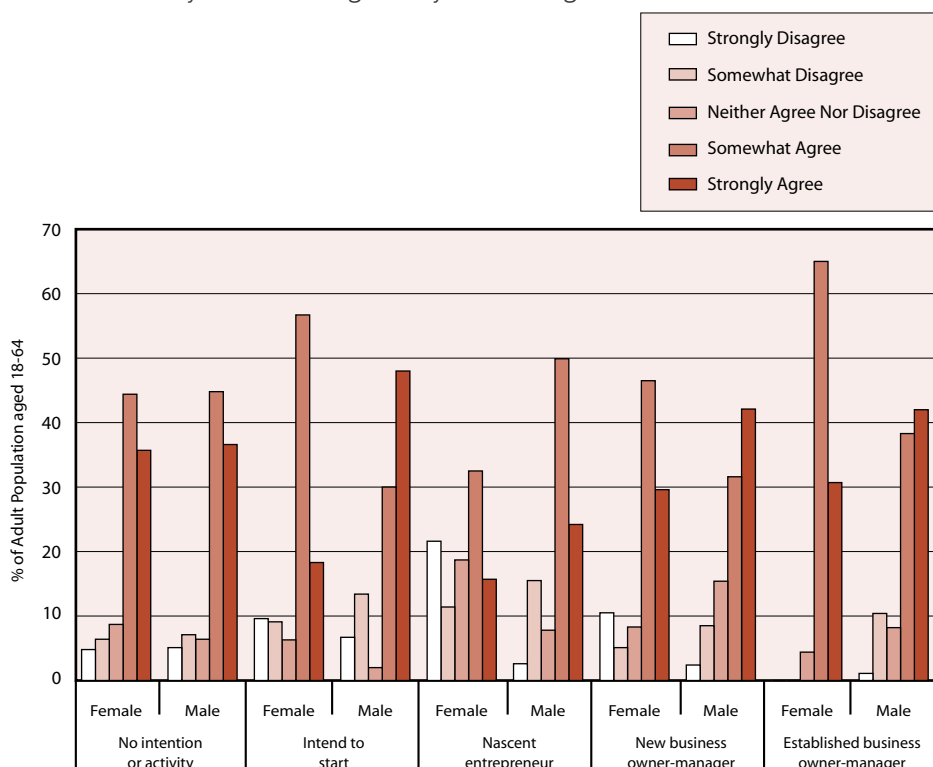
owners and the general population, the average subjective well-being of TEA entrepreneurs is lower than that of non-entrepreneurs, and the average subjective well-being of female TEA entrepreneurs is lower than that of male TEA entrepreneurs.

How do we explain these differences in the UK? Breaking down subjective well-being by gender and the stages of commitment to entrepreneurial activity, some interesting patterns emerge in the UK sample that may go some way to explain its unusual pattern in comparison to most innovation-driven countries. There is no significant difference in agreement (on a five point scale) with the statement "I am satisfied with my life" between men and women who have no entrepreneurial intention or activity<sup>15</sup>. However, a significantly

higher minority of females who intend to start a business in the next three years or who are actively trying to start a business are dissatisfied with their lives than men (see Figure 20). These dissatisfied females are mainly employees who we assume, therefore, are dissatisfied with their current work; fewer male employees who intend to start a business or who are actively trying to start a business seem to be dissatisfied with their current work. There is no difference between male and female new business owners in life satisfaction. But female established business owners are significantly more likely to be satisfied with their lives than male established business owners.

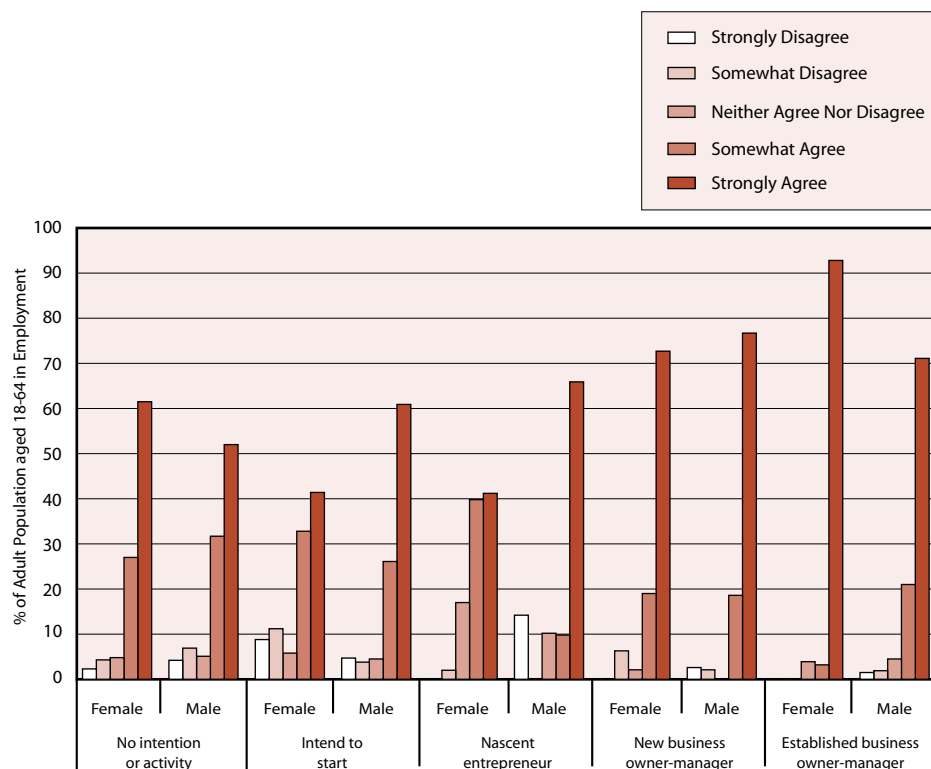
While this pattern is from cross-sectional and not longitudinal data and caution is needed

<sup>15</sup> Generally similar results were obtained with the other four items that contributed to the overall measure of subjective well-being. For the UK, all five items loaded onto one factor with a Cronbach's Alpha of .834 and KMO of .834.

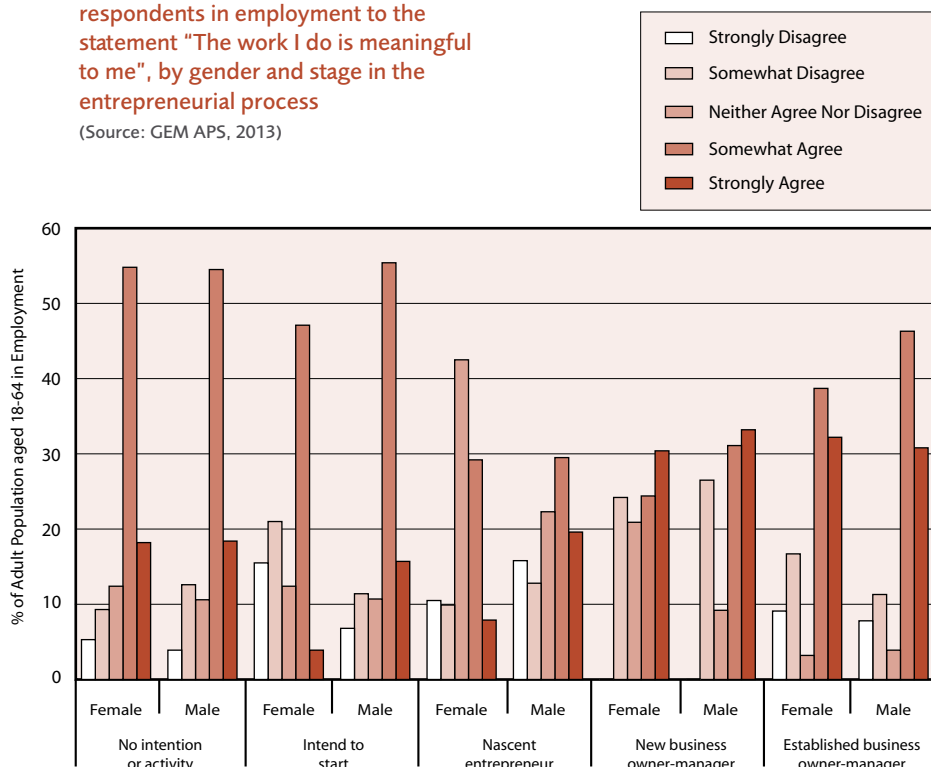


**Figure 20:** Responses by GEM UK 2013 respondents to the statement "I am satisfied with my life", by gender and stage in the entrepreneurial process  
(Source: GEM UK APS, 2013)

in its interpretation, it suggests the possibility that, in the UK, women who are dissatisfied with their work or life may be more likely than males to be "pushed" into business creation by work and/or life dissatisfaction. Supporting this, Figure 21 shows that the proportion of female entrepreneurs who strongly agree that the work they do is meaningful to them is lower than for males at the earliest stages of the entrepreneurial process, but it increases at a faster rate than among males across the entrepreneurial process and is higher for female than male established business owner-managers. At least part of this dissatisfaction may be income-related. A significantly higher proportion of females who intended to start a business were dissatisfied with their work income, but there were no significant differences by gender in the other phases of the entrepreneurial process. This "significant minority" of dissatisfied females at the intention phase of the entrepreneurial process can be seen in Figure 22.



**Figure 21: Responses by GEM UK 2013 respondents in employment to the statement "The work I do is meaningful to me", by gender and stage in the entrepreneurial process**  
(Source: GEM APS, 2013)



**Figure 22: Responses by GEM UK 2013 respondents in employment to the statement "I am satisfied with my current work income, including both salary and non-salary income such as payments in kind and other benefits", by gender and stage in the entrepreneurial process**  
(Source: GEM APS, 2013)

## 7 DEVELOPING AN ENTERPRISE CULTURE

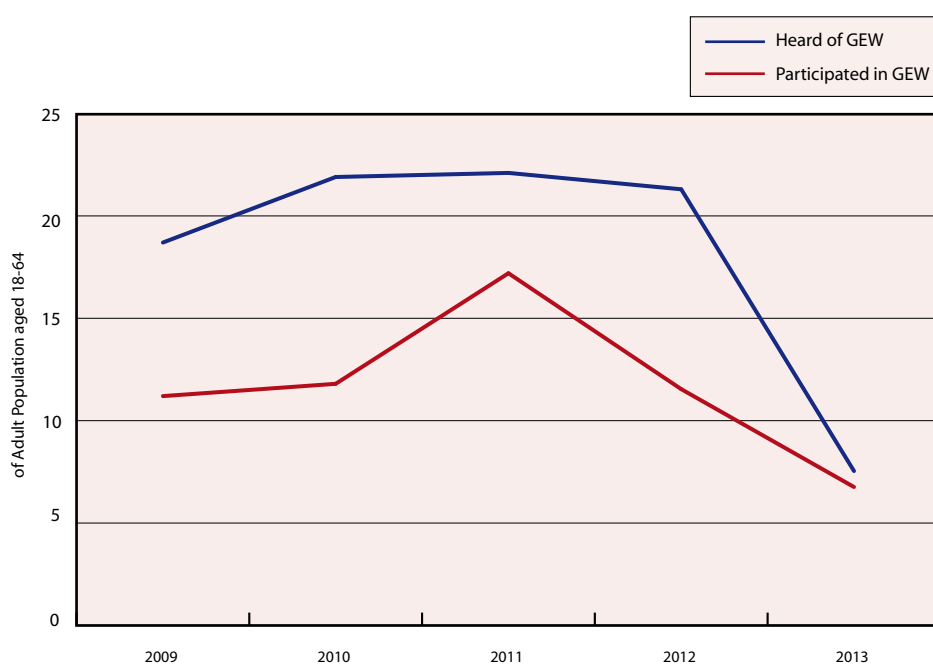
### 7.1 GLOBAL ENTREPRENEURSHIP WEEK

The GEM UK survey included questions on Global Entrepreneurship Week (GEW) run by Youth Business International (YBI). The objective here was to estimate if this national campaign, designed to develop an enterprise culture, was reaching their target audience. Figure 23 presents the responses from 2009-2013.

Awareness of Global Entrepreneurship Week (GEW) averaged at around 20% between

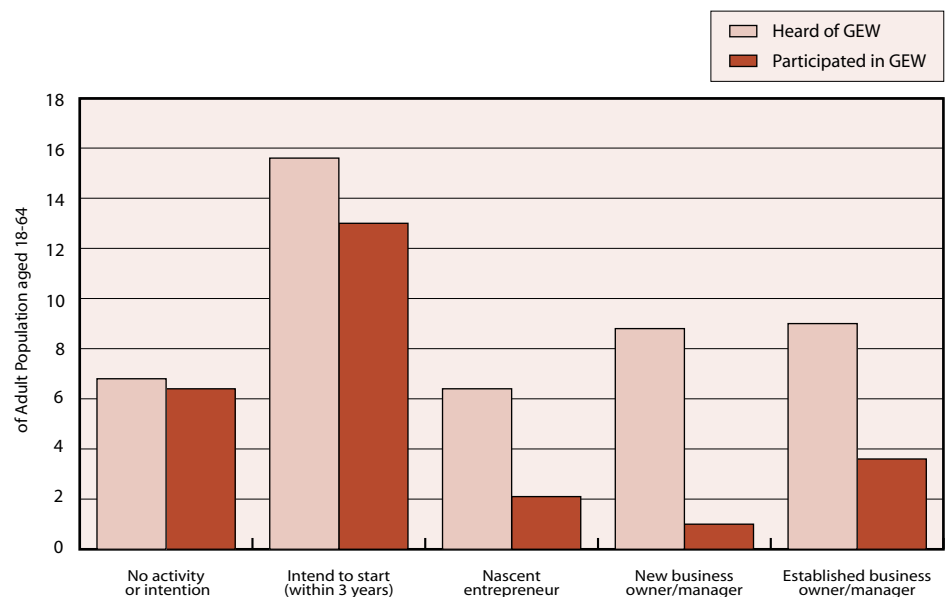
2009 and 2012 but fell significantly in 2013, from 21% to 8%. Recall of participating in GEW, amongst those who had heard of it, also declined from its peak of 17% in 2011 to 7% in 2013. Young adults aged 18-24 had the highest rates of awareness (13.1% in 2013 compared with 26.4% in 2012) and participation (9.2% of those who had heard of GEW in 2013, down from 19.7% in 2012).

Awareness of GEW was significantly higher among those who subsequently expected to start a business in three years compared to



**Figure 23:** Awareness of and Participation in Enterprise Week/Global Entrepreneurship Week in UK, 2009-2013  
(Source: GEM APS, 2009-2013)

those in all other stages of entrepreneurial activity however awareness amongst nascent entrepreneurs was lower than for both new and established business owners. Figure 24 illustrates the pattern of awareness and participation in GEW along the stages of the entrepreneurial process. It shows a peak in awareness and participation among those who expected to start a business. It shows that awareness was stronger earlier in the entrepreneurial process, which is a positive result for a campaign designed to raise awareness and celebrate enterprise.



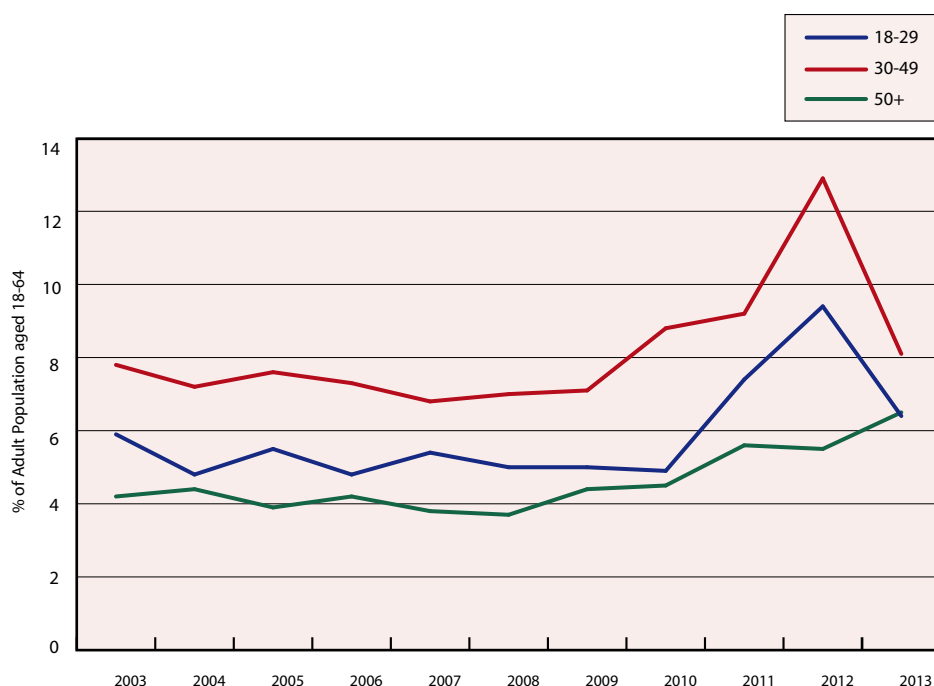
**Figure 24: Awareness of and participation in GEW by stages of the entrepreneurial process, 2013**

(Source: GEM APS, 2013)

## 7.2 SENIOR ENTREPRENEURSHIP AND PRIME

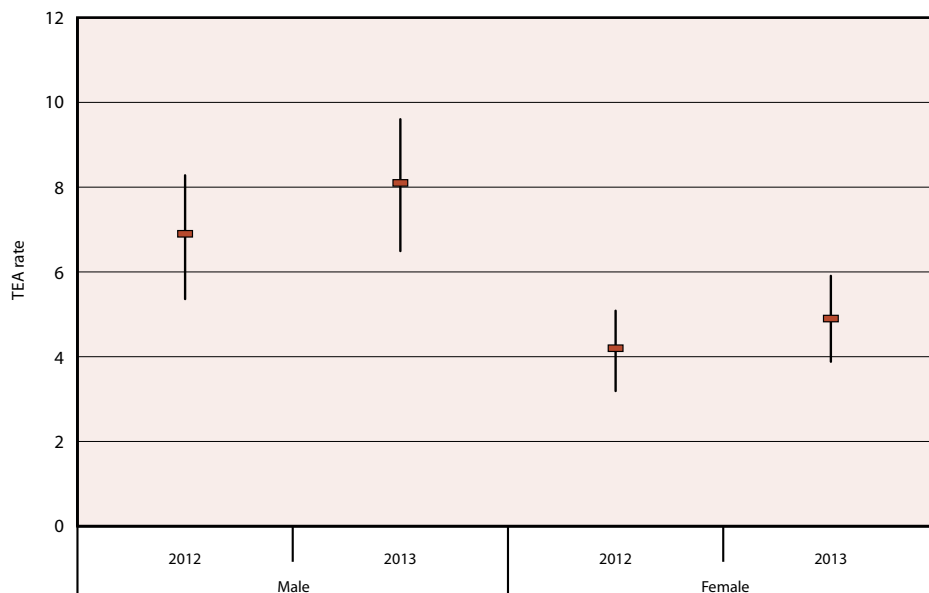
Entrepreneurial activity amongst the over 50s age group has historically been lower than for those in the younger age groups, with a long-run average of 4% between 2002 and 2008, compared to 5% for 18-29 year olds and 7% for 30-49 year olds. Since 2008 the rate has

continued to increase and in 2013 was identical to that for 18-29 year olds (6.5%). Figure 25 shows the time trend for entrepreneurial activity amongst the three age bands and reveals that whilst entrepreneurial activity peaked for the 18-29 and 30-49 age groups in 2012, before declining significantly, the rate for the over 50s age group continued to increase to stand at its highest ever level in 2013.



**Figure 25: Total early-stage Entrepreneurial Activity by Age-band 2002-2013**  
(Source: GEM APS, 2002-2013)

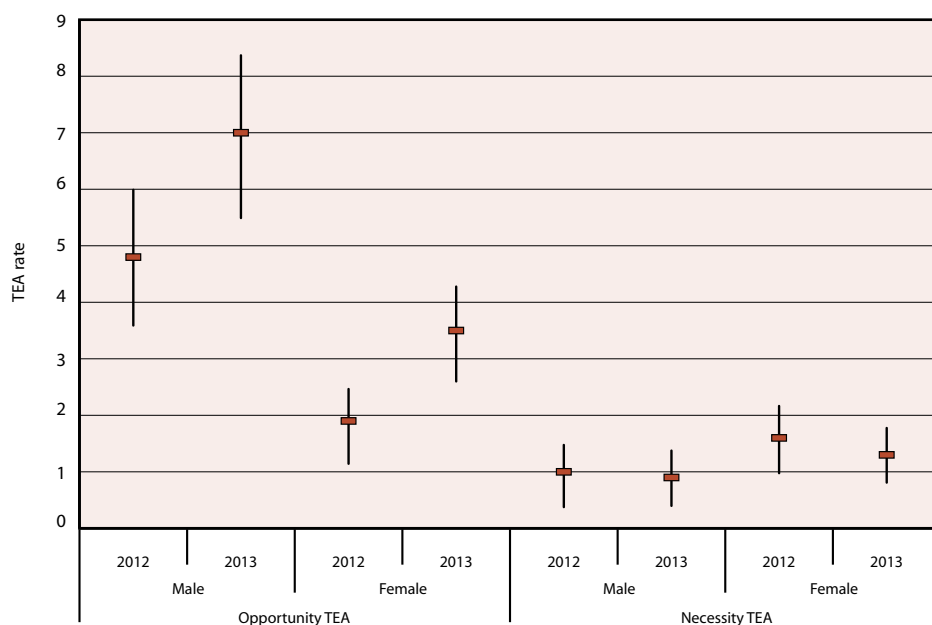
**Figure 26: Total early-stage Entrepreneurial Activity amongst the 50+ Age Group 2012-13**  
(Source: GEM APS, 2012-2013)



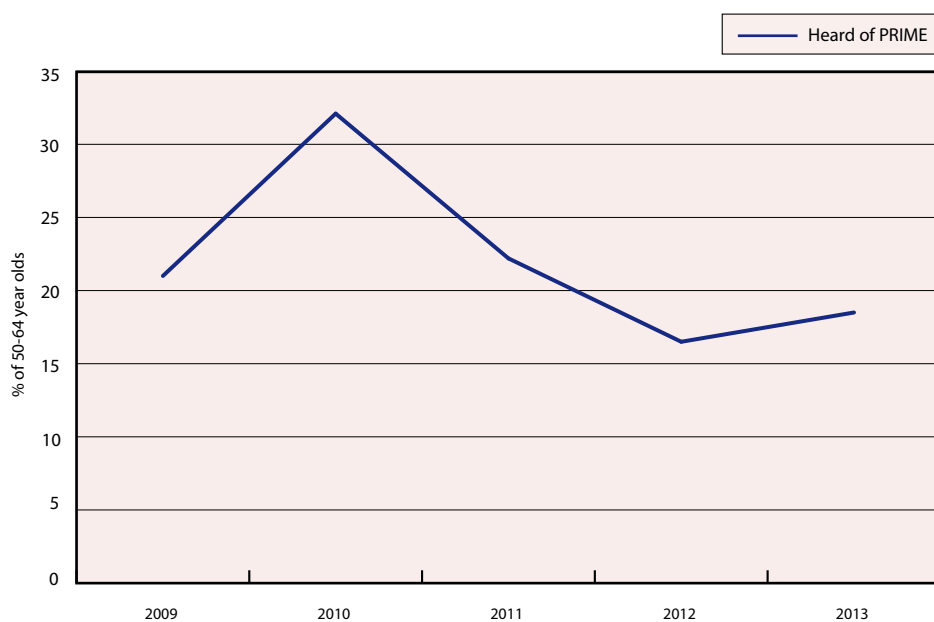
The increase in entrepreneurial activity since 2012 amongst the over 50s age group was a combination of increases in both male and female activity rates (Figure 26): the male rate increasing to 8% and the female to 5%. In both years the male rates for the over 50s was significantly higher than the female rates.

The increase in entrepreneurial activity amongst the over 50s was also driven entirely by opportunity TEA, the male rate rising from 5% to 7% and the female rate from 2% to 3.5% (Figure 27). Both the male and female necessity entrepreneurship rates for the over 50s remained largely unchanged on the previous year.

**Figure 27: Necessity and Opportunity TEA amongst the 50+ Age Group 2012-13**  
(Source: GEM APS, 2012-2013)



The Prince's Initiative for Mature Enterprise (PRIME) is a national organisation that provides support for self-employment to those over 50. In 2013 19% of 50-64 year olds engaged in start-up activity had heard of PRIME, which although up from 17% in 2012, was down from the peak of 32% in 2010 (Figure 28).



**Figure 28:** Awareness of the Prince's Initiative for Mature Enterprise amongst 50-64 year olds, 2009-2013

(Source: GEM APS, 2009-13)

It was previously suggested that 2011 was somewhat of a "break-out" year in terms of early-stage entrepreneurial activity in the UK: the year in which the TEA rate moved above its long run stable rate of around 6% to 7.6%. The increase in the TEA rate in 2012 to 9.8% seemed to have confirmed that break, and indeed although the rate in 2013 was back to 7.3%, it appears to have confirmed the higher long-term trend in early-stage entrepreneurial activity.

In 2013 one fifth of working age individuals either intended to start a business within the next three years, were actively trying to start a business, or were running their own business, which although down from one quarter in 2012, marked a return to the 2011 level. In addition, the long run high job expectation TEA rate in the

UK remained stable although nascent entrepreneurs' expectations of funding patterns seem to have decreased for most categories, and their experiences were also back down to previous levels.

Attitudes of non-entrepreneurial individuals to entrepreneurship also remained wary with fear of failure remaining high, and skills perception remaining lower than before the financial crisis. Opportunity perception has risen slightly among non-entrepreneurial men and women.

As the UK economy continues to recover, it remains to be seen if this higher long-run rate of early-stage entrepreneurial activity will be maintained or indeed whether it will increase further as larger businesses begin to recruit again and the labour market tightens.



GEM UK is one of the largest, longest-running national studies of entrepreneurial activity in the world, with over 200,000 individuals interviewed since monitoring began with a sample of 1,000 adults in 1998. In 2013, 11,017 adults aged 16-80 were interviewed. The distribution of respondents is not even across the UK. This is because the Hunter Centre for Entrepreneurship at the University of Strathclyde, Welsh Assembly Government and Invest Northern Ireland chose to boost sampling in their region in order to have more detail about entrepreneurship in their region.

The raw sample of 11,017 was distributed across 13 geographic areas within which representative sub-samples of the population aged 16-80 were taken. These areas and the sample sizes are: South West: 413; South East: 651; East of England: 443; West Midlands: 440; East Midlands: 352; Yorkshire & Humberside: 406; North East: 200; North West: 528; Wales: 2986; Scotland: 1998; Northern Ireland: 1997. The Scottish sample was paid for by the Hunter Centre for Entrepreneurship from its endowment income.

According to OfCom<sup>16</sup>, households in the UK which have access to a mobile phone

but not to a fixed telephone landline have grown steadily from 5% in 2000 to 15% in Q1 of 2011, remaining at 15% in Q1 of 2013. To mirror this increase, in 2013, 20% of the unweighted GEM sample across the UK consisted of mobile-only households, compared with 13% in 2011, 10% in 2010 and none in previous years. Meanwhile the decline in the proportion of households with a fixed telephone line has stabilised at 84% between 2010 and 2013. Eurobarometer estimates<sup>17</sup> suggest that in 2009, 20% of UK households were "mobile-only". Whatever the true figure, it is clear that fixed line surveys are not fully representative of UK households, that the distribution of mobile-only households is different to that of fixed line households, and that these differences are not fixed but change over time. In 2010, sampling methods for mobile only households had advanced to a stage where it was felt that inclusion of this group was not only desirable but feasible (though at greater cost). Changes in entrepreneurial activity again in 2013 are unlikely to be solely due to the slightly higher mobile-only household proportion in the 2013 sample.

Every attempt is made to ensure that the results reported are as reliable and robust

as possible. To do this, four sets of weights were calculated for the UK data:

- Weights for the whole UK that take the UK area sub-samples and the age, gender and ethnic minority proportion of the population of the UK (aged 18-64) into account, based on the latest available area estimates from the UK Office of National Statistics, typically mid-year estimates for the previous year.
- Sub-sample area weights that take into account the population distributions *within* GEM UK sub-sample areas by age, gender and ethnicity. These are used when we report comparisons between GEM UK sub-sample areas (e.g. Liverpool).
- Government Official Region (GOR) weights that create representative samples at the GOR level from all sub-samples within the same GOR.
- In addition, separate weights were constructed for England, based on balanced GOR samples for each English region, to develop a final "home nations" weight.

<sup>16</sup> Source: Ofcom (July 2012) The Communications Market in 2012, Figure 1.41. Available at [www.ofcom.org.uk](http://www.ofcom.org.uk)

<sup>17</sup> See Special Eurobarometer 335, available at [http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_335\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_335_en.pdf)

# Appendix 2

## Additional Tables and Data for Figures

**Table 1a: Attitudes towards entrepreneurship in participating G7 countries in 2013 - percentage of total working age population (including the entrepreneurially active) who expressed an opinion and agreed with the statement at the top of the column**

(Source: GEM APS, 2013. These estimates are comparable with measures used in the 2007 GEM UK report)

	I know someone who has started a business in the last 2 years	There are good start-up opportunities where I live in the next 6 months	I have the skills, knowledge and experience to start a business	Fear of failure would prevent me starting a business
UK	29.2	36.0	44.1	36.8
France	33.2	22.9	32.4	45.3
Germany	25.0	31.3	31.8	48.2
US	27.2	39.8	47.2	35.0

**Table 2b: Entrepreneurial attitudes in the UK in 2011, 2012 and 2013 (% respondents aged 18-64 expressing an opinion and agreeing with the statement)**

(Source: GEM APS, 2011, 2012, 2013. These estimates are comparable with measures used in the 2007 GEM UK report)

	2011	2012	2013	2011	2011	2012	2012	2013	2013
	All	All	All	Male	Female	Male	Female	Male	Female
I personally know someone who has started a business in the last two years	32.4	32.7	29.2	35.7	29.0	36.5	28.9	31.7	26.7
There will be good start-up opportunities where I live in the next six months	31.1	34.0	36.0	34.2	28.0	38.6	29.3	40.9	30.9
I have the skills, knowledge and experience to start a business	43.9	46.9	44.1	53.8	34.0	56.7	37.1	52.1	36.1
Fear of failure would prevent me from starting a business (for those who agree there are good start-up opportunities)	36.4	42.2	36.8	32.6	41.0	39.3	45.1	34.4	40.0
Most people consider that starting a business is a good career choice	49.8	49.9	54.6	50.0	49.6	51.6	48.0	55.3	53.8
Those successful at starting a business have a high level of status and respect in society	80.4	76.8	79.6	80.2	80.6	75.8	77.8	80.0	79.1
You will often see stories about people starting successful new businesses in the media	45.4	46.5	50.0	46.7	44.1	49.3	43.7	53.1	46.9

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
I know someone who has started a business in the last 2 years	21.8	24.1	25.3	24.9	23.6	23.6	23.4	31.1	28.2	27.1	25.2
There are good start-up opportunities where I live in the next 6 months	31.6	33.2	35.4	33.8	36.1	26.9	23.0	26.8	27.9	30.5	33.2
I have the skills, knowledge and experience to start a business	43.3	46.4	46.4	45.1	44.0	44.4	44.4	47.2	36.7	38.7	37.0
Fear of failure would prevent me starting a business (for those who agree there are good start-up opportunities)	35.5	36.0	36.1	37.3	37.9	38.3	35.2	36.0	41.4	43.3	41.4
Most people consider that starting a business is a good career choice	52.8	54.7	54.6	54.7	54.9	52.1	47.9	52.6	50.4	49.9	54.5
Those successful at starting a business have a high level of status and respect in society	71.7	72.2	71.8	72.9	73.6	74.2	73.8	76.3	81.4	77.1	79.5
You will often see stories about people starting successful new businesses in the media	54.8	55.3	53.9	54.3	56.3	52.4	44.7	51.5	44.2	45.5	48.8

**Figure 2: Entrepreneurial attitudes and perceptions in the UK, 2003-2013 (% non-entrepreneurial respondents aged 18-64 expressing an opinion and agreeing with the statement)**

(Source: GEM APS, 2003-2013)

**Figure 2a: Attitudes towards entrepreneurship in UK from 2003 to 2013 - percentage of total working age population who expressed an opinion and agreed with the statement at the left of the row**

(Source: GEM APS, 2003 -2013)

Note: These figures are calculated on the same basis as in GEM UK Report prior to 2008 – that is, for the 18-64 year sample overall and not solely the non-entrepreneurial adult population. However, due to revisions undertaken in the pooled UK GEM database there will be small differences between these figures and those published prior to 2008.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
I know someone who has started a business in the last 2 years	24.6	26.6	27.7	27.3	25.7	25.8	26.5	33.6	32.4	32.7	29.2
There are good start-up opportunities where I live in the next 6 months	35.0	35.7	38.2	36.7	39.1	28.8	27.0	29.4	31.1	34.0	36.0
I have the skills, knowledge and experience to start a business	48.3	50.3	50.9	49.6	48.5	49.0	52.4	52.3	43.9	46.9	44.1
Fear of failure would prevent me starting a business	33.8	33.7	34.3	35.7	35.9	37.2	35.1	39.5	45.7	42.2	36.8
Most people consider that starting a business is a good career choice	51.7	54.3	54.3	54.4	54.7	51.7	48.1	52.1	49.8	49.9	54.6
Those successful at starting a business have a high level of status and respect in society	71.6	72.1	71.7	72.7	73.6	73.8	73.8	76.4	80.4	76.8	79.6
You will often see stories about people starting successful new businesses in the media	55.6	56.1	54.6	55.0	56.7	53.2	45.9	52.4	45.4	46.5	50.0

**Table 3a: Attitudes towards entrepreneurship in UK regions in 2013 - percentage of total working age population who expressed an opinion and agreed with the statement at the top of the column**  
(Source: GEM APS, 2013)

	England	Wales	Scotland	Northern Ireland	United Kingdom
I know someone who has started a business in the last 2 years	29.2	27.8	30.8	25.4	29.2
There are good start-up opportunities where I live in the next 6 months	37.4	28.1	31.4	22.0	36.0
I have the skills, knowledge and experience to start a business	44.8	41.7	40.6	38.9	44.1
Fear of failure would prevent me from starting a business	36.8	34.9	34.9	45.9	36.8
Most people consider that starting a business is a good career choice	55.3	53.0	49.4	51.2	54.6
Those successful at starting a business have a high level of status and respect in society	79.6	80.3	78.9	80.4	79.6
You will often see stories about people starting successful new businesses in the media	50.0	47.9	50.0	53.2	50.0

**Table 3b: Good Opportunities for Start-up in the local area in next 6 months - in UK from 2003 to 2013 - percentage of non-entrepreneurially active working age population who expressed an opinion and agreed with the statement**  
(Source: GEM APS, 2003-2013)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change 2003-13	% change 2010-13
England	31.5	33.4	36.5	34.1	36.3	26.8	23.5	27.7	28.5	31.8	34.6	10	25
Wales	29.7	30.7	31.8	28.6	30.4	19.6	20.4	21.8	25.3	22.6	25.1	-15	15
Scotland	34.1	33.4	28.6	33.6	36.1	33.1	21.2	25.4	28.2	26.6	29.1	-15	15
N. Ireland	29.0	32.2	32.8	32.9	39.0	21.8	16.5	15.9	24.1	19.7	20.2	-30	27
UK average	31.6	33.2	35.4	33.8	36.1	26.9	23.0	26.8	28.2	30.5	33.2	5	24

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Opportunity Perception	Male	34.6	36.8	40.2	37.6	40.8	30.9	25.0	29.3	29.7	34.6	37.6
	Female	29.0	29.7	31.0	30.1	31.6	23.0	20.9	24.7	26.4	26.8	29.0
Fear of Failure	Male	34.6	34.9	34.0	34.1	36.4	35.9	32.3	34.9	38.7	40.5	40.1
	Female	35.0	37.5	38.6	41.2	39.6	41.4	38.8	37.2	44.0	46.4	43.0

**Figure 3: Male and female attitudes towards Good Opportunities and Fear of Failure**  
(% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statements "There are good start-up opportunities where I live in the next 6 months"; "Fear of failure would prevent me from starting a business")

(Source: GEM UK APS, 2003-2013)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Established business owner/manager	5.7	4.7	5.1	5.3	5.0	6.0	5.8	6.2	6.5	7.0	6.5
New business owner/manager	3.2	2.8	3.0	2.8	2.7	2.8	3.2	3.3	3.4	4.4	3.5
Nascent entrepreneur	3.0	2.9	2.7	2.7	2.7	2.6	2.5	2.9	4.1	5.3	3.5
Intend to start (within three years)	4.9	5.9	5.7	4.9	4.9	4.5	3.8	4.6	6.8	7.7	6.5
No activity or intention	83.2	83.7	83.4	84.3	84.7	84.1	84.7	83.0	79.2	75.7	80.0
Total	100	100	100	100	100	100	100	100	100	100	100

**Figure 4: Participation in entrepreneurship in the UK by most established stage of entrepreneurial activity, 2003 to 2013**

(Source: GEM UK APS, 2003-2013)

**Figure 4a: Participation in entrepreneurship in the UK by stage of entrepreneurial activity (percentage of working age population), 2003 to 2013**

(Source: GEM UK APS, 2003- 2013 Note: individuals can be in more than one stage at a time; hence annual percentages do not total to 100)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Established business owner/manager	5.7	4.7	5.1	5.3	5.0	6.0	5.8	6.2	6.5	7.0	6.5
New business owner/manager	3.2	2.9	3.1	2.8	2.7	2.9	3.2	3.4	3.4	4.3	3.6
Nascent entrepreneur	3.5	3.2	3.2	3.2	3.0	2.8	2.7	3.2	4.2	5.7	3.8
Intend to start (within three years)	7.9	8.6	8.7	7.8	7.4	6.8	6.1	7.2	9.8	11.3	5.6
No activity or intention	83.2	83.7	83.4	84.3	84.7	84.1	84.7	83.0	79.2	75.7	80.0

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
UK	6.42	5.84	6.04	5.82	5.58	5.53	5.77	6.47	7.59	9.78	7.26
France	1.62	6.04	5.35	4.40	3.17	5.64	4.35	5.83	5.73	5.17	4.57
Germany	5.2	5.07	5.39	4.20		3.77	4.10	4.17	5.62	5.34	4.98
US	11.94	11.33	12.44	10.00	9.61	10.76	7.96	7.59	12.34	12.84	12.73

**Figure 5: Total early-stage Entrepreneurial Activity (TEA) in the UK, France, Germany and US (2003-2013)**

(Source: GEM Global Adult Population Survey (APS) 2003-2013)

	18-24	25-34	35-44	45-54	55-64
United Kingdom	5.7	7.7	9.2	8.2	4.6
France	4.5	5.9	5.6	5.2	1.4
Germany	3.0	6.8	5.6	6.0	2.7
US	12.3	14.9	16.5	11.7	7.7

**Figure 6: Total early-stage Entrepreneurial Activity (TEA) in the UK, France, Germany and US by Age Group (2013)**

(Source: GEM Global Adult Population Survey (APS) 2013)

	18-24	25-34	35-44	45-54	55-64	Total
2011	6.2%	9.4%	8.7%	7.5%	5.5%	7.6%
2012	8.3%	10.9%	13.6%	10.0%	4.8%	9.8%
2013	5.7%	7.7%	9.2%	8.2%	4.6%	7.3%

**Figure 7: Total early-stage Entrepreneurial Activity (TEA) in the UK by Age Group, 2011 to 2013**

(Source: GEM Global Adult Population Survey (APS) 2011, 2012, 2013)

	Opportunity TEA	Necessity TEA
United Kingdom	5.8	1.2
France	3.6	0.7
Germany	3.8	0.9
US	9.3	2.7

**Figure 8: Necessity and opportunity entrepreneurship the UK, France, Germany and US in 2013**

(Source: GEM APS, 2013)

**Figure 9: Necessity and opportunity nascent and new business owner-manager rates in the UK showing 95% confidence intervals, 2011, 2012 and 2013**

(Source: GEM APS, 2011, 2012 and 2013)

	Nascent entrepreneurship rate						New business owner-manager rate					
	Opportunity			Necessity			Opportunity			Necessity		
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
High	3.9	4.6	3.5	0.8	1.4	0.6	2.8	3.6	3.1	0.9	0.9	0.8
Low	3.1	3.7	2.8	0.4	0.9	0.4	2.1	2.8	2.4	0.6	0.5	0.5
Mean	3.5	4.1	3.1	0.6	1.2	0.5	2.5	3.2	2.8	0.8	0.7	0.7

**Figure 10: Early stage entrepreneurial activity by gender in the UK, France, Germany and US in 2013**  
(Source: GEM APS, 2013)

	Male TEA	Female TEA
United Kingdom	8.7	5.8
France	6.1	3.1
Germany	6.0	3.9
US	15.1	10.4

**Figure 11: Established business ownership by gender in the UK, France, Germany and US, 2013**  
(Source: GEM APS, 2013)

	Male EBO	Female EBO
United Kingdom	9.0	3.9
France	5.8	2.4
Germany	6.1	4.0
US	8.5	6.6

**Figure 12: Female entrepreneurial activity in the UK, France, Germany and US, 2003-2013**  
(Source: GEM APS, 2003-2013)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
UK	3.9	3.8	3.7	3.7	3.6	3.6	3.7	4.0	5.0	7.1	5.8
France	1.6	3.8	3.3	2.5	2.2	3.3	2	4.8	3.0	4.0	3.1
Germany	3.3	3.1	3.8	2.6		3.4	3.7	2.9	4.5	3.5	3.9
US	8.2	10.7	9.7	7.4	7.3	8.8	5.8	7.0	10.4	10.5	10.4



	Male TEA	Female TEA	Ratio Female to Male TEA
England	8.9%	6.1%	68%
Wales	6.5%	4.2%	65%
Scotland	8.5%	5.2%	62%
N. Ireland	8.2%	2.2%	27%
UK	8.7%	5.8%	66%

**Figure 13: Male and Female Total early-stage Entrepreneurial Activity in the UK Home Nations, 2013**

(Source: GEM APS, 2013)

	18-24	25-34	35-44	45-54	55-64
England	5.6	7.8	9.6	8.6	4.8
Wales	5.5	6.2	6.3	5.0	4.0
Scotland	6.5	7.3	9.2	7.1	3.7
N. Ireland	4.5	8.0	4.5	5.2	2.8
UK	5.7	7.7	9.2	8.2	4.6

**Figure 14: Total early-stage Entrepreneurial Activity in the UK Home Nations by Age Group, 2013**

(Source: GEM APS, 2013)

**Figure 15: Total early-stage Entrepreneurial Activity in the UK Home Nations, for 18 to 29 year olds, 2003 to 2013**

(Source: GEM APS, 2002-2012)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
England	5.9	4.7	5.7	5.0	5.5	5.0	5.3	4.7	7.4	10.0	6.4
Wales	4.9	4.0	4.0	4.8	4.6	7.8	6.0	7.2	9.7	8.6	4.9
Scotland	5.6	6.0	4.6	3.3	4.8	4.0	1.6	5.1	7.0	5.1	7.1
N. Ireland	6.1	4.7	5.0	3.6	4.1	3.9	5.7	4.2	7.2	5.7	4.9

	3 Year Rolling Average								
	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
UK	23.8%	21.9%	21.6%	17.6%	16.8	15.7%	16.4%	16.3%	16.8%
France	5.7%	7.7%	6.0%	9.5%	14.7%	18.8%	19.9%	20.0%	19.5%
Germany	16.5%	16.8%	16.5%	13.7%	13.2%	13.3%	14.5%	16.7%	17.6%
US	19.2%	20.4%	23.1%	24.9%	23.8%	24.2%	22.8%	23.1%	23.1%

**Figure 16: Relative frequency of high job expectation early-stage entrepreneurs in the UK, France, Germany and the US, three year rolling averages, 2003-2005 to 2011-2013**

(Source: GEM APS, 2003-2013)

**Figure 17: Relative frequency of high job expectation among established business owner-managers in the UK, France, Germany and the US, three year rolling averages, 2003-2005 to 2011-2013**

(Source: GEM APS, 2003-2012)

	3 Year Rolling Average								
	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013
UK	5.1%	5.9%	5.4%	4.9%	4.6%	3.5%	3.5%	3.4%	4.2%
France	4.3%	4.3%	2.8%	1.9%	1.9%	3.5%	1.6%	1.7%	0.6%
Germany	3.9%	3.1%	2.2%	1.5%	2.4%	3.1%	3.4%	3.8%	3.3%
US	5.6%	5.3%	6.3%	7.4%	6.7%	4.6%	3.0%	3.7%	3.6%

	Type of funding ever sought						
	2007	2008	2009	2010	2011	2012	2013
Friends and family	24.0	25.2	27.7	23.1	16.8	27.8	13.5
Individual investors (not friends and family)	9.3	11.0	16.5	12.3	7.1	9.1	4.5
Unsecured bank loans	12.6	14.6	18.0	20.6	7.0	11.5	2.3
Bank overdraft	21.9	23.4	27.2	23.7	13.2	18.1	10.0
Non-bank unsecured loan	7.6	5.6	6.4	4.2	1.1	6.7	1.8
Mortgage or other secured loan	14.5	14.5	15.7	7.2	6.8	13.4	5.2
Equity finance or formal venture capital	5.3	2.4	5.2	3.7	0.9	3.5	2.3
Government grants	12.9	9.3	9.9	6.7	4.1	6.0	5.8
Credit cards	15.7	17.8	15.2	20.3	7.1	17.2	9.2

**Figure 18: Percentage of UK nascent entrepreneurs who have reported ever using a type of funding for a business, 2007 to 2013**

(Source: GEM APS, 2007-2013)

	Difference in subjective well-being of TEA entrepreneurs and non-entrepreneurs	Difference in subjective well-being of established business owner-managers and non-entrepreneurs	Difference in subjective well-being of female TEA entrepreneurs and male TEA entrepreneurs
Luxembourg	-0.15	-0.3	0.21
Korea	0.01	-0.05	0.24
United Kingdom	-0.2	0.01	-0.25
Greece	0.22	0.04	-0.27
Singapore	0.09	0.07	0.22
Sweden	0.08	0.07	0.44
Norway	-0.08	0.08	0.14
Taiwan	0.05	0.08	0.08
Spain	0.08	0.08	0.07
France	0.13	0.12	0.3
Slovenia	0.09	0.12	0.01
Belgium	0.01	0.12	0.13
Czech Republic	0.04	0.14	0.07
Germany	-0.06	0.15	0.25
Japan	-0.07	0.16	0.68
Netherlands	0.22	0.17	-0.19
Italy	-0.03	0.17	-0.07
Canada	-0.01	0.18	0.24
Israel	0.11	0.19	0.37
Finland	0.01	0.2	0.09
Ireland	0.09	0.21	0.04
Portugal	0.29	0.25	0.04
Switzerland	0.15	0.26	0.22
USA	-0.06	0.34	0.01
Trinidad & Tobago	0.03	0.36	0.02
Puerto Rico	0.33	0.46	-0.3

**Figure 19:** Difference in standardized average scores of subjective well-being (based on five items) between TEA entrepreneurs and non-entrepreneurs, between established business owners and non-entrepreneurs, and between female TEA entrepreneurs and male TEA entrepreneurs, by innovation-driven economy, 2013. (Note that a negative figure in the first two columns indicates a higher well-being score for non-entrepreneurs and, in the final column, for males)

(Source: GEM APS, 2013)

		Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree
No intention or activity	Female	4.8%	6.4%	8.7%	44.4%	35.7%
	Male	5.1%	7.1%	6.4%	44.8%	36.6%
Intend to start	Female	9.6%	9.1%	6.3%	56.7%	18.3%
	Male	6.7%	13.4%	2.0%	30.0%	48.0%
Nascent entrepreneur	Female	21.6%	11.4%	18.7%	32.5%	15.7%
	Male	2.6%	15.5%	7.8%	49.9%	24.2%
New business owner-manager	Female	10.5%	5.1%	8.3%	46.5%	29.6%
	Male	2.4%	8.5%	15.4%	31.6%	42.1%
Established business owner-manager	Female	0.0%	0.0%	4.4%	65.0%	30.7%
	Male	1.1%	10.4%	8.2%	38.3%	42.0%

**Figure 20: Responses by GEM UK 2013 respondents to the statement "I am satisfied with my life", by gender and stage in the entrepreneurial process**  
(Source: GEM UK APS, 2013)

**Figure 21: Responses by GEM UK 2013 respondents in employment to the statement "The work I do is meaningful to me", by gender and stage in the entrepreneurial process**  
(Source: GEM APS, 2013)

		Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree
No intention or activity	Female	2.3%	4.3%	4.8%	27.0%	61.5%
	Male	4.2%	6.9%	5.1%	31.7%	52.0%
Intend to start	Female	8.8%	11.2%	5.8%	32.8%	41.4%
	Male	4.7%	3.8%	4.5%	26.1%	60.9%
Nascent entrepreneur	Female	0.0%	2.0%	17.0%	39.8%	41.2%
	Male	14.2%	0.0%	10.2%	9.8%	65.9%
New business owner-manager	Female	0.0%	6.3%	2.1%	19.0%	72.7%
	Male	2.6%	2.1%	0.0%	18.6%	76.7%
Established business owner-manager	Female	0.0%	0.0%	3.9%	3.2%	92.8%
	Male	1.5%	1.9%	4.5%	21.0%	71.1%

		Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree
No intention or activity	Female	5.3%	9.3%	12.4%	54.8%	18.2%
	Male	3.9%	12.6%	10.6%	54.5%	18.4%
Intend to start	Female	15.5%	21.0%	12.4%	47.1%	3.9%
	Male	6.8%	11.4%	10.7%	55.4%	15.7%
Nascent entrepreneur	Female	10.5%	9.9%	42.5%	29.2%	7.9%
	Male	15.8%	12.8%	22.3%	29.5%	19.6%
New business owner-manager	Female	0.0%	24.2%	20.9%	24.4%	30.4%
	Male	0.0%	26.5%	9.2%	31.1%	33.2%
Established business owner-manager	Female	9.1%	16.7%	3.2%	38.7%	32.2%
	Male	7.8%	11.3%	3.9%	46.3%	30.8%

**Figure 22: Responses by GEM UK 2013 respondents in employment to the statement "I am satisfied with my current work income, including both salary and non-salary income such as payments in kind and other benefits", by gender and stage in the entrepreneurial process**

(Source: GEM APS, 2013)

**Figure 23: Awareness of and Participation in Enterprise Week/Global Entrepreneurship Week in UK, 2009-2013**

(Source: GEM APS, 2009-2013)

	2009	2010	2011	2012	2013
Heard of GEW	18.7	21.9	22.1	21.3	7.5
Participated in GEW	11.2	11.8	17.2	11.5	6.8

**Figure 24: Awareness of and participation in GEW by stages of the entrepreneurial process, 2013**

(Source: GEM APS, 2013)

	No activity or intention	Intend to start (within 3 years)	Nascent entrepreneur	New business owner/manager	Established business owner/manager
Heard of GEW	6.8	15.6	6.4	8.8	9.0
Participated in GEW	6.4	13.0	2.1	1.0	3.6

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
18-29	4.2%	5.9%	4.8%	5.5%	4.8%	5.4%	5.0%	5.0%	4.9%	7.4%	9.4%	6.4%
30-49	6.9%	7.8%	7.2%	7.6%	7.3%	6.8%	7.0%	7.1%	8.8%	9.2%	12.9%	8.1%
50+	4.0%	4.2%	4.4%	3.9%	4.2%	3.8%	3.7%	4.4%	4.5%	5.6%	5.5%	6.5%

**Figure 25: Total early-stage Entrepreneurial Activity by Age-band 2002-2013**

(Source: GEM APS, 2002-2013)

	Male		Female	
	2012	2013	2012	2013
High	8.3%	9.6%	5.1%	5.9%
Low	5.4%	6.5%	3.2%	3.9%
Mean	6.9%	8.1%	4.2%	4.9%

**Figure 26: Total early-stage Entrepreneurial Activity amongst the 50+ Age Group 2012-13**

(Source: GEM APS, 2012-2013)

	Opportunity TEA				Necessity TEA			
	Male		Female		Male		Female	
	2012	2013	2012	2013	2012	2013	2012	2013
High	6.0%	8.4%	2.5%	4.3%	1.5%	1.4%	2.2%	1.8%
Low	3.6%	5.5%	1.2%	2.6%	0.4%	0.4%	1.0%	0.8%
Mean	4.8%	7.0%	1.9%	3.5%	1.0%	0.9%	1.6%	1.3%

**Figure 27: Necessity and Opportunity TEA amongst the 50+ Age Group 2012-13**

(Source: GEM APS, 2012-2013)

**Figure 28: Awareness of the Prince's Initiative for Mature Enterprise amongst 50-64 year olds, 2009-2013**

(Source: GEM APS, 2009-2013)

	2009	2010	2011	2012	2013
Heard of PRIME	21.0	32.1	22.2	16.5	18.5

