

# Global Entrepreneurship Monitor

## United Kingdom 2008 Monitoring Report

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## 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.

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# Executive Summary

- In 2008, the Global Entrepreneurship Monitor (GEM) research consortium measured entrepreneurial activity of working age adults in 43 countries, making it the world's most authoritative comparative study of entrepreneurial activity in the general adult population. In 2008, 32,007 adults aged 16-80 participated in the GEM UK survey.
- This monitoring report compares Global Entrepreneurship Monitor (GEM) measures of entrepreneurial attitudes and activity in the UK and participating G7 and BRIC countries. It also summarises entrepreneurial attitudes and activity within Government Official Regions of the UK and introduces a map of entrepreneurial activity in the UK at the NUTS2 level. Finally, it examines aspirations of entrepreneurs in the UK.
- In general, attitudes to entrepreneurship in the UK population did not change significantly between 2007 and 2008 with the exception of opportunity perception, which has declined by eight percentage points. In other high income countries, opportunity perception also declined (by an average of six percentage points) and fear of failure rose. In the UK, the gap in fear of failure between males and females widened.
- Total early-stage Entrepreneurial Activity (TEA) in the UK in 2008 was 5.5%<sup>1</sup>, the same as in 2007. This continues a long term pattern in the UK of lower TEA rates than the US, Canada and BRIC nations other than Russia, and higher TEA rates than other G7 nations and Russia. The UK TEA rate has closely tracked the G7 average since 2002.
- The UK has intermediate rates of established business ownership and business "churn" in comparison to other G7 and BRIC nations. The proportion of entrepreneurs reporting high growth expectations, new product/market combinations, and new technology sectoral choices is also intermediate. Necessity-driven entrepreneurship in the UK is low.
- The gender gap in entrepreneurial activity varies greatly across G7 and BRIC countries. In 2008 UK levels of female entrepreneurship remained at 49% of male entrepreneurial activity, similar to other developed countries with the notable exception of the US. UK female TEA rates have remained slightly below the G7 average since 2004.
- The regional distribution of TEA rates in 2008 was slightly wider than in 2007 but the only statistically significant difference was between Yorkshire & Humberside (4.2%) and the West Midlands (6.3%) and the East of England (7.3%).
- Levels of female TEA in Northern Ireland (2.3%) were significantly lower than rates in the East of England (5.9%).
- Londoners are twice as likely to expect to start a business in the next three years as residents of other regions. London has a relatively low ratio of established business owner/managers to early-stage entrepreneurs and a relatively high business closure rate. Inner London also has a very high TEA rate (9.4%) in comparison to other NUTS2 regions of the UK.
- The aspirations of UK entrepreneurs for their businesses appear close to the average for G7 countries.

<sup>1</sup> This differs slightly from the 2008 GEM Executive Report (5.5 versus 5.9) because the latter used a much smaller interim dataset and a different set of weights, based on US Census Office estimates. A more detailed note is available from the GEM UK team.

## 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 participating G7 countries and the large industrialized or industrializing countries of Brazil, Russia, India and China ("BRIC"). It also summarizes entrepreneurial attitudes, activity and aspiration within Government Official Regions of the UK and, for the first time, demonstrates the pattern of entrepreneurial activity at the sub-regional (NUTS2) level.

A comprehensive review of the historic GEM UK database was conducted in late 2008, resulting in a harmonized, pooled database of almost 160,000 responses from individuals aged 18 to 64 over the period 2002 to 2008. Historical data for the UK in this report are based on this harmonized database. As a result, there may be small differences in point estimates of entrepreneurial attitudes, activity and aspiration in the UK between figures reported in previous years and those in this report. In addition, the reporting of some measures in the GEM Executive reports has evolved in recent years, and in the body of this report we display measures that are harmonized with the 2008 GEM Executive Report. Readers who wish to update time series data using older measures are invited to consult the appendix.

### 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 2008, the study covered 43 countries 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:

1. To measure differences in entrepreneurial attitudes, activity and aspiration between countries
2. To uncover factors which underpin these differences
3. To identify policies that may enhance entrepreneurial activity.

The 2008 GEM global study was based on an analysis of adult population survey (APS) results from 43 countries and more than 150,000 adults across the world. The core of the APS is identical in each country and asks respondents 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 2008 Report was published in January 2009<sup>2</sup> and can be downloaded from [www.gemconsortium.org](http://www.gemconsortium.org).

<sup>2</sup> Bosma, N., Acs, Z., Autio, E. and Levie, J. (2008) Global Entrepreneurship Monitor 2008 Executive Report, GERA and Babson College, Babson Park, MA.

<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 of a business you help manage?" 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 early-stage 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.

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

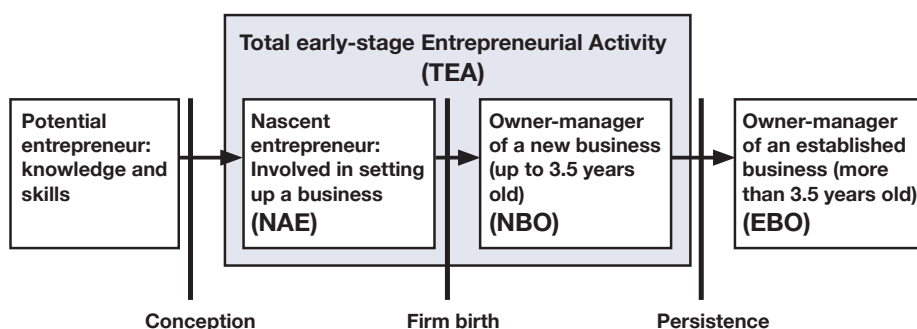
- **Nascent entrepreneurs (NAE):** The stage at which individuals begin to commit resources, such as time or money, to starting a business. To qualify as a nascent entrepreneur, the business must not have been paying wages for more than three months.
- **New business owner-managers (NBO):** Those whose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

if they have shut down 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 closure. 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 the 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 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.

**Figure 1**  
The Entrepreneurial Process and GEM  
Operational Definitions  
(Source: Bosma *et al.*, 2009)



### 1.3 GEM UK sampling and weighting methodology

GEM UK is the largest, longest-running national study 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 2008, 32,007 adults aged 16-80 were interviewed. The distribution of respondents is not even across the UK. This is because some Regional Development Agencies (RDAs) and the Devolved Administrations, Government Agencies and Organisations in Wales, Northern Ireland and the South East choose to boost their sample in order to have more detail about entrepreneurship in their region<sup>4</sup>. Every attempt is made to ensure that the results reported are as reliable and robust as possible. To do this, four sets of weights are 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.
- Government Official Region (GOR) weights that create representative samples at the GOR level from all sub-samples within the same GOR. Ten out of twelve GORs were not sub-sampled in 2007; the South East had four sub-samples and Northern Ireland had two sub-samples<sup>5</sup>.
- In addition, separate weights were constructed for England, based on balanced GOR samples for each English region, as some variables (e.g. urbanity, deprivation) are only available for English regions.

<sup>4</sup> The raw sample of 32,007 was distributed across 16 geographic areas within which representative sub-samples of the population aged 16-80 were taken. These areas and the sample sizes are: South West: 2996; Isle of Wight: 255; PUSH: 746; Other Hampshire: 657; Rest of South East: 2358; East of England: 1007; West Midlands: 2995; East Midlands: 2999; Yorkshire & Humberside: 2996; North East: 2998; North West: 3001; Wales: 2994; Scotland: 1999; London: 1007; Belfast: 1307; Northern Ireland excluding Belfast: 1692. The Scottish sample was paid for by the Hunter Centre for Entrepreneurship from its endowment income.

<sup>5</sup> In order to minimise the effect of over-samples in sub-regions within a GOR, random samples were created from these areas to produce representative samples of GORs.

## 2 ENTREPRENEURIAL ATTITUDES

<sup>6</sup> In the Appendix, the data on entrepreneurial attitudes and perceptions for all adults aged 18-64 are presented in Table 1a. These data are comparable with data in the 2007 GEM UK report, while the data in Table 1 is comparable with the data in the 2008 GEM Executive Report in which the data were rounded.

<sup>i</sup> The GEM Executive report authors took the decision in 2008 to report the proportion of the adult population who state that fear of failure would prevent them from starting a business only for those indicating that there are good start-up opportunities in their local area in the next 6 months. The UK estimate of this measure is 38.3 which is not significantly different from the 39.1% calculated without the restriction. The figure in Table 1 is consistent with estimates in the GEM 2008 Executive Report. Opportunity perception and fear of failure estimates for other countries are revised estimates.

**Table 1i**

**Attitudes towards entrepreneurship in participating G7 and BRIC countries in 2008 - 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 2008 and GEM Executive Report 2007)

### 2.1 Entrepreneurial attitudes in the UK, G7 and BRIC nations

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. For the past two years, the GEM Executive Report has reported attitudinal data only for that portion of the working age (18-64) population who are not already nascent entrepreneurs or business owner/managers. In this section we provide attitudinal estimates for the UK based on this revised methodology for participating G7 and BRIC countries for 2008<sup>6</sup>. Comparing like for like measures, the main differences with 2007 are as follows:

- In the UK, the proportion of the non-entrepreneurial working age population who perceived good opportunities in the next 6 months declined from 35% in the 2007 survey to 27% in the 2008 survey. However, skills perception only dropped by one percentage point to 44% in the UK, and remained above skills perception rates of other participating G7 countries with the exception of the US. Fear of failure among those who perceived opportunities remained at 38%. In other G7 nations, skills perception was also maintained but fear of failure tended to rise. Consistent with previous years, the UK had a smaller proportion of non-entrepreneurs of working age who said they personally knew someone who had started a business in both 2008 and 2007 than any other participating G7 nation except Japan.
- France stands out from other G7 countries in having relatively high future start-up expectation yet very high fear of failure. The 2008 estimates are very similar to those obtained in 2007.
- In the US, perception of the prevalence of start-up opportunities improved significantly from 20% to 31%. Fear of failure in the US in 2008 remained much lower than in the UK (28% in US versus 38% in UK).
- Perceptions of entrepreneurship in Brazil, India and China are on the whole more positive than in Russia and G7 countries.

	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 startup opportunities)
G7				
<b>UK</b>	<b>24</b>	<b>27</b>	<b>44</b>	<b>38</b>
France	33	22	25	52
Germany	29		30	45
Italy	30	29	35	46
Japan	21	7	9	54
US	33	31	48	28
G7 average	28	23	32	44
BRIC				
Brazil	44	38	49	42
Russia	33	29	14	62
India	56	54	45	49
China (2007)	n/a	32	30	n/a



## 2.2 Entrepreneurial attitudes in the UK in 2007 and 2008

Table 2 shows estimates of changes in attitudes towards entrepreneurship in the UK among the non-entrepreneurially active working age population between 2007 and 2008. The only substantial difference in attitudes between 2007 and 2008 was that around eight per cent fewer people in 2008 thought that there would be good opportunities to start a business in their local area in the next six months. As this drop from 35% to 27% represents almost a quarter of all those who perceived good opportunities in 2007, this is an important and significant drop. On average, opportunity perception dropped by around six percentage points (from 37% to 31%) in high-income (innovation-driven)

countries<sup>7</sup>. The decline in the UK at 23% of the 2007 level is the fourth largest, after Iceland (48%), Ireland (41%) and Spain (24%).

With the exception of opportunity perception, attitudes towards entrepreneurship in general have not changed among non-entrepreneurial males or females since 2007. However, males tend to have more positive entrepreneurial attitudes than females. The gap in fear of failure between females and males has widened (from one to five percentage points<sup>8</sup>). Fear of failure in high-income countries rose by around 5 percentage points on average between 2007 and 2008<sup>9</sup>. The lack of a rise in fear of failure among UK males is, therefore, noteworthy.

<sup>7</sup> Average of estimates for the following innovation-driven countries that participated in GEM 2007 and GEM 2008: Belgium, Denmark, Finland, France, Greece, Iceland, Ireland, Israel, Italy, Japan, Netherlands, Norway, Slovenia, Spain, UK and US. Source: GEM 2007 and 2008 Executive reports.

<sup>8</sup> This gap is not statistically significant (at the 5% level) if the fear of failure measure includes only those non-entrepreneurial individuals who perceive opportunities, because of small numbers, but it is significant for all non-entrepreneurial individuals and for all individuals.

<sup>9</sup> See Figure 4 on page 17 of the GEM 2008 Executive Report.

	2007	2008	2007	2007	2008	2008
	All	All	male	female	male	female
I personally know someone who has started a business in the last two years	21.7	23.6	24.8	18.8	27.3	20.0
There will be good start-up opportunities where I live in the next six months	35.0	26.9	39.7	30.8	30.9	23.0
I have the skills, knowledge and experience to start a business	45.2	44.4	53.8	37.4	53.7	35.5
Fear of failure would prevent me from starting a business (for those who agree there are good startup opportunities)	37.6	38.3	36.7	38.6	35.9	41.4
Most people consider that starting a business is a good career choice	53.4	52.1	52.8	54.0	53.4	50.7
Those successful at starting a business have a high level of status and respect in society	72.8	74.2	73.3	72.3	75.2	73.3
You will often see stories about people starting successful new businesses in the media	56.8	52.4	57.4	56.3	54.2	50.8

**Table 2**  
Entrepreneurial attitudes in the UK in 2007 and 2008 (% non-entrepreneurially active respondents aged 18-64 expressing an opinion and agreeing with the statement)  
(Source: GEM UK APS, 2007, 2008)

Figure 2 presents a trend analysis of the four core attitudes to entrepreneurship among non-entrepreneurially active individuals over the last seven years in the UK (2002-08). There has been a marginal upward shift in the number of people who report that they know an entrepreneur and possess the requisite skills to start a business and the differences between 2002 and 2008 are statistically significant. There was little significant change in the period 2002-08 in the proportion of the population who state that 'fear of failure' would prevent them from starting a new business venture.

From 2002-2007 there was an upward trend in the number of people reporting that there were good start-up opportunities

in their local area in the next 6 months – a statistically significant increase of almost 10% in seven years (25.8% to 35.0%). However, the drop in opportunity perception between 2007 and 2008 to 26.9%, which is statistically significant, has brought this back to just above the 2002 level.

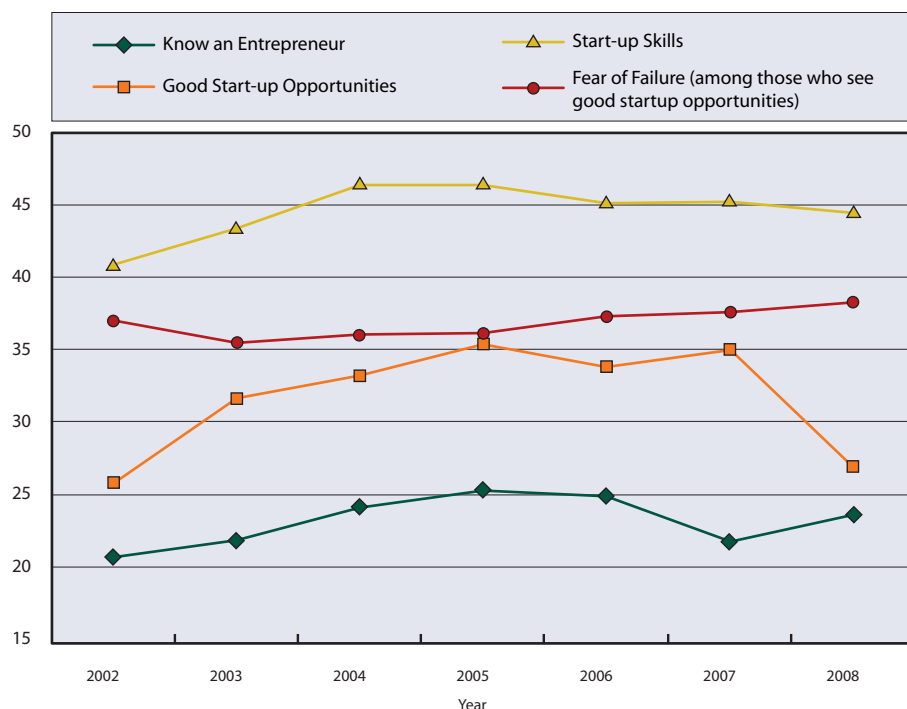
## 2.3 Attitudes towards entrepreneurship in the UK regions

The self-reporting of attitudes of the non-entrepreneurially active working age population towards entrepreneurship in each UK region in 2008 is 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

**Figure 2**  
Entrepreneurial attitudes in the UK, 2002-2008 (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statement)  
(Source: GEM UK APS, 2002-2008).



years" is intended as a proxy measure of networking with entrepreneurial individuals. Londoners were significantly more likely to agree with this item than respondents in the West Midlands, North West, North East, Scotland or Yorkshire & Humberside.

- London, the East of England and the South East, along with Scotland, had the highest proportion of the non-entrepreneurially active population reporting that there were good start-up opportunities in their local area in the next 6 months at around 32-33%. There is a great deal of variation in strength of the decline in opportunity perception between 2007 and 2008 across the UK regions. The sharpest falls occurred

in Northern Ireland (17%), Yorkshire & Humberside (14%) and the North East (13%).<sup>10</sup>

- As in previous years, Northern Ireland had the highest fear of failure rate in the UK in 2008, at 44.5% of those who perceived opportunities but were not entrepreneurially active, but it was also relatively high in London.
- Respondents in London were significantly more likely to agree that they have the skills to start a business than respondents in any region except South East, East of England and West Midlands. Northern Ireland had the lowest percentage of adults agreeing that they have the skills to start a business (37.8%).

<sup>10</sup> The 2002-08 regional data for the 'Good Opportunities' attitude variable in the GEM UK pooled dataset is included in the Appendix (Table 3b)

	I personally know someone who has started a business in the last two years	There will be good start-up opportunities where I live in the next six months	I have the skills, knowledge and experience to start a business	Fear of failure would prevent me from starting a business (for those who agree there are good startup opportunities)
East of England	23.3	31.8	45.9	38.9
East Midlands	21.8	22.6	42.8	34.0
London	28.7	32.9	51.7	44.1
North East	21.5	20.9	42.0	41.7
North West	21.1	25.6	41.4	38.5
Northern Ireland	24.6	21.8	37.8	44.5
Scotland	20.2	33.1	41.3	33.8
South East	26.8	31.5	45.5	40.5
South West	24.3	24.7	42.6	39.4
Wales	22.6	19.6	42.2	28.2
West Midlands	20.7	21.3	45.8	32.9
Yorkshire & Humberside	21.4	20.2	42.4	34.0
United Kingdom	23.6	26.9	44.4	38.3

**Table 3**  
Perceptions of entrepreneurship among non-entrepreneurially active individuals in the UK regions, 2008

(Source: GEM UK APS 2008)

## 3 ENTREPRENEURIAL ACTIVITY

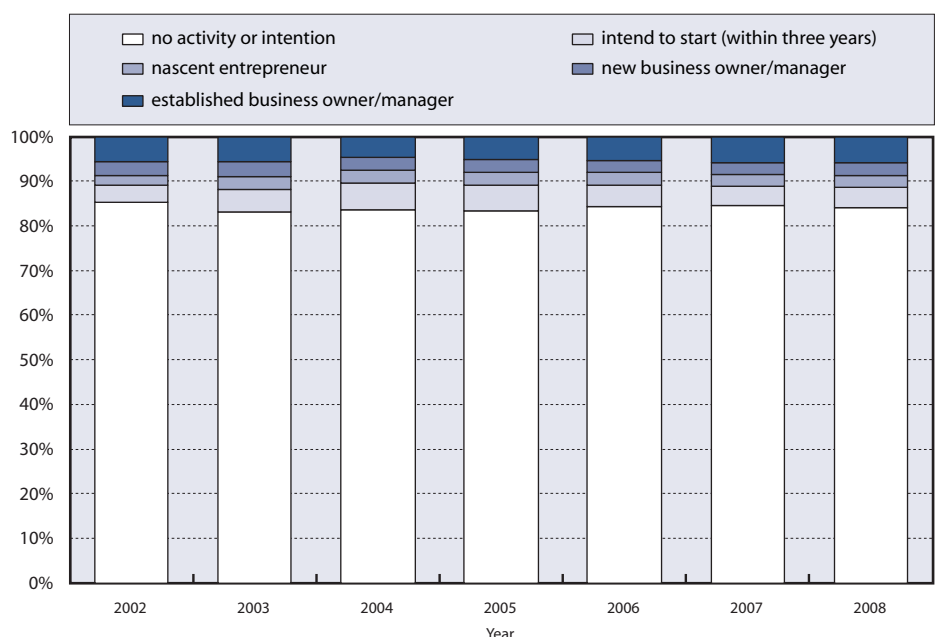
### 3.1 Entrepreneurial activity in the UK, G7 and BRIC countries

GEM views entrepreneurship as a process in which individuals become increasingly engaged in entrepreneurial activity. Figure 3 illustrates the proportion of respondents by stage of entrepreneurial activity in the UK over the period 2002 to 2008. 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 3a in Appendix for gross rates for each stage). In the UK in 2008, 84% of working age individuals were not engaged in entrepreneurial activity and had no intention of starting a business within the next three years. A further 4.5% expected to start a business in the next three years, but were not actively trying to start a business or running

an existing business. A further 2.6% were nascent entrepreneurs and an additional 2.8% were new business owner/managers. Finally, 6.0% were established business owner/managers. The proportions have changed little since 2002.

Total early-stage Entrepreneurial Activity (TEA) is the sum of the nascent entrepreneurship rate and the new business owner/manager rate. Figure 4 shows trends in TEA rates of the G7 + Brazil, Russia, India and China (BRIC) nations between 2002 and 2008. Over the past seven years, the relative position of the G7 countries on TEA has not changed. The US had the highest TEA rate of G7 nations in 2008 at 10.8%, double that of the UK (5.5%). Three of the four BRIC countries have higher levels of entrepreneurial activity than the UK: Brazil

**Figure 3**  
Participation in entrepreneurship in the UK by most established stage of entrepreneurial activity, 2002 to 2008  
(Source: GEMUK APS 2002 to 2008)



(12.0%), India (11.5%) and China (16.4% - 2007 estimate). Russia (3.5%) had the lowest TEA rate among these nations in 2008. The UK's TEA rate has varied little during the period 2002 to 2008 and has tracked the G7 average very closely. Estimates of TEA for France have fluctuated over this period, possibly due to small sample sizes and changes in collection methods. Official statistics on enterprise creation in France show a rising year on year trend and an overall one third increase in the number of enterprises created per year over this period<sup>11</sup>. TEA in Japan appears to have risen each year since 2004 and in 2008 were the same as the UK. Equivalent official statistics are not available to confirm this apparent trend.

In addition to TEA, GEM measures the proportion of established business owner-

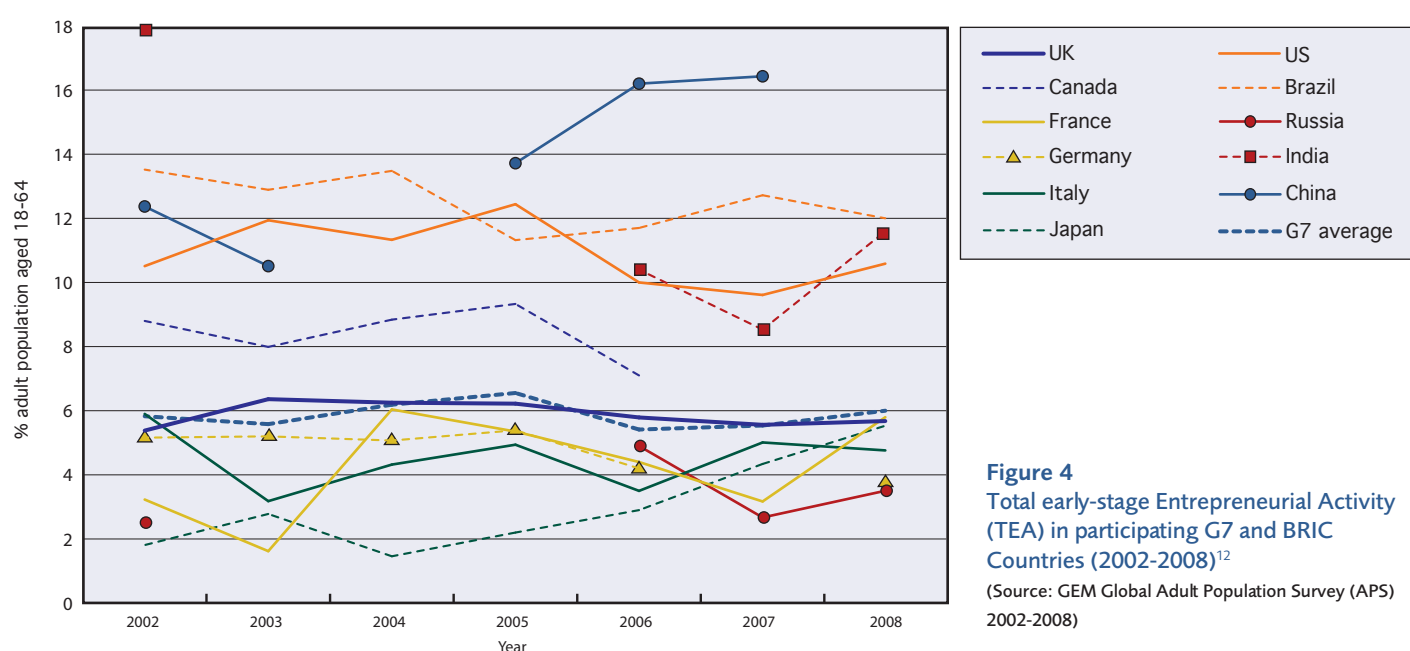
managers in the working age population (EBO). Established business owner-managers have owned or managed a business for more than 42 months. Finally, GEM measures the proportion of individuals of working age who closed down a business in the last 12 months, one that did not continue under a different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

The ratio of established business owners gives a proxy measure of transition rates from early stage entrepreneurship to established business ownership<sup>13</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 2008 results for participating G7 and BRIC countries are given in Table 4.

<sup>11</sup> Source: Insee, REE (Répertoire des Entreprises et des Établissements – Sirene)

<sup>12</sup> Canada and China did not participate in GEM in 2008.

<sup>13</sup> This measure assumes that early stage entrepreneurship and established business ownership does not fluctuate over time.



**Figure 4**  
Total early-stage Entrepreneurial Activity (TEA) in participating G7 and BRIC Countries (2002-2008)<sup>12</sup>  
(Source: GEM Global Adult Population Survey (APS) 2002-2008)

<sup>14</sup> Correlation coefficient of .309, p = .043

<sup>15</sup> Correlation coefficient of -.419, p = .005

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. Nevertheless, the table presents some interesting summary points:

- Rates for the UK on almost all these measures and ratios are very close to the G7 average.
- France and Russia stand out as having low established business owner rates and relatively high business churn rates.
- With the exception of Russia, the BRIC

countries have higher numbers of people expecting to start a business than G7 countries.

- Survival rates and churn rates are negatively correlated with each other. Countries with high apparent early-stage survival rates have low apparent churn rates. Although there is no significant correlation across the countries in Table 4 between TEA rates and either survival or churn rates, across all 43 countries there was a weak positive correlation between TEA rates and churn rates<sup>14</sup> and a weak negative correlation between TEA rates and survival rates<sup>15</sup>.

	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)
G7								
<b>UK</b>	<b>6.8</b>	<b>2.8</b>	<b>2.9</b>	<b>5.5</b>	<b>6.0</b>	<b>1.4</b>	<b>1.1</b>	<b>0.16</b>
France	15.2	3.8	1.9	5.6	2.8	1.7	0.5	0.36
Germany	6.2	2.4	1.5	3.8	4.0	1.0	1.1	0.18
Italy	9.2	2.0	2.7	4.6	6.5	1.2	1.4	0.13
Japan	8.0	3.2	2.3	5.4	7.9	0.6	1.5	0.06
US	12.4	5.9	5.0	10.8	8.3	2.7	0.8	0.20
G7 average	9.6	3.4	2.7	6.0	5.9	1.4	1.0	0.16
BRIC								
Brazil	25.0	2.9	9.3	12.0	14.6	2.2	1.2	0.09
Russia	5.3	1.7	2.0	3.5	1.1	0.8	0.3	0.26
India	32.7	6.9	4.9	11.5	16.5	4.8	1.4	0.22
China (2007 est.)	37.2	6.9	10.0	16.4	8.4	6.1	0.5	0.33

**Table 4**  
Measures of entrepreneurial activity in participating G7 and BRIC countries, 2008  
(Source: GEM APS 2008)

### 3.2 Opportunity and necessity entrepreneurship

One way of distinguishing between different types of entrepreneurial activity is the extent to which the activity is based on necessity (i.e. there are no better alternatives for work) or opportunity (where entrepreneurs may be exploiting the potential for new market creation).

Opportunity-motivated entrepreneurship rates (Opportunity TEA) and Necessity-driven entrepreneurship rates (Necessity TEA) for G7 and BRIC countries in 2008 are presented in Figure 5. Levels of necessity entrepreneurship in 2008 are lower than levels of opportunity entrepreneurship

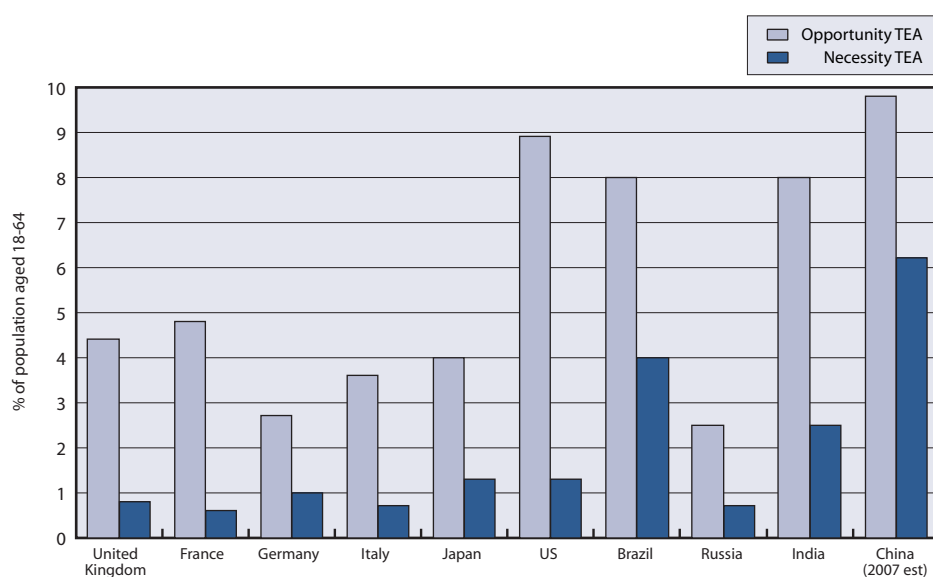
in all participating G7 and BRIC countries.

In the UK, 4.4% of the working age adult population were opportunity-motivated early-stage entrepreneurs, with 0.8% identified as necessity-driven early-stage entrepreneurs.

Ratios of necessity to opportunity entrepreneurship are less than 1:5 in the UK, US, France and Italy. However, in Germany, Japan, and BRIC countries, necessity entrepreneurship is proportionately higher.

Necessity entrepreneurship tends to be proportionately higher in low and medium income countries than in high income countries<sup>16</sup>. Japan and Germany are noticeable for their unusually high necessity to opportunity TEA ratios of around 1:3 in 2008.

<sup>16</sup> See the GEM 2008 Executive Report for a comparison of necessity and opportunity entrepreneurship across 43 nations.



**Figure 5**  
Necessity and opportunity entrepreneurship in participating G7 and BRIC countries in 2008

(Source: GEM APS 2008)

<sup>17</sup> The established business owner rate for males and females in the US in 2008 is significantly higher than in previous years. This is because of an improvement in collection methodology in the US. The 2008 estimates should be considered more accurate than estimates for previous years, according to the US GEM team.

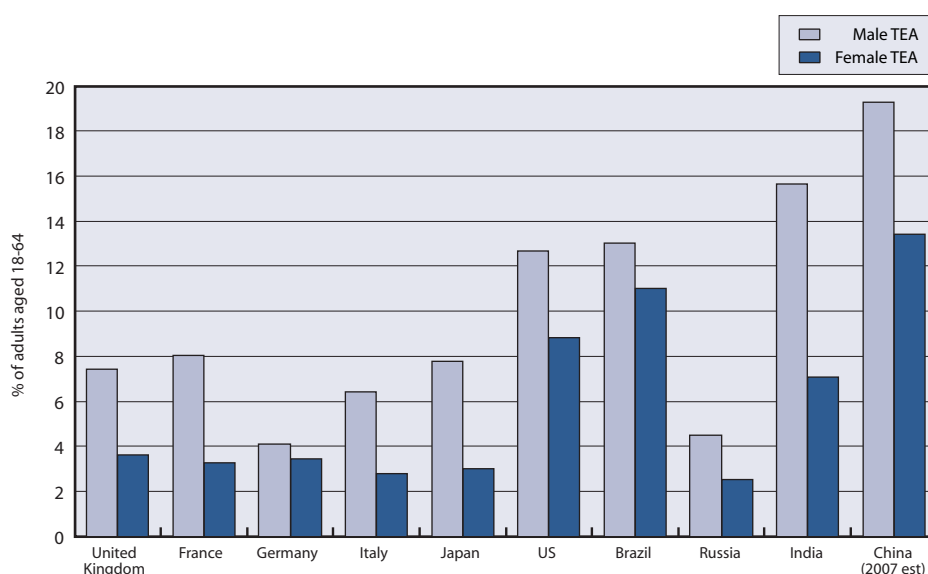
### 3.3 Male and female entrepreneurial activity compared

Figure 6 presents a summary of Total early-stage Entrepreneurial Activity (TEA) rates for the G7 and BRIC countries by gender. In most high income countries, men are around twice as likely to be entrepreneurially active as women. But in the US and Germany in 2008, the gender gap was much narrower than in the other G7 countries. In the UK the level of female early stage entrepreneurial activity was 49% that of males, the same as 2007: 3.6% compared to 7.4% for men. In the US the ratio of female to male TEA in 2008 was 70%, up from 60% in 2007.

With the exception of Eastern Europe, the gender gap tends to be narrower in low and middle income countries. However, in 2008, there was a wide variation in female to male TEA ratios in the BRIC countries, from 45% in India to 85% in Brazil.

The gender gap in participation rates appears to be wider among established business owner-managers than among early-stage entrepreneurs (see Figure 7) in all countries except Russia and China, where private enterprise was essentially illegal two decades ago. For example, in the UK female early stage entrepreneurial activity is 49% of male activity, while established business ownership at 3.4% is just 40% that of males (8.6%). The equivalent proportions for the US are 70% and 62% respectively<sup>17</sup>.

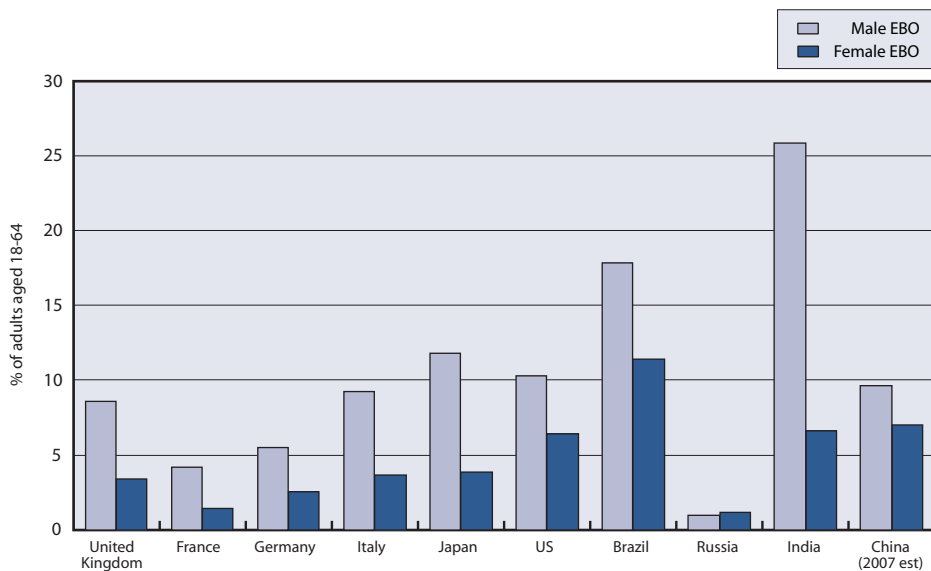
Overall, levels of female early-stage entrepreneurial activity in the G7 and BRIC countries appear to be static since 2002, with the possible exception of Japan, as illustrated in Figure 8. Female TEA in the UK has been slightly under the G7 average for the past 6 years with the exception of 2003.



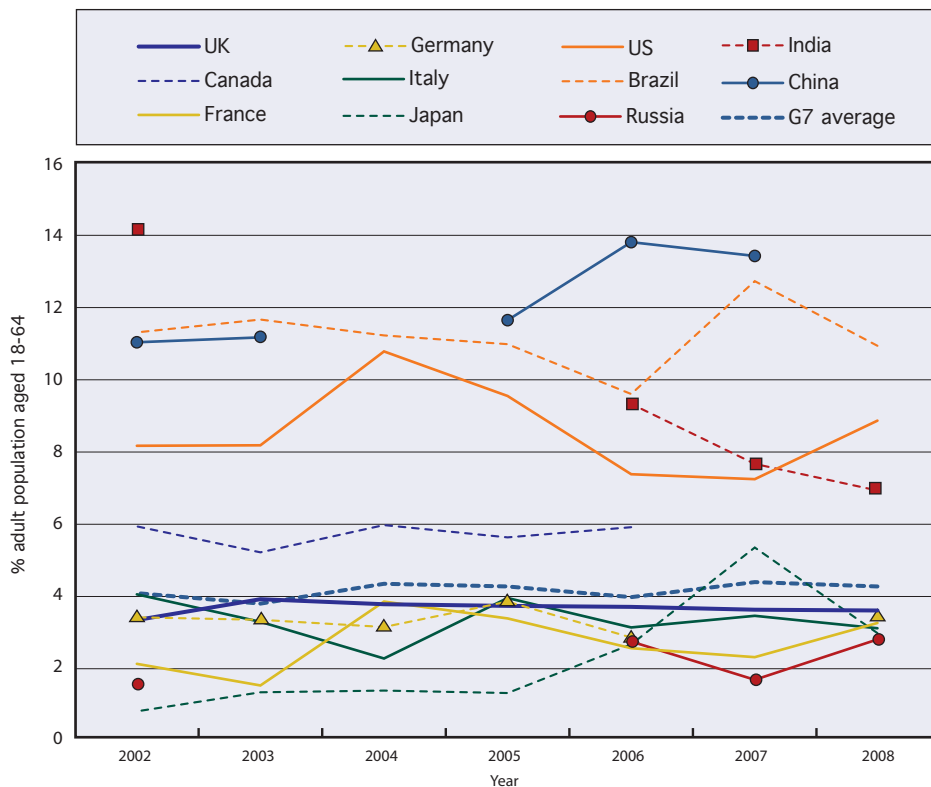
**Figure 6**  
Total early-stage Entrepreneurial Activity  
by gender in participating G7 and BRIC  
countries in 2008

(Source: GEM APS 2008)





**Figure 7**  
Established business ownership by gender in participating G7 and BRIC countries, 2008  
(Source: GEM APS, 2008)



**Figure 8**  
Female Total early-stage Entrepreneurial Activity in participating G7 and BRIC countries, 2002-2008  
(Source: GEM APS, 2002-2008)

<sup>18</sup> GEM estimates of ethnic minority early-stage entrepreneurship and of self-employment tend to be lower than estimates of ethnic minority self-employment drawn from the UK Government Adult Population Survey (formerly the Labour Force Survey). In an earlier paper (Levie, Hart, Harding and Anyadike-Danes, 2007), this was investigated thoroughly. Apart from differences in survey design, sample and question order, one possible source of the differences between GEM estimates of self-employment rates in different ethnic groups and those provided by the Adult Population Survey may be variance across ethnic groups in the percentage of people who consider themselves self-employed but actually work for a family business in which they have no legal ownership. This may inflate self-employment rates among certain ethnic groups as measured by the Adult Population Survey. For further details see Levie, J., Hart, M., Harding, R., and Anyadike-Danes, M. (2007). How does Ethnic Minority Entrepreneurship Differ? Evidence from GEM. Paper presented at Institute for Small Business & Entrepreneurship conference, Glasgow, November.

<sup>19</sup> For example, see Levie, J (2007). Immigration, in-migration, ethnicity and entrepreneurship in the United Kingdom. *Small Business Economics* 28: 143-169.

### 3.4 Entrepreneurial activity and ethnicity

By combining seven years of GEM data from 2002 to 2008, we can estimate TEA for different ethnic groups in the UK.

Figure 9 shows the point estimates (the short horizontal bars) and 95% confidence intervals (the vertical bars) for each major ethnic group in the UK, based on the pooled GEM database. It should be noted that the confidence intervals are based on the assumption that the individuals are drawn from a random sample; they have not been adjusted for the complex nature of the survey. They should therefore be treated as underestimates of the range within which the true value lies for each ethnic group. In addition, many of the sample sizes for different ethnic groups are small.

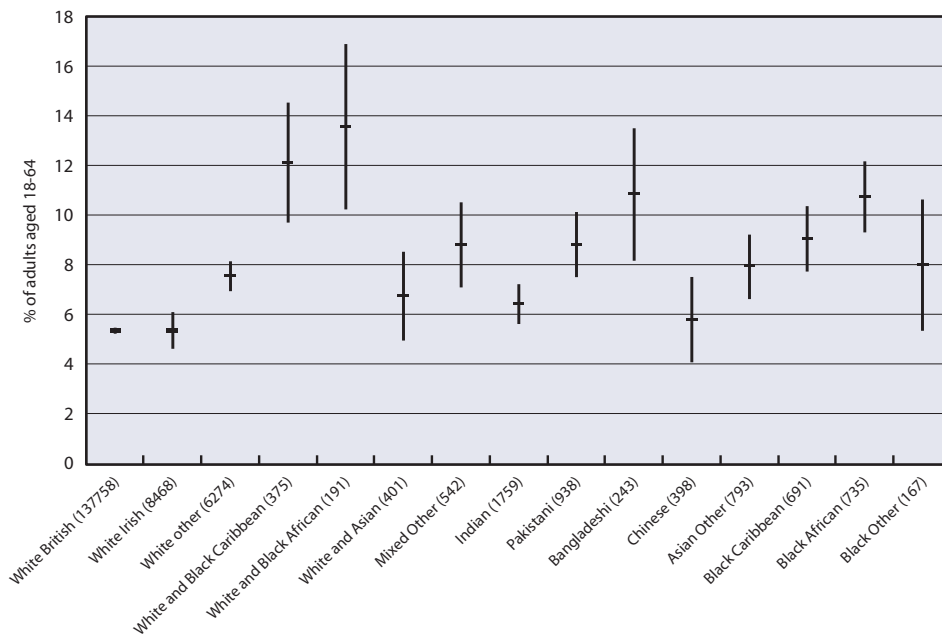
In interpreting Figure 9, it is important to bear in mind that a high proportion of many ethnic minorities of working age are immigrants. The TEA rate among the UK-born and immigrants by broad ethnic category is shown in Figure 10. In general, immigrants who identify with the white British ethnic group have higher rates of TEA than UK-born white British. UK-born and immigrant mixed ethnic individuals have similar TEA rates, on average. Black and Asian immigrants appear to have lower TEA rates than their UK-born peers. For all ethnic minority groups, the point estimates for TEA among all immigrants are slightly lower than for non-immigrants, but these small differences are not significant.

Mixed white and black individuals appear to have the highest rates of entrepreneurial activity. Among Asians, both UK-born and immigrant Bangladeshis appear to have higher rates of entrepreneurial activity than Indians. The TEA estimates for Black Africans are slightly but not significantly higher than those for the Black Caribbean ethnic minority group<sup>18</sup>.

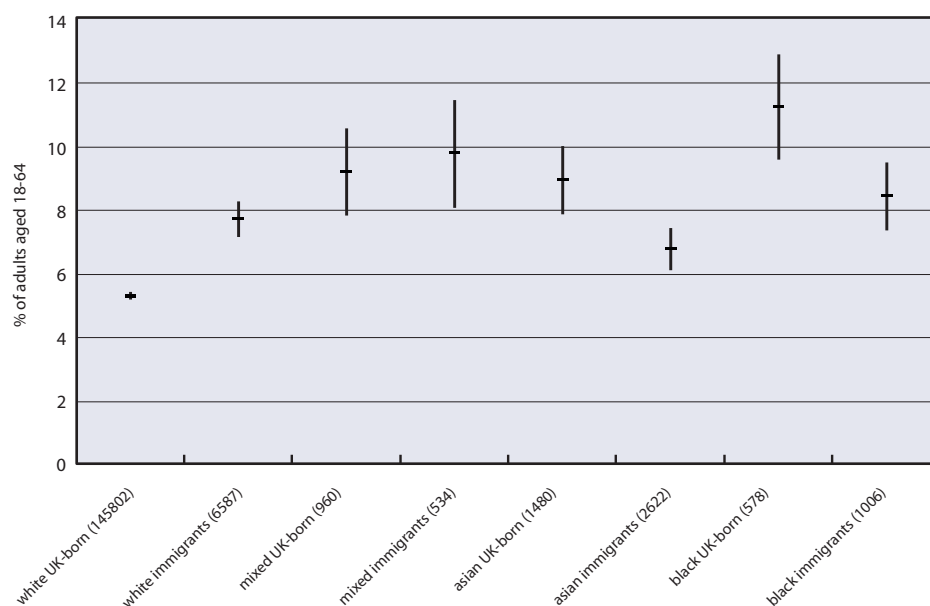
Almost 40% of the variance in TEA between these different ethnic groups, and over 50% among immigrants, can be explained by the difference in average age of these groups (see the Tables to Figures 9 and 10 in the Appendix). Ethnic groups with younger age profiles, such as White and Black Africans, Bangladeshis and Black Africans, tend to have higher TEA rates.

White immigrants of working age tend to be younger than white UK-born individuals of working age; among mixed, Asian and black ethnic minority groups, it is the reverse. In addition, ethnic minority groups with high TEA scores also tend to have higher ratios of nascent to new entrepreneurs, suggesting a lower "successful business birth" rate among these groups. The lower rate of established business ownership among ethnic minority groups would also support this conclusion.

Multivariate analysis, which is beyond the scope of this report, could measure the importance of an "ethnic" effect from other effects, such as age and origin, on an individuals' progress through the entrepreneurial process<sup>19</sup>.



**Figure 9**  
Total early-stage Entrepreneurial Activity in the United Kingdom by ethnicity, for the pooled 2002 to 2008 GEMUK database, showing the unweighted sample size of each ethnic group  
(Source: GEM UK APS, 2002 to 2008)



**Figure 10**  
Total early-stage Entrepreneurial Activity in the United Kingdom among UK-born and immigrants by broad ethnic category, for the pooled 2002 to 2008 GEMUK database, showing the unweighted sample size of each category  
(Source: GEM UK APS, 2002 to 2008)

### 3.5 Entrepreneurial activity in UK regions

Table 5 displays different measures of entrepreneurial activity in regions of the UK for 2008. In London, the number of people expecting to start a business in the next three years was twice that reported in any of the other UK regions. London displays unusual entrepreneurial activity; it has relatively high TEA rates, a relatively low established business owner/manager rate, and a relatively high business closure rate. The ratio of EBO to TEA, a proxy of early-stage

business survival, is relatively low in London while its rate of business closure to business ownership is unusually high. Overall, London stands out as a high churn region.

At the other end of the activity spectrum, Yorkshire & Humberside and Scotland have relatively high ratios of TEA to EBO and low churn rates. The North East, another low activity regions has relatively low TEA rates and EBO rates, but a relatively low ratio of EBO to TEA, which suggests that it may be maintaining a relatively high flow of early-

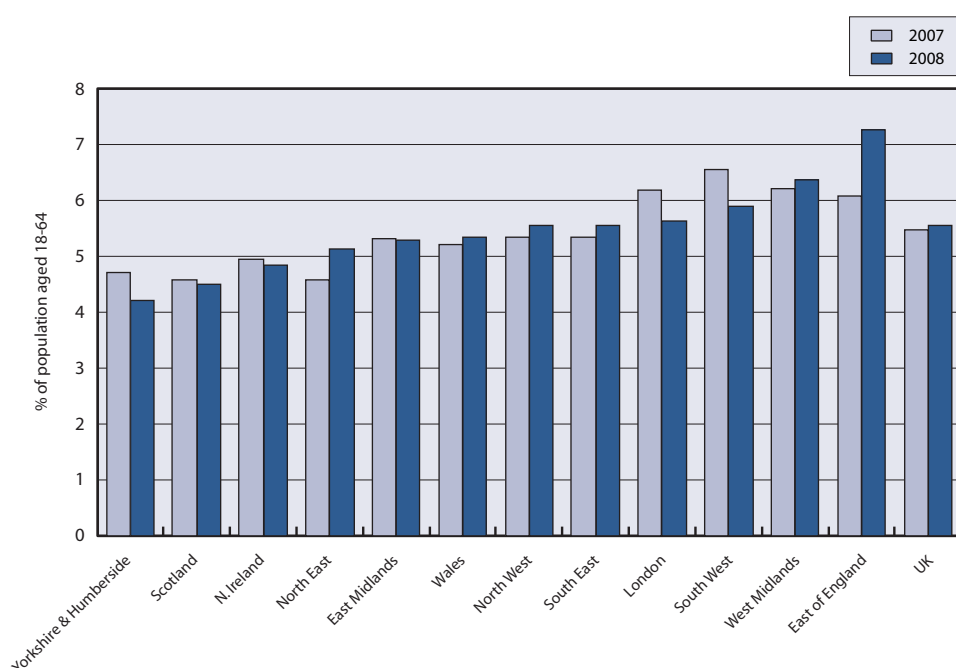
	I expect to start a business in the next 3 years (FUT)	Nascent Entrepreneurial Activity rate (paying wages for 3 months or less) (NEA)	New Business Owner-manager rate (4-42 months) (NBO)	Nascent + New business owner-manager rate (TEA)	Established Business Owners (>42 months) (EBO)	Business closure rate (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)
East of England	5.8	4.0	3.9	7.3	5.5	1.7	0.8	0.18
East Midlands	6.8	2.8	2.6	5.3	6.4	1.6	1.2	0.18
London	12.5	2.9	2.9	5.6	4.8	2.0	0.9	0.26
North East	6.2	2.6	2.5	4.8	4.3	1.1	0.9	0.16
North West	6.1	2.9	2.7	5.5	5.5	1.4	1.0	0.17
Northern Ireland	6.1	2.9	2.1	4.8	4.8	0.9	1.0	0.13
Scotland	5.1	2.0	2.5	4.5	5.5	0.6	1.2	0.08
South East	6.2	2.6	3.0	5.5	7.3	1.4	1.3	0.14
South West	6.3	2.9	3.0	5.9	7.6	1.4	1.3	0.13
Wales	5.5	3.0	2.4	5.3	5.2	1.6	1.0	0.21
West Midlands	6.0	2.7	3.8	6.3	6.5	1.3	1.0	0.13
Yorkshire & Humberside	5.5	2.1	2.1	4.2	6.3	0.9	1.5	0.10
<b>UK</b>	<b>6.8</b>	<b>2.8</b>	<b>2.9</b>	<b>5.5</b>	<b>6.0</b>	<b>1.4</b>	<b>1.1</b>	<b>0.16</b>

**Table 5**  
Measures of entrepreneurial activity in the UK regions, 2008  
(Source: GEM APS 2008)

stage businesses given its business stock while maintaining an average level of churn.

Figure 11 contrasts TEA rates in the UK regions in 2008 with rates in 2007. The distribution of TEA rates in 2008 was slightly wider than in 2007 but the only statistically significant difference was between Yorkshire & Humberside (4.2%)<sup>20</sup> and the West Midlands (6.3%) and the East of England (7.3%). None of the fluctuations in point estimates of TEA in individual UK regions between 2007 and 2008 are statistically significant.

<sup>20</sup> The 2007 TEA rate for Yorkshire & Humberside (Y&H) has been revised downwards in the new pooled GEM UK dataset. However, it should be noted that the confidence interval for TEA for Y&H using this revised dataset is 3.925 - 5.501. The old figure is well within this confidence interval. The confidence interval for the estimate we used last year for 2007 TEA in Y&H was 4.475-6.14. The weighted sample size in the revised dataset is slightly smaller: 2782 instead of 2788 in the old database. The ACTUAL number of cases was 2779 in the revised database and 2785 in the original database. This reduced sample size is because of the removal of cases that were coded "other" in the 16-fold ethnicity classification. These had been coded as non-white in the original classification. In the revised classification, which harmonised the treatment of ethnicity across all years, cases that could not be clearly coded were excluded from the analysis rather than being classified as non-white. In the revised database, a new proportional random sample of the Doncaster over-sample (in 2007) within Y&H was taken, because the sample size had changed due to the removal of "other" ethnic cases. This in turn changed cases in Doncaster chosen for the final GOR sample. Hence the slight change in the final TEA estimate for Y&H for 2007.



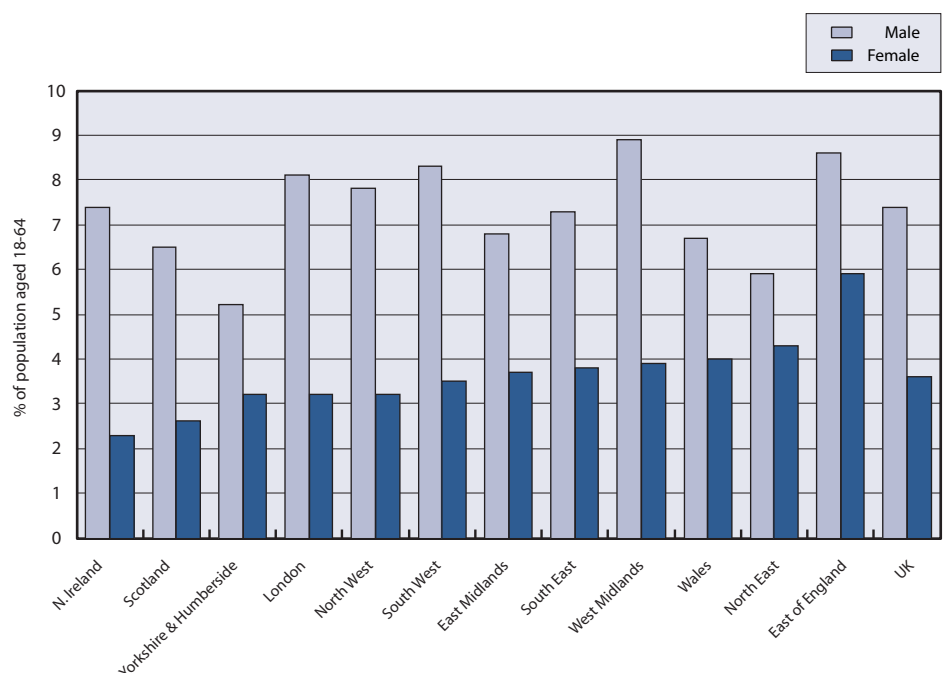
**Figure 11**  
Total early-stage Entrepreneurial Activity in the UK Regions in 2007 and 2008  
(Source: GEM APS, 2008)

While female early-stage entrepreneurial activity in the UK remains unchanged in 2008 compared to 2007, there are some important differences across the regions. Figure 12 examines male and female early-stage entrepreneurial activity rates by region. It shows that the East of England had the highest level of female early-stage entrepreneurial activity in 2008 at 5.9%. Northern Ireland and Scotland had the lowest level of female TEA at 2.3% and

2.5% respectively. The female TEA rate for Northern Ireland was significantly lower than in the East of England. Further, Northern Ireland and Scotland also had the widest gap between male and female TEA rates: the level of female TEA was 49% that of males in the UK as a whole, but considerably lower in Northern Ireland (30%) and Scotland (38%).

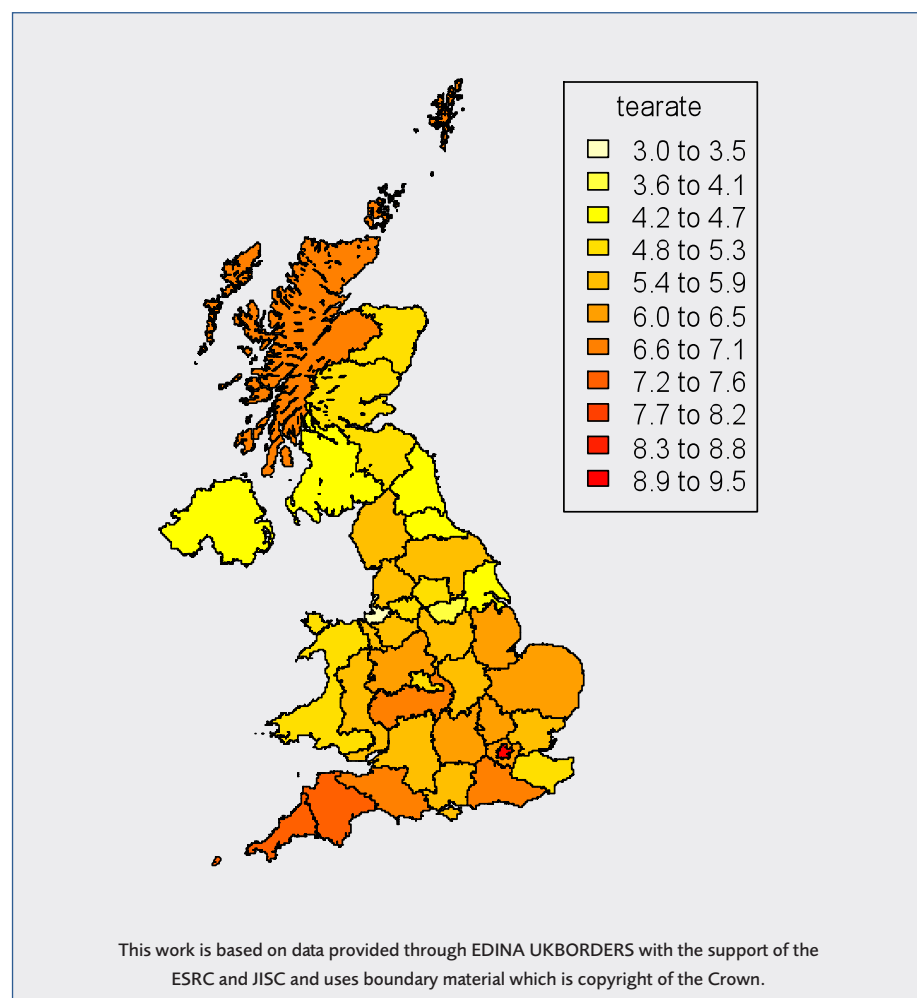
Using the pooled 2002-08 GEM datasets

**Figure 12**  
Male and Female Total early-stage  
Entrepreneurial Activity in the UK  
Regions, 2008  
(Source: GEM APS, 2008)



we are now in a position for the first time to present TEA rates for the 37 NUTS2 regions of the UK, that is, at sub-regional level (Figure 13). The average sample size of NUTS2 regions in the pooled database is 4317; no NUTS2 region had a sample of less than 1000 individuals. Figure 13 shows substantial differences in TEA rates *within* GOR regions. One example is the difference between Inner London, with a TEA rate of 9.4, and Outer London, with a

significantly lower TEA rate of 6.4. Another is the contrast between the Highlands and Islands of Scotland (6.9) and South Western Scotland (4.4). The pattern of TEA across the UK suggests that Inner London, a world city, is a special case with its own, faster, entrepreneurial rhythm. Inner London aside, a general south to north gradual decline in the TEA rate is evident. A second pattern is a raised TEA rate in the most isolated rural regions of the South West and Scotland.



**Figure 13**  
TEA rates of NUTS2 regions in the UK,  
based on the pooled 2002 to 2008 UK  
GEM database

(Source: GEMUK APS 2002 to 2008)

## 4 ENTREPRENEURIAL ASPIRATION

<sup>21</sup> According to the 2008 GEM Executive Report, expectations of high growth are rare among nascent and new entrepreneurs. Only 70% of all start-up attempts expected any job creation at all. Only 8% of all start-up attempts expected to create 20 or more jobs.

<sup>22</sup> Where the product is new to all or most customers and where there is little or no competition.

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.

Across the world, the majority of businesses expect little or no growth<sup>21</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. The results are illustrated in Table 6 for early-stage entrepreneurs and established

business owner-managers.

Table 6 also shows the proportion of early-stage entrepreneurs and established business owner-managers who state they operate in new product markets<sup>22</sup> and operate in "high" or "medium" technology sectors (according to OECD definitions) for the G7 and BRIC countries. In 2008 the UK performed close to the G7 average on the first two of these measures, and relatively well in the proportion of technology-based businesses.

High job expectation varies substantially and is highest in the US and China. 15% of UK early stage entrepreneurs had high job expectations in 2008. In all G7 countries but only half of BRIC countries, the proportion of established business owners with high

	High Job Expectation (% TEA or EBO greater than ten jobs and growth >50%)		New Product Market (% of all TEA or EBO)		High or Medium tech sectors (% of all TEA or EBO)	
	TEA	EBO	TEA	EBO	TEA	EBO
G7						
<b>UK</b>	<b>15.2</b>	<b>4.6</b>	<b>22.0</b>	<b>2.0</b>	<b>12.0</b>	<b>8.9</b>
France	17.4	5.7	23.6	1.4	3.8	0
Germany	11.2	2	24.3	0.7	2	3.9
Italy	15.2	3.7	10.8	2.4	12.5	8.3
Japan	25.7	3.3	13.3	1.9	2.2	2.8
US	29.2	8.5	20.2	4.2	7.3	4.7
G7 average	19.0	4.6	19.0	2.1	6.6	4.7
BRIC						
Brazil	8.8	2	3.8	0.8	3.3	2.4
Russia	13	18.1	11.5	0	4.7	0
India	3.1	6.6	5.3	0.7	0.8	1.9
China	26.6	10.8	8.9	2.8	6.3	2.6

**Table 6**  
Measures of entrepreneurial aspiration in  
participating G7 and BRIC countries, 2008

(Source: GEM APS 2008)



job expectation was much lower than the proportion of early-stage entrepreneurs. In all countries, and particularly in the G7 countries, early-stage entrepreneurs were more likely than established business owners to report new product-market creation.

The final variable in Table 6 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>23</sup>. In 2008, the UK had a relatively high proportion of early-stage entrepreneurs and established business owners in high or medium tech sectors. It should be noted that this measure fluctuates from year to year in many countries. The first two measures of aspiration in Table 6 appear to be more stable year-on-year.

<sup>23</sup> 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.

Entrepreneurial activity in the UK in 2008 was little changed on the previous year, continuing a pattern of no substantial change in activity rates since 2002. While overall entrepreneurial activity in the UK has tracked the G7 average very closely for the past six years, UK female entrepreneurial activity has tended to track slightly under the G7 average.

The bulk of the interviewing for the 2008 survey was conducted in the summer, before the turmoil in the international banking industry. There was no evidence in this survey of any change in entrepreneurial attitudes or activity in the UK as a whole in 2008, other than a sharp decline in opportunity perception.

2007 marked the last year of a long run of relatively benign economic growth for the G7 as a whole. This period provided opportunities for entrepreneurship, but also

for the alternative: being an employee. 2008 witnessed a drop in opportunity perception in most high income countries. The decline in the UK was twice the average decline for high income countries, but not as severe as those in Iceland or Ireland. On the other hand, UK residents appeared to maintain start-up expectation rates, and skills perception has remained steady. This may be because nascent entrepreneurship requires some commitment, and the nascent entrepreneurs in our sample were committed before the downturn in general sentiment in late 2008.

Finally, a more in depth regional analysis has revealed that London, or more specifically Inner London, is quantitatively and qualitatively different in entrepreneurial activity from the rest of the UK. Inner London is a world city, more comparable in entrepreneurship terms to other world cities than to other regions of the UK.

	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
G7				
UK	25.8	28.8	49.0	37.2
France	32.9	21.6	24.7	50.4
Germany	31.1	23.9	35.1	48.7
Italy	32.0	29.7	40.1	49.4
Japan	23.2	7.6	12.5	40.6
US	37.2	36.6	55.7	28.2
G7 average	30.4	24.6	36.2	42.4
BRIC				
Brazil	47.9	41.4	53.1	47.1
Russia	35.5	30.1	17.6	61.0
India	60.5	58.5	58.0	44.2
China (2007)	64.5	39.2	38.9	29.5

**Table 1a**

Attitudes towards entrepreneurship in participating G7 and BRIC countries in 2008 - 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 2008. These estimates are comparable with measures used in the 2007 GEM UK report).

	2007	2008	2007	2007	2008	2008
	All	All	male	female	male	female
I personally know someone who has started a business in the last two years	24.0	25.8	27.7	20.2	30.3	21.2
There will be good start-up opportunities where I live in the next six months	38.1	28.8	43.1	33.0	32.7	24.6
I have the skills, knowledge and experience to start a business	50.0	49.0	59.5	40.4	58.7	38.8
Fear of failure would prevent me from starting a business	35.2	37.2	33.7	36.7	34.2	40.4
Most people consider that starting a business is a good career choice	53.3	51.7	52.7	53.9	53.1	50.3
Those successful at starting a business have a high level of status and respect in society	72.7	73.8	73.3	72.2	74.5	73.2
You will often see stories about people starting successful new businesses in the media	57.2	53.2	57.9	56.5	55.1	51.2

**Table 2a**

Entrepreneurial attitudes in the UK in 2007 and 2008 (% respondents aged 18-64 expressing an opinion and agreeing with the statement)

(Source: GEM UK APS, 2007, 2008. These estimates are comparable with measures used in the 2007 GEM UK report)

**Figure 2**  
Entrepreneurial attitudes and perceptions in the UK, 2002- 2008  
(% non-entrepreneurial respondents aged 18-64 expressing an opinion and agreeing with the statement)  
(Source: GEM UK APS, 2002-2008).

	2002	2003	2004	2005	2006	2007	2008
I know someone who has started a business in the last 2 years	20.7	21.8	24.1	25.3	24.9	21.7	23.6
There are good start-up opportunities where I live in the next 6 months	25.8	31.6	33.2	35.4	33.8	35.0	26.9
I have the skills, knowledge and experience to start a business	40.9	43.3	46.4	46.4	45.1	45.2	44.4
Fear of failure would prevent me starting a business (for those who agree there are good startup opportunities)	37.0	35.5	36.0	36.1	37.3	37.6	38.3

**Figure 2a**  
Attitudes towards entrepreneurship in UK from 2002 to 2008 - percentage of total working age population who expressed an opinion and agreed with the statement at the left of the row  
(Source: GEM APS 2002 -2008)

**Note:** These figures are calculated on the same basis as in previous GEM UK Reports – that is, for the 18-64 year sample overall and not solely the non-entrepreneurial adult population. However, due to the revisions undertaken in the new pooled 2002-08 UK database there will be small differences between these figures and those previously published.

	2002	2003	2004	2005	2006	2007	2008
I know someone who has started a business in the last 2 years	23.9	24.6	26.6	27.7	27.3	24.0	25.8
There are good start-up opportunities where I live in the next 6 months	29.1	35.0	35.7	38.2	36.7	38.1	28.8
I have the skills, knowledge and experience to start a business	46.0	48.3	50.3	50.9	49.6	50.0	49.0
Fear of failure would prevent me starting a business	34.4	33.8	33.7	34.3	35.7	35.2	37.2

	I personally know someone who has started a business in the last two years	There will be good start-up opportunities where I live in the next six months	I have the skills, knowledge and experience to start a business	Fear of failure would prevent me from starting a business
East of England	25.5	33.0	50.1	38.8
East Midlands	24.9	25.4	48.2	34.9
London	29.6	36.7	55.2	39.9
North East	24.1	23.0	45.9	36.3
North West	23.2	27.2	46.4	37.5
Northern Ireland	26.2	23.3	41.5	44.5
Scotland	22.3	33.7	45.4	36.0
South East	29.1	32.2	51.0	35.2
South West	27.3	27.3	48.4	36.0
Wales	24.4	21.8	45.8	34.7
West Midlands	23.2	22.0	50.2	38.3
Yorkshire & Humberside	24.6	22.9	47.1	37.0
<b>United Kingdom</b>	<b>25.8</b>	<b>28.8</b>	<b>49.0</b>	<b>37.2</b>

**Table 3a**  
Attitudes towards entrepreneurship  
in UK regions in 2008 - percentage  
of total working age population who  
expressed an opinion and agreed with  
the statement at the top of the column  
(Source: GEM APS 2008)

	2002	2003	2004	2005	2006	2007	2008	% change 2002-08	% change 2007-08
East	32.1	31.9	35.3	38.2	35.3	37.1	31.9	-0.2	-5.2
East Midlands	28.0	29.8	34.0	36.5	33.7	32.4	22.7	-5.3	-9.8
London	29.4	28.6	32.6	41.4	37.3	38.8	32.8	3.4	-6.0
N. Ireland	24.8	28.9	32.2	32.8	32.9	38.8	21.9	-3.0	-16.9
North East	21.9	29.5	28.7	32.5	30.2	33.1	20.8	-1.1	-12.2
North West	22.6	28.8	33.8	32.0	31.6	32.6	25.6	2.9	-7.0
Scotland	23.3	34.0	33.3	28.5	33.6	33.5	33.1	9.8	-0.4
South East	28.9	40.1	35.3	36.0	36.3	40.9	31.5	2.6	-9.4
South West	25.0	36.5	32.1	39.4	35.9	35.0	24.8	-0.2	-10.2
Wales	21.1	29.6	30.7	31.8	28.6	29.6	19.5	-1.6	-10.1
West Midlands	25.0	31.6	33.1	37.4	32.4	31.0	21.3	-3.7	-9.7
Yorks & Humber	21.8	25.0	32.7	32.7	30.1	33.2	20.2	-1.7	-13.1
UK average	25.8	31.6	33.2	35.4	33.8	35.0	26.9	1.1	-8.2

**Table 3b**  
Good Opportunities for Start-up in  
the local area in next 6 months - in  
UK from 2002 to 2008 - percentage of  
non-entrepreneurially active working  
age population who expressed an  
opinion and agreed with the statement  
(Source: GEM APS 2002 -2008)

**Figure 3**  
Participation in entrepreneurship in the UK by most established stage of entrepreneurial activity (percentage of working age population), 2002 to 2008  
(Source: GEMUK APS 2002 to 2008)

	2002	2003	2004	2005	2006	2007	2008
established business owner/manager	5.6	5.7	4.7	5.1	5.3	5.8	6.0
new business owner/manager	3.1	3.2	2.8	3.0	2.8	2.7	2.8
nascent entrepreneur	2.1	3.0	2.8	2.7	2.7	2.6	2.6
intend to start (within three years)	3.9	4.9	5.9	5.7	4.9	4.4	4.5
no activity or intention	85.3	83.2	83.7	83.4	84.3	84.5	84.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Figure 3a**  
Participation in entrepreneurship in the UK by stage of entrepreneurial activity (percentage of working age population), 2002 to 2008  
(Source: GEMUK APS 2002 to 2008)  
Note: individuals can be in more than one stage at a time; hence annual percentages do not total to 100)

	2002	2003	2004	2005	2006	2007	2008
established business owner/manager	5.6	5.7	4.7	5.1	5.3	5.8	6.0
new business owner/manager	3.1	3.2	2.9	3.1	2.8	2.7	2.9
nascent entrepreneur	2.5	3.5	3.2	3.2	3.2	2.9	2.8
intend to start (within three years)	6.7	8.0	8.6	8.7	7.9	6.8	6.8
no activity or intention	85.3	83.2	83.7	83.4	84.3	84.5	84.1

**Figure 4**  
Total early-stage Entrepreneurial Activity (TEA) in participating G7 and BRIC Countries (2002-2008)<sup>1</sup>  
(Source: GEM Global Adult Population Survey (APS) 2002-2008)

	2002	2003	2004	2005	2006	2007	2008
<b>UK</b>	<b>5.4</b>	<b>6.4</b>	<b>5.8</b>	<b>6.0</b>	<b>5.8</b>	<b>5.5</b>	<b>5.5</b>
Canada	8.8	8.0	8.8	9.3	7.1		
France	3.2	1.6	6.0	5.4	4.4	3.2	5.6
Germany	5.2	5.2	5.1	5.4	4.2		3.8
Italy	5.9	3.2	4.3	4.9	3.5	5.0	4.6
Japan	1.8	2.8	1.5	2.2	2.9	4.3	5.4
US	10.5	11.9	11.3	12.4	10.0	9.6	10.8
Brazil	13.5	12.9	13.5	11.3	11.7	12.7	12.0
Russia	2.5				4.9	2.7	3.5
India	17.9				10.4	8.5	11.5
China	12.4	10.5		13.7	16.2	16.4	
<b>G7 average</b>	<b>5.8</b>	<b>5.6</b>	<b>6.1</b>	<b>6.5</b>	<b>5.4</b>	<b>5.5</b>	<b>6.0</b>

	Opportunity TEA	Necessity TEA
<b>G7 Average</b>	<b>4.7</b>	<b>1.0</b>
<b>United Kingdom</b>	<b>4.4</b>	<b>0.8</b>
France	4.8	0.6
Germany	2.7	1
Italy	3.6	0.7
Japan	4	1.3
US	8.9	1.3
Brazil	8	4
Russia	2.5	0.7
India	8	2.5
China (2007 est)	9.8	6.2

**Figure 5**  
Necessity and opportunity entrepreneurship in participating G7 and BRIC countries in 2008  
(Source: GEM APS 2008)

	Male TEA	Female TEA
<b>G7 Average</b>	<b>7.7</b>	<b>4.2</b>
<b>United Kingdom</b>	<b>7.4</b>	<b>3.6</b>
France	8.0	3.3
Germany	4.1	3.4
Italy	6.4	2.8
Japan	7.8	3.0
US	12.7	8.8
Brazil	13.0	11.0
Russia	4.5	2.6
India	15.7	7.1
China (2007 est)	19.3	13.4

**Figure 6**  
Total early-stage Entrepreneurial Activity by gender in participating G7 and BRIC countries in 2008  
(Source: GEM APS 2008)

**Figure 7**  
Established business ownership by  
gender in participating G7 and BRIC  
countries, 2008  
(Source: GEM APS, 2008)

	Male EBO	Female EBO
<b>G7 Average</b>	<b>8.2</b>	<b>3.6</b>
<b>United Kingdom</b>	<b>8.6</b>	<b>3.4</b>
France	4.2	1.4
Germany	5.5	2.5
Italy	9.2	3.7
Japan	11.8	3.9
US	10.3	6.4
Brazil	17.8	11.4
Russia	1.0	1.2
India	25.9	6.6
China (2007 est)	9.7	7.0

**Figure 8**  
Female entrepreneurial activity in  
participating G7 and BRIC countries,  
2002-2008  
(Source: GEM APS, 2002-2008)

	2002	2003	2004	2005	2006	2007	2008
<b>UK</b>	<b>3.2</b>	<b>3.9</b>	<b>3.8</b>	<b>3.7</b>	<b>3.7</b>	<b>3.7</b>	<b>3.6</b>
Canada	6.0	5.2	6.1	5.6	6.0		
France	2.1	1.6	3.8	3.3	2.5	2.2	3.3
Germany	3.4	3.3	3.1	3.8	2.6		3.4
Italy	4.1	3.2	2.3	3.7	3.1	3.3	2.8
Japan	0.6	1.3	1.2	1.2	2.6	5.2	3.0
US	8.2	8.2	10.7	9.7	7.4	7.3	8.8
Brazil	11.1	11.7	11.3	10.8	9.6	12.7	11.0
Russia	1.6				2.6	1.6	2.6
India	14.1				9.2	7.5	7.1
China	11.0	11.2		11.6	13.8	13.4	
<b>G7 average</b>	<b>3.9</b>	<b>3.8</b>	<b>4.4</b>	<b>4.4</b>	<b>4.0</b>	<b>4.3</b>	<b>4.2</b>



UK Ethnic status	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 discontinuation rate (Discontinued a business in the last 12 months; business may have continued under other ownership) (BDC)	Nascent rate divided by new business owner rate (NEA/NBO)	% immigrants in sample	Mean age of ethnic group in sample	Unweighted sample size
White British	2.7	2.8	5.4	5.7	1.9	1.0	2%	42	137758
White Irish	3.3	2.3	5.4	5.7	1.5	1.4	26%	41	8468
White other	4.3	3.8	7.6	5.5	2.3	1.1	64%	39	6274
White and Black Caribbean	9.6	4.0	12.0	1.9	3.1	2.4	24%	37	375
White and Black African	8.2	6.2	14.4	1.5	6.2	1.3	66%	34	191
White and Asian	3.5	3.3	6.8	5.7	2.0	1.1	36%	37	401
Mixed Other	4.2	5.0	9.0	2.4	3.8	0.8	45%	38	542
Indian	3.2	3.4	6.4	4.4	1.5	1.0	67%	38	1759
Pakistani	5.9	2.9	8.8	4.4	3.3	2.0	57%	34	938
Bangladeshi	6.9	4.7	10.9	1.0	3.5	1.5	62%	31	243
Chinese	3.1	2.9	5.8	2.8	2.0	1.1	68%	37	398
Asian Other	4.8	3.4	8.1	3.2	3.2	1.4	78%	39	793
Black Caribbean	7.3	2.2	9.1	4.2	0.9	3.3	53%	42	691
Black African	7.8	3.2	10.8	1.4	2.8	2.4	84%	36	735
Black Other	4.2	3.9	8.1	0.6	2.7	1.1	39%	38	167

**Figure 9**  
Entrepreneurial activity rates, proportion  
of immigrants and mean age of pooled  
2002 to 2008 GEMUK sample by ethnic  
group (ages 18-64 only)  
(Source: GEMUK APS 2002 to 2008)

**Figure 10**  
Total early-stage Entrepreneurial Activity in the United Kingdom among UK-born and immigrants by broad ethnic category, for the pooled 2002 to 2008 GEM UK database, showing the unweighted sample size of each category  
(Source: GEM UK APS, 2002 to 2008)

	TEA rate	high C.I.	low C.I.	Mean age	unweighted sample size
White UK-born	5.4	5.5	5.2	42	145802
White immigrants	7.8	8.3	7.2	38	6587
Mixed UK-born	9.2	10.6	7.9	35	960
Mixed immigrants	9.8	11.5	8.1	40	534
Asian UK-born	9.0	10.0	7.9	30	1480
Asian immigrants	6.8	7.5	6.2	41	2622
Black UK-born	11.3	12.9	9.6	35	578
Black immigrants	8.5	9.5	7.4	41	1006

**Figure 11**  
Total early-stage Entrepreneurial Activity in the UK Regions in 2007 and 2008  
(Source: GEM APS, 2008)

	2007	2008
Yorkshire & Humberside	4.7	4.2
Scotland	4.6	4.5
N. Ireland	4.9	4.8
North East	4.6	5.1
East Midlands	5.3	5.3
Wales	5.2	5.3
North West	5.3	5.5
South East	5.3	5.5
London	6.2	5.6
South West	6.5	5.9
West Midlands	6.2	6.4
East of England	6.1	7.3
<b>UK</b>	<b>5.5</b>	<b>5.5</b>

	Male	Female	Ratio
N. Ireland	7.4	2.3	30.8
Scotland	6.5	2.6	38.9
Yorkshire & Humberside	5.2	3.2	60.6
London	8.1	3.2	39.2
North West	7.8	3.2	41.4
South West	8.3	3.5	41.9
East Midlands	6.8	3.7	54.9
South East	7.3	3.8	51.9
West Midlands	8.9	3.9	43.5
Wales	6.7	4.0	59.9
North East	5.9	4.3	73.2
East of England	8.6	5.9	67.9
<b>UK</b>	<b>7.4</b>	<b>3.6</b>	<b>48.9</b>

**Figure 12**  
**Male and Female Total early-stage**  
**Entrepreneurial Activity in the UK**  
**Regions, 2008**  
 (Source: GEM APS, 2008).

	TEA rate (2002-2008)	Sample size (18-64 only)
Tees Valley and Durham	4.4	4999
Northumberland and Tyne and Wear	4.4	6394
Cumbria	5.9	1003
Cheshire	5.4	1813
Greater Manchester	5.0	3481
Lancashire	5.6	2289
Merseyside	3.5	2299
East Riding and North Lincolnshire	4.4	2383
North Yorkshire	5.6	2397
South Yorkshire	3.9	3446
West Yorkshire	4.8	5391
Derbyshire and Nottinghamshire	5.5	6998
Leicestershire, Rutland and Northamptonshire	5.7	5662
Lincolnshire	6.4	2603
Herefordshire, Worcestershire and Warwickshire	6.7	3272
Shropshire and Staffordshire	6.4	3973
West Midlands	5.2	4720
East Anglia	6.4	3058
Bedfordshire and Hertfordshire	6.1	2022
Essex	5.8	1929
Inner London	9.4	2253
Outer London	6.4	3361
Berkshire, Buckinghamshire and Oxfordshire	6.4	3519
Surrey, East and West Sussex	7.1	4118
Hampshire and Isle of Wight	5.5	2608
Kent	5.2	2753
Gloucestershire, Wiltshire and North Somerset	5.7	4442
Dorset and Somerset	6.7	2286
Cornwall and Isles of Scilly	7.5	1201
Devon	7.3	2325
North Eastern Scotland	4.8	1444
Eastern Scotland	4.9	4386
South Western Scotland	4.4	4592
Highlands and Islands	6.9	1348
East Wales	5.4	10943
West Wales and the Valleys	5.3	18142
Northern Ireland	4.7	19885

**Figure 13**  
TEA rates of NUTS2 regions in the UK, based on the pooled 2002 to 2008 UK GEM database  
(Source: GEM UK APS 2002 to 2008)



