

# **GEM UK: Northern Ireland Report 2011**

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The Global Entrepreneurship Monitor (GEM) is an international project involving 54 countries in 2011 which seeks to provide information on the entrepreneurial landscape of countries. Many studies have shown that entrepreneurship is an important driver for economic growth, competitiveness and job creation. The results of the GEM data analysis are used as key benchmarking indicators by regional and national authorities around the world. The sample size in Northern Ireland was 3,008 adults aged over 16 years of age in 2011 as a result of Invest NI and Belfast City Council boosting the regional sample.

#### **Main Findings**

- The rate of early-stage entrepreneurship (TEA) in Northern Ireland for 2011 was 7.1 per cent, up from 6.4 per cent in 2010. This compared with TEA rates of 7.6 per cent in the UK overall, 7.7 per cent for the English regions and 8.1 per cent in Wales.
- Necessity-driven TEA rose marginally from 1.0 per cent to 1.2 per cent, while opportunity-driven TEA rose from 5.3 per cent to 5.7 per cent.
- The female TEA rate in Northern Ireland rose to a record high of 3.9 per cent in 2011 (UK 5.0 per cent) and the female to male ratio of TEA was 38 per cent, which is still the lowest in the UK (UK 49 per cent, up from 44 per cent).
- The TEA rate of young adults aged 18 to 29 continued to rise in 2011. The TEA rate among this age group has almost doubled in Northern Ireland from 4.1 per cent in 2002 to 7.2 per cent in 2011 (UK: 4.2 per cent to 7.4 per cent), compared with a similar increase in the TEA rate among 30 to 64 year olds from 3.5 per cent to 7.1 per cent (UK: 5.8 per cent to 7.7 per cent).
- Attitudes among the non-entrepreneurial population have generally been more negative in 2011 than in 2010. Only 15.7 per cent of the non-entrepreneurial working age population in Northern Ireland agreed there were good opportunities for starting a business in their local area in the next six months, compared with 27.9 per cent across the UK. This is the lowest rate of perception of start-up opportunities in Northern Ireland since 2002.
- Some 52.1 per cent of non-entrepreneurial individuals of working age in Northern Ireland (UK: 41.4 per cent) agreed they were afraid of starting a business in case it might fail.
- The proportion of non-entrepreneurial working age adults in Northern Ireland who expect to start a business within the next three years rose slightly from 4.1 per cent in 2010 to 4.8 per cent in 2011.
- The Private Sector Entrepreneurial Employee Activity (PEEA) rate, or the proportion of employees in private for-profit organisations who are currently engaged in leading new business activities for their employer in Northern Ireland, was 1.7 per cent, compared with 2.3 per cent for the UK.

### Background

The Global Entrepreneurship Monitor (GEM) is based on the following premises. First, an economy's prosperity is highly dependent on a dynamic entrepreneurship sector. Second, an economy's entrepreneurial capacity is composed of individuals from all groups in society with the ability and motivation to start businesses, and requires positive societal perceptions about entrepreneurship. Third, high-growth entrepreneurship is a key contributor to new employment in an economy, and national competitiveness depends on innovative and cross-border entrepreneurial ventures.

Invest NI and the Belfast City Council sponsored the Northern Ireland component of the GEM UK research project. Stimulating entrepreneurship remains an important challenge for the region and both Invest NI and Belfast City Council have committed significant resources over the years in ensuring that it is embedded within their core activities. This is the ninth year in which Invest NI has participated in GEM. Of the 250,000 respondents to GEM UK surveys for the period 2002-2011, over 29,400 respondents were from Northern Ireland. Northern Ireland now has a large database on entrepreneurial attitudes, activity and aspirations. This is particularly useful conducting trend analysis for important sub-populations in Northern Ireland, such as young people, in relation to other home nations.

The results from GEM data analysis are used as key benchmarking indicators by regional and national authorities around the world. They also enable comparisons to be made with the other regions of the UK and other countries participating in GEM. Overall, GEM's unique ability to provide information on the entrepreneurial landscape of countries in a global context makes its data a necessary resource for any serious attempt to study and track entrepreneurial behaviour.

It is important that we better understand the determinants of early stage entrepreneurship, because there is evidence to suggest a connection between higher rates of entrepreneurship and overall economic prosperity, particularly in innovation-driven economies like Northern Ireland.

## **How GEM Measures Entrepreneurial Activity**

GEM creates an index of early stage entrepreneurial activity (known as TEA) using the following approach:

- A telephone survey of a random sample of the adult population is conducted between May and September.
- The TEA index is the sum of those respondents classified as nascent<sup>1</sup> entrepreneurs and new firm entrepreneurs<sup>2</sup>.

The TEA index does not measure all entrepreneurial activity and is not based on a survey of business entities. It measures the characteristics of entrepreneurial individuals and the types of entities they establish. As such it is a unique and internationally comparative measure of the cultural propensity of a nation, or region, to be entrepreneurial.

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). In 2011, entrepreneurial activity among employees was measured, adding to our knowledge about the variety of contexts in which entrepreneurial activity can be expressed.

In addition to activity, the GEM survey asks all respondents about their attitudes to entrepreneurial activity, and asks entrepreneurs about their aspirations.

The methodology, sample sizes and weighting systems used for the GEM UK 2011 adult population survey are explained in more detail in the GEM UK 2011 report (<u>www.gemconsortium.org</u>). An important change in the sample design was introduced in 2010 when 10 per cent of respondents in each Government Office Region (GOR) were selected at random from households which had mobile phones but not fixed phone landlines. In 2011, this was increased to 13 per cent, in line with recent estimates in the proportion of

<sup>&</sup>lt;sup>1</sup> The active planning phase in which the entrepreneur has done something during the past 12 months to help start a new business, a new business that he/she will at least part own, and which has not paid wages or other income to the owners in the past 3 months.

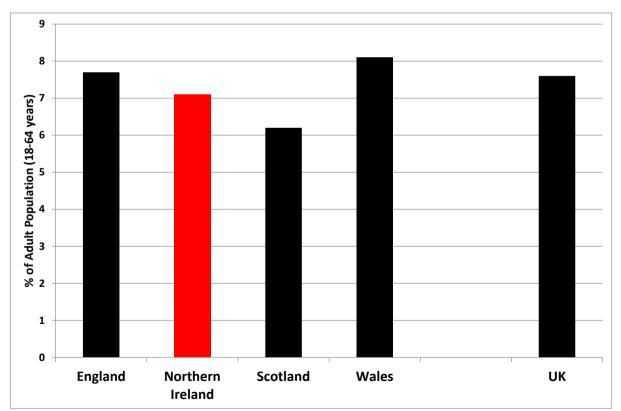
 $<sup>^{2}</sup>$  The second phase is defined as from 4 to 42 months after the new venture begins to provide income to the owners. Entrepreneurs who at least part own and manage a new business that has been paying some form of income to the owners for at least 4 and not more than 42 months are referred to as new firm entrepreneurs.

mobile-only households in the UK. The following report presents a summary of the headline results, and key themes arising from the GEM survey in 2011 and the analysis of the ten years of GEM data (2002-11).

# **Total Early-Stage Entrepreneurial Activity (the TEA Index)**

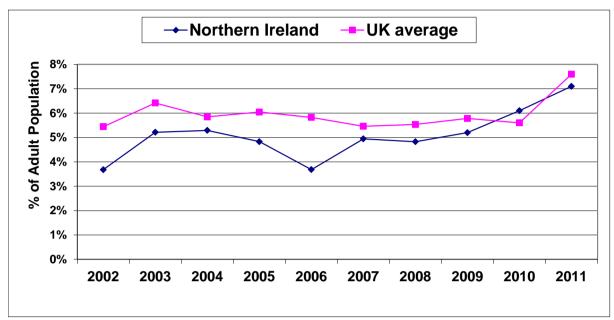
The rate of early-stage entrepreneurship in Northern Ireland for 2011 was 7.1 per cent compared to 7.6 per cent in the UK overall, 8.1 per cent in Wales, 7.7 per cent for the English regions and 6.2 per cent in Scotland. The TEA rates for Northern Ireland, the other home nations and the UK in 2011 were not significantly different from each other statistically (Figure 1).

Overall, a TEA rate of 7.1 per cent in Northern Ireland equates to around one in every twelve adults aged 18-64 or over 180,000 individuals, 60 per cent of whom were in the very early stages of starting a business (nascent entrepreneurs 4.9 per cent) and the remainder those who had a new business which was between 3 and 42 months old (3.2 per cent).



**Figure 1: Total early-stage entrepreneurial activity (TEA) in the UK Home Nations 2011 (Source: GEM APS)** 

Looking at the 2002-2011 period we observe that the rate of early-stage entrepreneurial activity in Northern Ireland, as in the UK, has risen through the recession (Figure 2). The level of early-stage entrepreneurial activity in Northern Ireland has tracked the UK trend very closely in recent years.



**Figure 2: Total Early-Stage Entrepreneurial Activity in Northern Ireland and the UK** (2002-11). (Source: GEM APS)

Both "necessity-driven" and "opportunity-driven" TEA rates were broadly similar in Northern Ireland in 2011 than in 2010. Necessity-driven TEA rose from 1.0 per cent to 1.2 per cent, while opportunity-driven TEA rose from 5.3 per cent to 5.7 per cent. Necessity-driven TEA as a proportion of all TEA was 17.5 per cent, similar to previous years (Figure 3) and around the same as that in other home nations except for Scotland. Northern Ireland had a significantly higher level of necessity entrepreneurship in 2011 than Scotland.

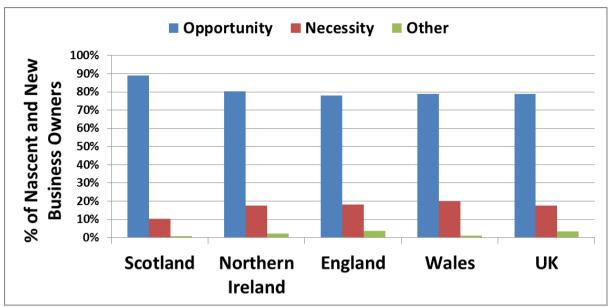
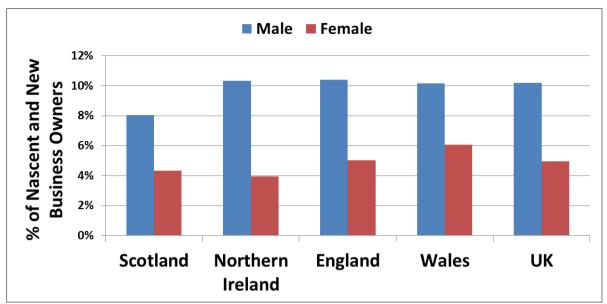


Figure 3: Opportunity and Necessity Entrepreneurship in the UK Home Nations in 2011. (Source: GEM APS 2011)

#### Who are the Entrepreneurs in Northern Ireland?

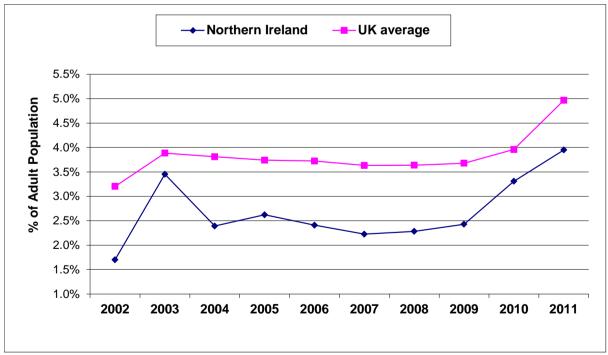
**Gender:** In all the home nations and the UK, males have significantly higher TEA rates than females. However, neither gender-based TEA rates differ significantly across the home nations, or between a home nation and the UK average.

The ratio of female to male early-stage entrepreneurial activity varies markedly across the four home nations. The ratio in Northern Ireland at 38 per cent is the lowest of all the home nations in 2011 (Figure 4). While annual ratios are likely to vary from year to year, the long run average ratios over the 2002 to 2011 period suggest that Wales has a similar ratio, at 51 per cent, to England (47 per cent) and Scotland (49 per cent) but higher than Northern Ireland (36 per cent).



**Figure 4: Total Early-Stage Entrepreneurial Activity in the UK Home Nations in 2011.** (Source: GEM APS 2011)

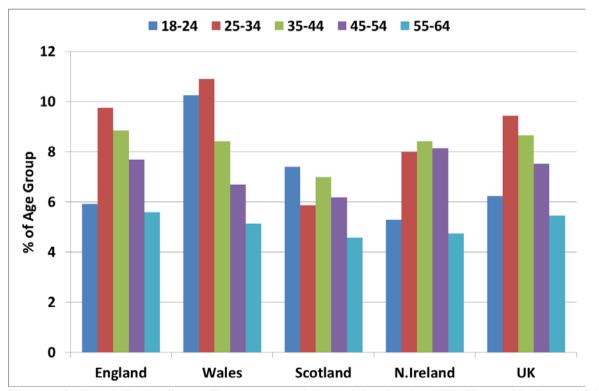
The female TEA rate in Northern Ireland rose to a record high of 3.9 per cent in 2011. We can see from Figure 5 that female TEA rates in Northern Ireland generally match the UK trend, albeit at very different levels, and the medium term trend is upwards.



**Figure 5: Total Early-Stage Female Entrepreneurial Activity in Northern Ireland and the UK, 2002-2011.** (Source: GEM APS)

**Age:** As Figure 6 shows, individuals aged between 25-34 years display the highest rate of early-stage entrepreneurial activity in the UK but this is not true for Northern Ireland. However, the 18-24 age group in Wales appears to have a relatively high TEA rate in comparison to the other home nations, and especially Northern Ireland which has the lowest rate. This difference is not statistically significant, but there are relatively few individuals in this age group.

A more meaningful analysis is to compare how TEA rates have changed in the 18 to 29 age group (where there seems to be a natural break in UK GEM activity data) and compare them to the 30 to 64 age group. Figures 7 and 8 show a near tripling of the TEA rate among 18 to 29 years olds in Wales from 3.4 per cent in 2002 to 9.7 per cent in 2011, compared with a milder increase in the TEA rate among 30 to 64 year olds from 4.4 per cent to 7.7 per cent. This increase in TEA rates among 18-29 year olds in Wales is larger than the other home nations, and is more than double the increase in the 30-64 rate. By comparison, the rate for 18-29 year olds in Northern Ireland displayed a more modest increase over the decade from 4.1 per cent to 7.2 per cent.



**Figure 6: Total Early-Stage Entrepreneurial Activity in the UK Home Nations, 2011.** (Source: GEM APS, 2011)

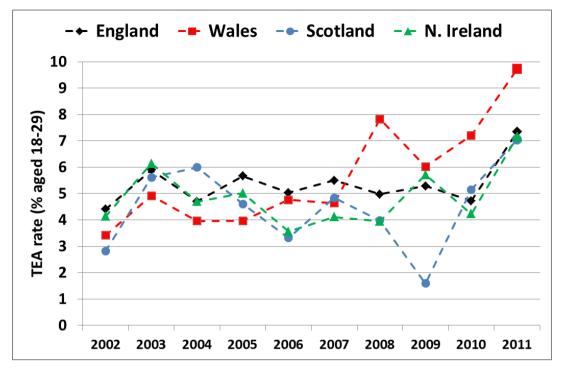


Figure 7: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18 to 29 year olds, 2002 to 2011 (Source: GEM APS, 2002 to 2011)

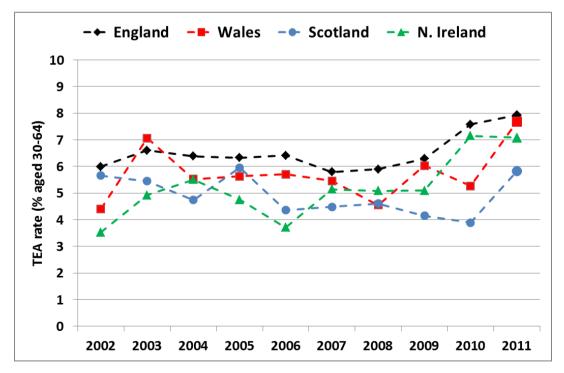


Figure 8: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 30 to 64 year olds, 2002 to 2011 (Source: GEM APS, 2002 to 2011)

**Education:** The average level of total early-stage entrepreneurial activity for graduates in the UK in 2011 was 9.4 per cent (Figure 9), significantly higher than for non-graduates (6.5 per cent). The comparable figure for graduates currently residing in Northern Ireland was 8.0 per cent and this is not statistically different from the UK level or from the TEA rate for non-graduates in Northern Ireland (6.5 per cent). Graduate TEA rates in Wales, Northern Ireland and Scotland seem closer to non-graduate TEA rates than in England – the difference between TEA rates of English graduates and non-graduates was close to significant.

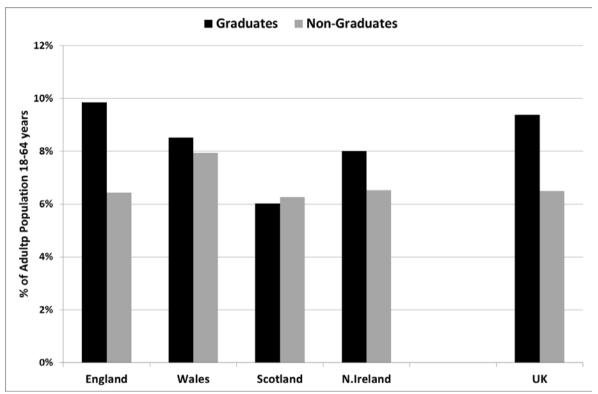


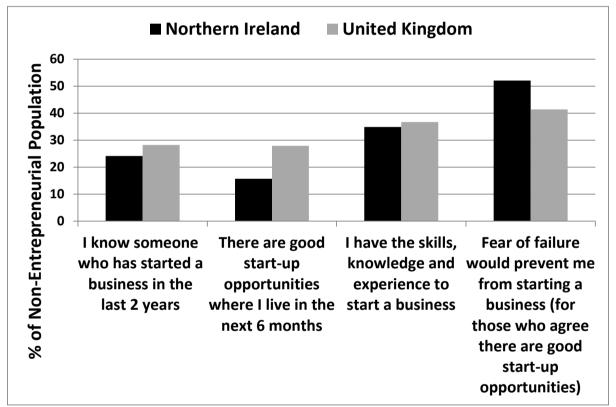
Figure 9: Total Early-Stage Entrepreneurial Activity in the UK Home Nations by Graduate Status, 2010. (Source: GEM APS, 2011)

#### **Entrepreneurial Attitudes and Intentions**

GEM has developed a number of attitudinal statements which provide a proxy for entrepreneurial potential in a country/region. They include knowing a person who has started a business in the last 2 years, perception of good opportunities for start-up, self-belief in possessing the relevant skills to set up in business and the prevalence of fear of failure as a deterrent to setting up in business.

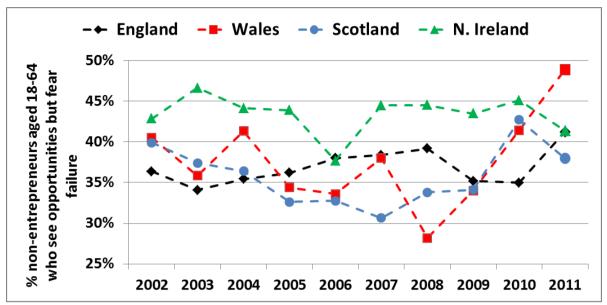
GEM attitudinal data is best treated at the group rather than individual level, because individuals who are already entrepreneurs may feel compelled to provide positive answers in the Adult Population Survey (APS). Here, as in the last two years, we report attitudinal data only for that portion of the population who are not already entrepreneurs.

In Northern Ireland, almost one in four (24.1 per cent) of individuals state that they know an entrepreneur compared to 28.2 per cent in the UK as a whole (Figure 10), the same as in 2010. In Northern Ireland two-thirds (34.9 per cent) of non-entrepreneurs believe they have the skills to set up in business compared – again similar to the UK average at 36.7 per cent.



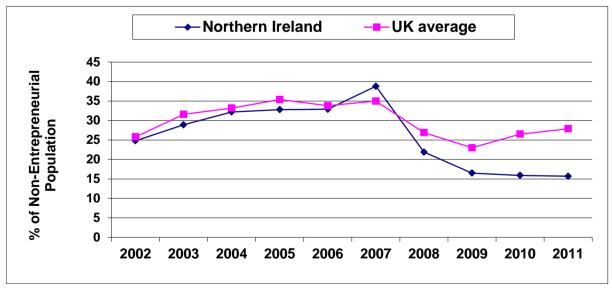
**Figure 10: Entrepreneurial Attitudes and Perceptions in Northern Ireland and the UK** (2011). (Source: GEM APS, 2011)

The proportion of the population reporting that the fear of failure would prevent them starting a business fell slightly in 2011 from 54.9 per cent to 52.1 per cent. In the UK, it rose from 36.0 per cent to 41.4 per cent, although neither of these rises is statistically significant. Restricting the analysis to only those who see good opportunities in their local area in the next 6 months, Figure 11 shows that fear of failure has risen more sharply in Wales than in other home nations since the onset of the recession in 2007. In Northern Ireland it has remained largely unchanged to 2011 when it has fallen slightly.



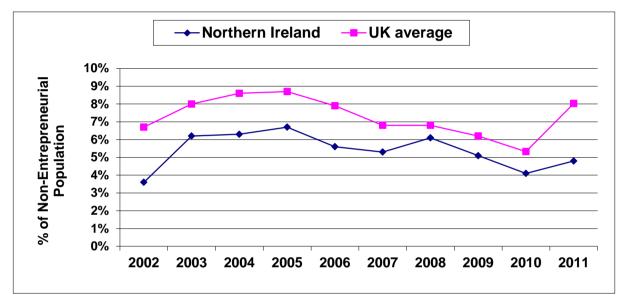
**Figure 11: Fear of Failure among those who see Opportunities in the UK Home Nations, 2002-11.** (Source: GEM APS)

In the 2011 survey, only 15.7 per cent of the non-entrepreneurial working age population in Northern Ireland agreed there were good opportunities for starting a business in their local area in the next six months, compared with 27.9 per cent of the UK non-entrepreneurial working age population. This is the lowest rate of perception of start-up opportunities in Northern Ireland since 2002 although the trend does appear to have bottomed out.



**Figure 12: Perception of Start-up Opportunities in Northern Ireland and the UK, 2002-11.** (Source: GEM APS)

Looking to the future, the proportion of non-entrepreneurial working age adults in Northern Ireland who expect to start a business within the next three years rose slightly from 4.1 per cent in 2010 to 4.8 per cent in 2011 (Figure 13). This would seem to have reversed the downward trend since 2008. However, in the UK the rise was more pronounced and significant from 5.3 per cent to 8.0 per cent. This runs counter to the trend in opportunity perception, which suggests it is more a reflection of the tightening of the labour market and the increase in necessity-based entrepreneurship.



**Figure 13: Future Start-up Expectations (within 3 years) in Northern Ireland and the UK, 2002-11.** (Source: GEM APS)

Men are more likely than women to report that they intend to start a business in the next three years in Northern Ireland (Figure 14). In 2011, 2.9 per cent of women in Northern Ireland expected to start a business in the next 3 years compared to 7.0 per cent of men. The ratio of female to male future start-up intentions in Northern Ireland was 42 per cent, down from 47 per cent in 2010 and close to that observed for the TEA rate in 2011 (38 per cent).

Start-up intentions rose significantly in Scotland in 2011 for males and females, but the increases in other home nations for males and females were not statistically significant. The rise among females in Scotland is particularly noteworthy and unusual; since 2002 it has never been higher than 3.7%.

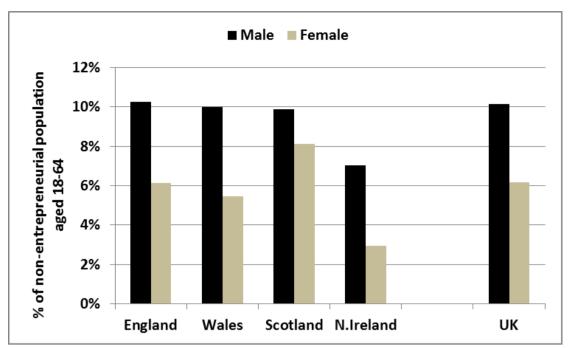


Figure 14: Future Start-up Expectations (within 3 years) in the UK Home Nations by Gender, 2011. (Source: GEM APS, 2011)

#### **Training, Awareness and Entrepreneurial Activity**

In the 2008 GEM UK survey<sup>3</sup>, almost three out of five (58 per cent) of 18 to 29 year olds in Wales agreed they had received training in starting a business provided by a college or university that was not part of their formal education, compared with only 35 per cent in Scotland, 39 per cent in England and 29 per cent in Northern Ireland. There was no significant difference in the proportion who had received training in starting a business as part of formal post-school education across the home nations.

In 2010 we included a more precise question on whether people aged 18-30 had taken part in any activities at school, college or university that made them think about starting a business or being their own boss. Almost half (46.7 per cent) reported that they had, and this figure dropped to 39.7 per cent in 2011. While this difference may appear to be steep, it is not statistically significant, because of the small size of the sample of 18 to 30 year olds. At 50.8

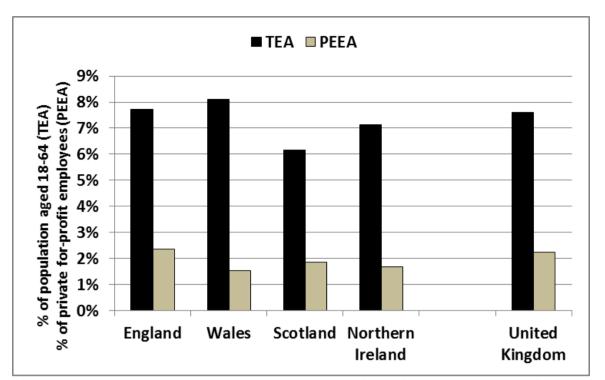
<sup>&</sup>lt;sup>3</sup> This was the last year the survey carried a full set of questions on enterprise education and training.

per cent, the estimate for Northern Ireland was significantly higher than that for Wales or England (41.6 per cent) but the same as Scotland (50.0 per cent). We also asked a slightly different question: "As a result of something you did at school, college or university, would you think about starting your own business?" Answers were very similar, with 42.3 per cent answering yes in 2011, compared with 48.3 per cent who answered yes in 2010. A similar proportion in England answered yes (44.6 per cent) but significantly more people in Scotland (51.5 per cent) and Northern Ireland (51.6 per cent) answered yes than in Wales. In 2011, very similar proportions of people in the home nations had heard of Enterprise Week or Global Entrepreneurship Week: 23.6 per cent in Wales, 22.2 per cent in England and Scotland, and 21.9 per cent in Northern Ireland.

#### **Entrepreneurial Employee Activity**

In 2011, GEM measured entrepreneurial employee activity (EEA) for the first time, defining it as the proportion of employees aged 18-64 who play a leading role in the creation and development of new business activities for the organization in which they work, specifically those involved in developing or launching new goods or services or setting up a new business unit, a new establishment or subsidiary. While GEM has developed a range of measures for this activity, we focus on the measure which is most analogous to early-stage entrepreneurial activity (TEA): Private Sector Entrepreneurial Employee Activity (PEEA), or the proportion of employees in private for-profit organisations who are currently engaged in leading new business activities for their employer. GEM distinguishes two phases of entrepreneurial employee activity: idea development for a new activity and preparation and implementation of a new activity.

The PEEA rate estimates for 2011 were: UK 2.3 per cent, England 2.4 per cent, Wales 1.5 per cent, Scotland 1.8 per cent and Northern Ireland 1.7 per cent. Figure 15 compares the TEA and PEEA rates for the four home nations and the UK in 2011. Note that the denominators of these two measures are different. There is no significant difference between the PEEA rates of home nations.



**Figure 15: Total early-stage Entrepreneurial Activity and Private-sector Entrepreneurial Employee Activity in the UK Home Nations, 2011.** (Source: GEM APS, 2011)

#### **Concluding Observations**

For entrepreneurship in Northern Ireland, 2011 may seem a paradox: entrepreneurial activity and intention were rising, yet attitudes were becoming more negative among the nonentrepreneurially active population. This however needs to be put in the context of the economic cycle. At a late stage of a prolonged recession, we would be expecting some entrepreneurial individuals to be eyeing new opportunities for when the economy moves out of recession, while others fear for their jobs and expect they may have to start a business out of necessity, or indeed actively try to start a business before they lose their job. The remainder of the population sees continued recession as a threat rather than an opportunity.

In 2011, 72.7 per cent of TEA entrepreneurs in Northern Ireland were first-time entrepreneurs, while 85 per cent of non-entrepreneurially-active individuals who expected to start a business in the next three years were first-time entrepreneurs. Given the rise in intentions and activity, particularly among younger adults, and the tough economic conditions, the existence of training and signposting to resources for first time entrepreneurs is particularly important at this time.

## 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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