

# **GEM UK: Wales Report 2013**

#### Jonathan Levie, Mark Hart and Karen Bonner

The Global Entrepreneurship Monitor (GEM) is an international project involving 70 economies in 2013 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 Wales was 2,986 adults aged over 16 years of age in 2013 as a result of the Welsh Government boosting the national sample.

# **Main Findings**

- The rate of early-stage entrepreneurship (TEA) in Wales for 2013 was 5.4 per cent. This was significantly lower than the estimate of 7.0 per cent in 2012 and also significantly lower than the 2013 estimates of 7.5 per cent for England and 7.3 per cent for the whole of the UK.
- Necessity-driven TEA in Wales in 2013 was 1.3 per cent, identical to the 2012 rate, while opportunity-driven TEA was 4.0 per cent, not significantly different from the 5.3 per cent estimate in 2012.
- The female TEA rate in Wales slipped back to 4.2 per cent from a record high of 6.1 per cent in 2011. This was not significantly different from the UK estimate of 5.8 per cent. However, the female to male ratio of TEA rose significantly from 39 per cent to 65 per cent in 2013 (UK 66%, up from 57%).
- The TEA rate of young adults aged 18 to 29 dropped from 8.6 per cent in 2012 to 4.9 per cent in 2013 (UK: 6.4%, down from 9.4% in 2012), while the TEA rate among 30 to 64 year olds was 5.4 per cent (6.5% in 2012), significantly lower than the UK average of 7.5 per cent (9.9% in 2012) and the average for England (7.7%).
- Entrepreneurial attitudes remained largely unchanged in Wales in 2013.
  Opportunity perception rose slightly, from 22.6 per cent of the non-entrepreneurial working age population to 25.1 per cent. Opportunity perception also increased slightly across the UK from 30.5 per cent to 33.2 per cent.
- Continuing the decline seen in 2012 the percentage of non-entrepreneurial individuals of working age in Wales who saw opportunities but were afraid of starting a business in case it might fail dropped, from 43.8 per cent to 39.2 per cent (UK: 43.3% to 41.4%) but these changes were not statistically significant.

 The proportion of non-entrepreneurial working age adults in Wales who expect to start a business within the next three years fell significantly to 3.9 per cent (8.8% in 2012). Start-up intentions also declined significantly across the UK from 11.3 per cent to 5.4 per cent

# **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.

The Welsh Government (WG) sponsored the Welsh component of the GEM UK research project. Stimulating entrepreneurship remains an important challenge for the region and WG has taken the lead in ensuring that it is embedded within its core activities. This is the eleventh year in which the WG has participated in GEM. Of the 2,842,000 respondents to GEM UK surveys for the period 2002-2013, over 47,000 respondents were from Wales. Wales now has the largest database on entrepreneurial attitudes, activity and aspirations of any region of the UK for this period. This is particularly useful when conducting trend analysis for important subpopulations in Wales, such as women, young or older 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 Wales.

# **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).

Since 2011 entrepreneurial activity among employees has been measured. We now know that culture and regulations can affect how entrepreneurial activity is expressed within nations. In countries where entrepreneurs have much less access to social security than employees, for example, employee entrepreneurial activity tends to comprise a higher proportion of overall entrepreneurial activity<sup>3</sup>.

<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.

<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>&</sup>lt;sup>3</sup> Bosma, N. et al. (2013) Global Entrepreneurship Monitor special report on employee entrepreneurial activity. London: Global Entrepreneurship Research Association.

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 2013 adult population survey are explained in more detail in the GEM UK 2013 report (<a href="www.gemconsortium.org">www.gemconsortium.org</a>). 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 2013, this was increased from 16 per cent to 20 per cent, in line with recent estimates in the proportion of 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 2013 and the analysis of the twelve years of GEM data (2002-13).

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

The rate of early-stage entrepreneurship in Wales for 2013 was 5.4 per cent. This was significantly lower than the estimate of 7.0 per cent in 2012 and also significantly lower than the estimate of 7.5 per cent for England and the UK estimate of 7.3 per cent. The English TEA rate was significantly higher than the rates for all other home nations except Scotland in 2013 (Figure 1).

Overall, a TEA rate of 5.4 per cent in Wales equates to around one in every nineteen adults aged 18-64 or around 92,000 individuals, 65 per cent of whom were in the very early stages of starting a business (nascent entrepreneurs 3.5%) and the remainder those who had a new business which was between 3 and 42 months old (2.0%).

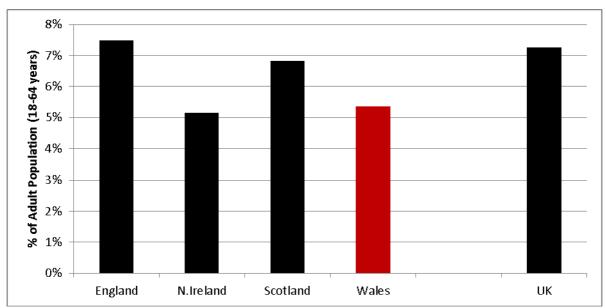


Figure 1: Total early-stage entrepreneurial activity (TEA) in the UK Home Nations 2013 (Source: GEM APS)

The rate of early-stage entrepreneurial activity in Wales, as in the UK, immediately rose following the recession but appears to be reverting to the long-run average (Figure 2a). In 2013 the nascent entrepreneurial activity rate fell from 3.9 per cent to 3.5 per cent in Wales, while both nascent and new entrepreneurship rates also decreased significantly in the UK as a whole.

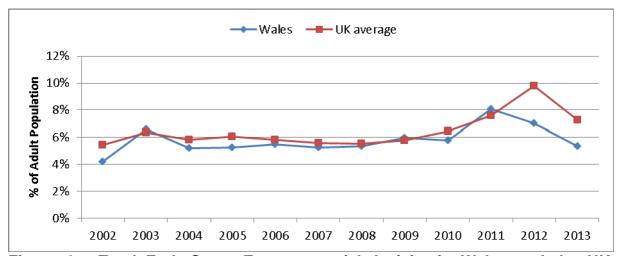


Figure 2a: Total Early-Stage Entrepreneurial Activity in Wales and the UK (2002-13). (Source: GEM APS)

Figure 2b suggests that the dip in 2012 in the level of early-stage entrepreneurial activity in Wales may have been concentrated in West Wales & Valleys rather than in East Wales, although none of these differences are statistically significant. The

apparent peak in entrepreneurial activity in East Wales in 2009 may be an anomaly due to small sample size.

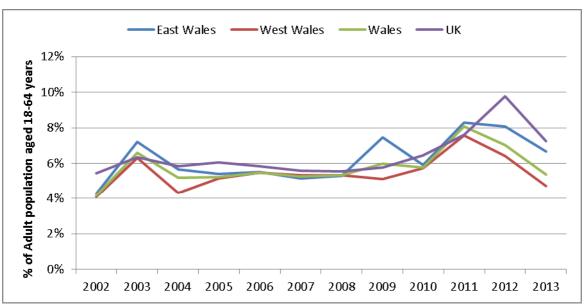


Figure 2b: Total Early-Stage Entrepreneurial Activity in East Wales, West Wales & Valleys, Wales and the UK (2002-13). (Source: GEM APS)

Necessity-driven TEA in 2013 was 1.3 per cent, identical to the 2012 rate. Opportunity-driven TEA was 4.0 per cent, not significantly different from the 5.3 per cent estimate in 2012. Necessity-driven TEA as a proportion of all TEA was 25 per cent, which was higher than previous years and also higher than that in other home nations (Figure 3).

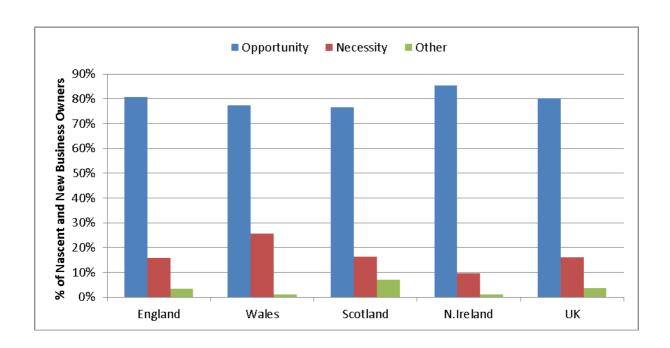


Figure 3: Opportunity and Necessity Entrepreneurship in the UK Home Nations in 2013. (Source: GEM APS 2013)

## Who are the Entrepreneurs in Wales?

**Gender:** In England, Northern Ireland and the UK in 2013 males had a significantly higher TEA rate than females. In addition, the English female TEA rate was significantly higher than the Northern Irish female TEA rate.

The ratio of female to male early-stage entrepreneurial activity varies markedly across the four home nations. The ratio in Wales rose from 39 per cent to 65 per cent in 2013. While annual ratios are likely to vary from year to year, the long run average ratios over the 2002 to 2013 period suggest that Wales has a similar ratio, at 54 per cent, to England (49%) and Scotland (51%) but higher than Northern Ireland (35%).

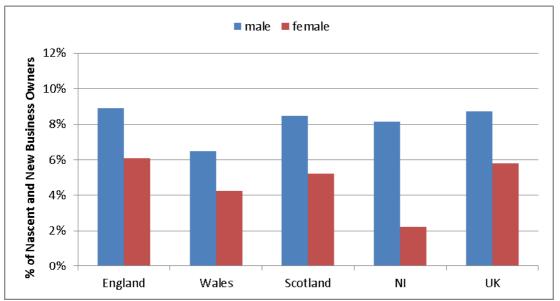


Figure 4: Total Early-Stage Entrepreneurial Activity in the UK Home Nations in **2013.** (Source: GEM APS 2013)

The female TEA rate in Wales slipped from a record high of 6.1 per cent in 2011 to its long run average of 4.0 per cent in 2012, and increased slightly to 4.2 per cent in 2013. The Welsh male TEA rate fell significantly from 10.1 per cent to 6.5 per cent. We can see from Figure 5 that female TEA rates in Wales generally match the UK

trend although from year to year they are more volatile because of a relatively small sample size. The medium term trend is upwards.

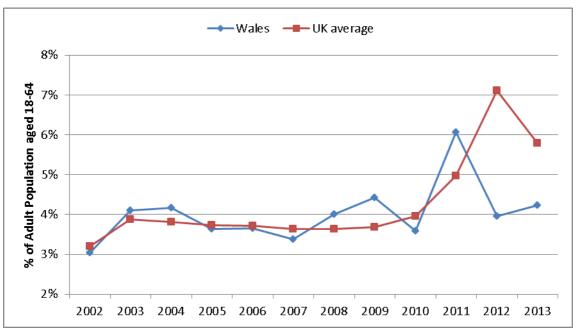


Figure 5: Total Early-Stage Female Entrepreneurial Activity in Wales and the UK, 2002-2013. (Source: GEM APS)

**Age:** As Figure 6 shows, individuals aged between 35-44 years display the highest rate of early-stage entrepreneurial activity in the UK, and in all home nations except Northern Ireland. For several years, the distribution of the TEA rate by age has been shifting towards a younger generation in Wales, and in 2013 it is noted that the rates for 18-24 and 25-34 year olds both lie within one percentage point of that for 35-44 year olds.

In fact, looking at the trend for 18-24 year olds in Wales (Figure 7), it has been evident since the recession that this age group has had a higher rate of early-stage entrepreneurial activity than the UK average, only returning to UK levels in 2013. The tough economic climate during the recession may have stimulated the increased entrepreneurial activity rates amongst the young in Wales, with the rate appearing to return towards the long run average of 5 per cent in 2013.

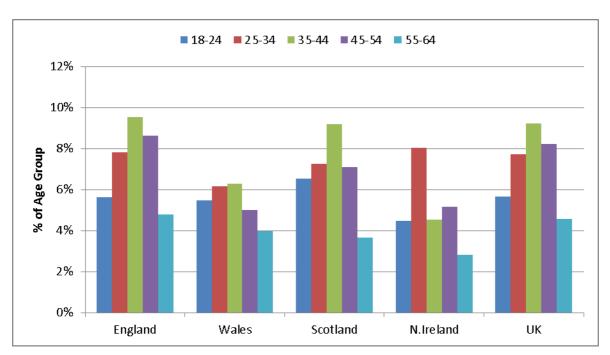


Figure 6: Total Early-Stage Entrepreneurial Activity in the UK Home Nations, **2013.** (Source: GEM APS, 2013)

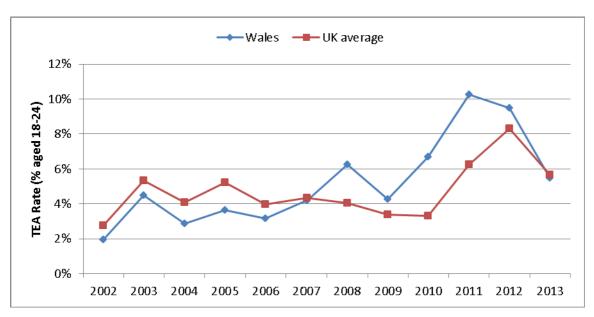


Figure 7: Trend in Total early-stage Entrepreneurial Activity amongst 18-24 year olds in Wales and the UK, 2002 to 2013. (Source: GEM APS, 2002 to 2013)

A potentially more helpful analysis is to assess 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 8 and 9 show that the TEA rate for young adults in Wales has been relatively high since 2008, and higher than for 30-64 year olds, but has fallen in 2013 to match Northern Ireland with the

lowest rate, at 4.9 per cent. By contrast, TEA rates among 30 to 64 year olds in Wales have been consistently similar to Northern Ireland, and in 2013 both were significantly lower than English TEA rates for this age group. Notably, the TEA rate for 30-64 year olds in 2013 was higher than for 18-29 year olds for the first time since 2007.

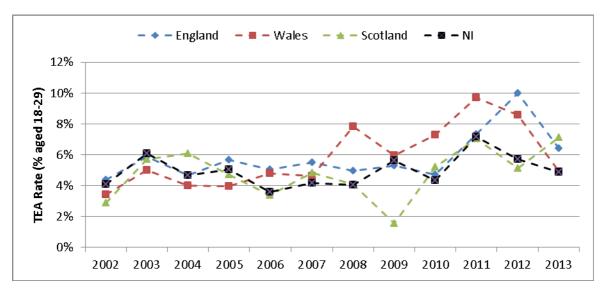


Figure 8: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18 to 29 year olds, 2002 to 2013. (Source: GEM APS, 2002 to 2012)

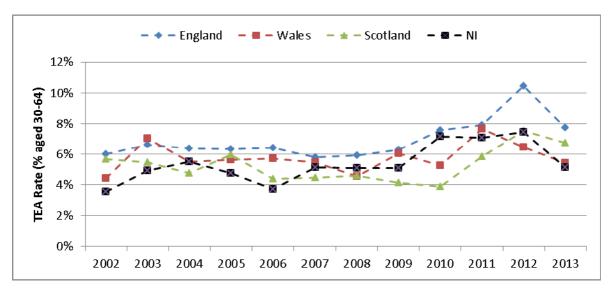


Figure 9: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 30 to 64 year olds, 2002 to 2013. (Source: GEM APS, 2002 to 2013)

**Education:** The average level of total early-stage entrepreneurial activity for graduates in the UK in 2013 was 10.3 per cent, down from 12.6 per cent in 2012 (Figure 10) and significantly higher than for non-graduates (5.5%, not significantly different from the 2012 estimate of 7.9 per cent). It was also significantly higher than the TEA rate for graduates currently residing in Wales (7.4%). The Welsh graduate TEA rate was down on the previous year (8.9%) and just significantly different from the TEA rate for non-graduates in Wales (4.4%, down but not significantly from 6.0% in 2012). Similarly, graduate TEA rates were significantly higher than non-graduate TEA rates in England and Scotland.

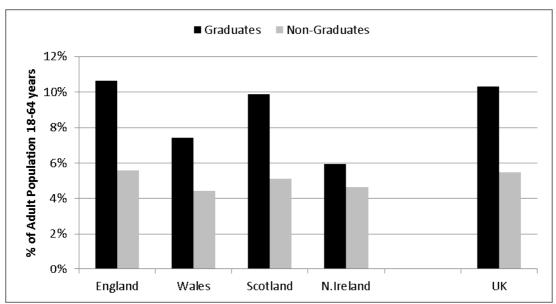


Figure 10: Total Early-Stage Entrepreneurial Activity in the UK Home Nations by Graduate Status, 2013. (Source: GEM APS, 2013)

## **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). Hence, as in the last three years, we report attitudinal data only for that portion of the population who are not already entrepreneurs.

In Wales, one in four (24.6%) of individuals state that they know an entrepreneur. This is the same as the UK as a whole (Figure 11), and much the same as in previous years. In Wales one third (35.5%) of non-entrepreneurs believe they have the skills to set up in business – again similar to the UK average at 37.0 per cent.

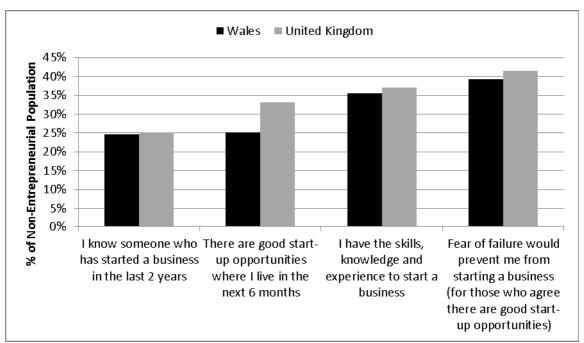


Figure 11: Entrepreneurial Attitudes and Perceptions in Wales and the UK (2013). (Source: GEM APS, 2013)

The proportion of the population seeing good opportunities for starting a business but reporting that the fear of failure would prevent them starting a business fell in 2013 from 43.8 per cent to 39.2 per cent, similar to the UK, which fell from 43.3 per cent to 41.4 per cent, although neither of these differences is statistically significant. Figure 12 shows that fear of failure rose more sharply in Wales than in other home nations since the onset of the recession in 2007, but has now fallen to a rate similar to that in England and Scotland.

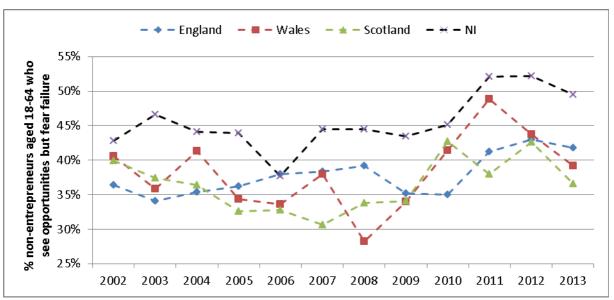


Figure 12: Fear of Failure among those who see Opportunities in the UK Home Nations, 2002-13. (Source: GEM APS)

In the 2013 survey, only 25.1 per cent of the non-entrepreneurial working age population in Wales agreed there were good opportunities for starting a business in their local area in the next six months, compared with 33.2 per cent of the UK non-entrepreneurial working age population. This is not significantly higher than the 2012 estimate. However, there is still a significant gap in opportunity perception with the UK and specifically with England (Figure 13).

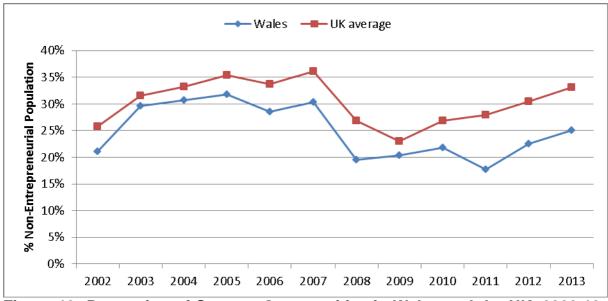


Figure 13: Perception of Start-up Opportunities in Wales and the UK, 2002-13. (Source: GEM APS)

Looking to the future, the proportion of non-entrepreneurial working age adults in Wales who expect to start a business within the next three years dropped significantly to 3.9 per cent from 8.8% in 2012 (Figure 14). The UK estimate also fell significantly from 11.3 per cent to 5.4 per cent. This drop in expectation is consistent with the general decline in entrepreneurial activity in 2013 however the decrease in fear of failure rates and the improved perception of start-up opportunities does suggest a degree of optimism amongst the non-entrepreneurial population.

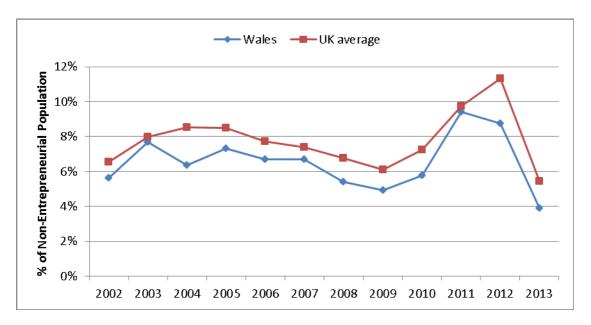


Figure 14: Future Start-up Expectations (within 3 years) in Wales and the UK amongst the non-entrepreneurial population, 2002-13. (Source: GEM APS)

In 2013, there was no significant difference between the proportion of non-entrepreneurially active men and women in Wales who reported that they intend to start a business in the next three years (Figure 15). In 2013, 3.1 per cent of such women in Wales expected to start a business in the next 3 years compared to 4.7 per cent of men. The ratio of female to male future start-up intentions in Wales was 67 per cent, up from 63 per cent in 2012 and higher than that of Scotland and Northern Ireland. Overall, start-up intentions have declined significantly for all home nations in the past year.

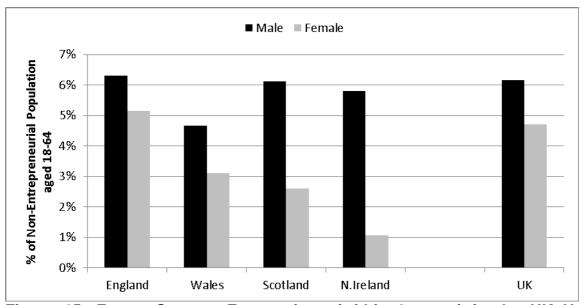


Figure 15: Future Start-up Expectations (within 3 years) in the UK Home Nations by Gender, 2013. (Source: GEM APS, 2013)

# Welsh Language fluency and Entrepreneurial Activity

There was no significant difference in 2013 in the TEA rate of those in Wales who were fluent in spoken and written Welsh (3.6%), who could speak and understand some Welsh (6.3%) and who had little or no Welsh skills (5.2%).

# Training, Awareness and Entrepreneurial Activity

In 2013 12.6 per cent of nascent and new entrepreneurs aged 18 to 24 and 0 per cent of entrepreneurs aged 25 to 30<sup>4</sup> had heard of Big Ideas Wales<sup>5</sup>, compared with 16.1 per cent of others aged 18 to 24 and 11.5 per cent of others aged 25 to 30. Although the differences amongst younger individuals were not significant they did appear to be more likely to have heard of Big Ideas Wales (15.9%) than those aged 25 to 30 (11.0%). Overall, 14.2 per cent of young adults aged 18 to 30 had heard of Big Ideas Wales, similar to the 2012 estimate of 13.3 per cent.

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

 $<sup>^4</sup>$  This is due to a very small number of observations for nascent and new entrepreneurs aged 25-30.  $^5$  This was previously known as Dynamo Resources.

starting a business or being their own boss. Almost half (46.7%) reported that they had; this figure was 41.5 per cent in 2012 and remained around the same at 39.4 per cent in 2013. At 39.5 per cent (down from 53.9%), the estimate for Northern Ireland was similar to that for Wales as was England (39.9%). The share in Scotland (36.8 per cent) was slightly lower.

In 2013, very similar proportions of people in the home nations had heard of Enterprise Week or Global Entrepreneurship Week: 9.0 per cent in Wales, 7.5 per cent in England, 7.0 in Scotland, and 7.9 per cent in Northern Ireland. All of these estimates were down significantly on 2012.

# **Concluding Observations**

As with the other home nations 2013 saw a decline in levels of entrepreneurial activity and start-up intention in Wales. Notably there was a significant decrease in activity rates amongst 18-29 year olds. Since 2008 TEA rates for this age group amongst the home nations were the highest in Wales however by 2013 Wales had dropped to join Northern Ireland with the lowest activity rate. The high rates of entrepreneurial activity amongst 18-29 year olds during the recession and the subsequent decline in 2013 is interesting, particularly given that the shares of young people that had heard of Big Ideas Wales and/or had taken part in activities in school that made them think about starting a business remained relatively unchanged on the year. It suggests that the decline may in fact be a consequence of improving economic conditions, with the perception of increased availability of jobs no longer necessitating entry into self-employment amongst the young due to lack of employment opportunities.

In 2013 there remained a gap in the share of non-entrepreneurial individuals in Wales that thought there were good opportunities for starting a business in their local area in the next six months compared to the UK, however the proportion of the population seeing good opportunities and reporting that the fear of failure would prevent them starting a business has fallen from the peak of around 50% in 2011 to 39% in 2013. In Wales fear of failure had risen dramatically during the recession, and the fall back in 2013 also suggests a renewed confidence and degree of optimism amongst the non-entrepreneurial population, factors which may lead to an increase in activity rates in the future.

#### **Disclaimer**

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

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

Karen Bonner Economics & Strategy Group Aston Business School, Aston University Aston Triangle, Birmingham, B4 7ET Email: k.bonner1@aston.ac.uk



Professor Mark Hart Economics & Strategy Group Aston Business School, Aston University Aston Triangle, Birmingham, B4 7ET Email: mark.hart@aston.ac.uk



Professor Jonathan Levie Hunter Centre for Entrepreneurship, University of Strathclyde, Livingstone Tower, 26 Richmond Street, Glasgow, G1 1XH Email: j.levie@strath.ac.uk

