

# **GEM UK: Wales Report 2015**

Karen Bonner, Mark Hart and Jonathan Levie

The Global Entrepreneurship Monitor (GEM) is an international project involving 62 economies in 2015 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 2,977 adults aged over 18 years of age in 2015 as a result of the Welsh Government boosting the UK national sample.

### **Main Findings**

- The rate of early-stage entrepreneurship (TEA) in Wales for 2015 was 6.8
  per cent. This was not significantly different to the 2014 rate of 7.1 per
  cent, nor to the 2015 estimates of 7.2 per cent for England and 7.1 per
  cent for the whole of the UK.
- Necessity-driven TEA in Wales in 2015 was 1.4 per cent, unchanged from the 2014 rate. Opportunity-driven TEA was 5.4 per cent, also not significantly different from the 5.6 per cent estimate in 2014.
- At 4.6 per cent the female TEA rate in Wales remained close to its 2014 rate, but was down from a record high of 6.1 per cent in 2011. The rate was not significantly different to the UK estimate of 4.7 per cent. The female to male ratio of TEA remained at 52 per cent in 2015; the UK ratio also stayed at 49 per cent.
- The TEA rate for 18-24 year olds in Wales, at 5.9 per cent, is higher, but not significantly different, to the UK rate of 3.9 per cent. In recent years the two rates have converged after a period of increased TEA rates amongst the young in Wales during the recession.
- The TEA rate of young adults aged 18 to 29 stood at 7.4 per cent in 2015 while the TEA rate among 30 to 64 year olds was 6.6 per cent. These rates were not significantly different from each other, nor different to the respective UK rates of 6.0 per cent for 18-29 year olds and 7.3 per cent for 30-64 year olds.
- Entrepreneurial attitudes were consistent with those reported in 2014.
   Opportunity perception of the non-entrepreneurial working age population stayed at 29.6 per cent in Wales. Opportunity perception in the UK saw only a marginal change from 36.8 per cent to 37.6 per cent, but remained significantly higher than that for Wales.
- 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 was also stable at 40.5 per cent in 2015 (39.4 per cent in 2014). The UK figure was similar at 39.5 per cent (43.0 per cent in 2014).
- The proportion of non-entrepreneurial working age adults in Wales who expect to start a business within the next three years remained constant at 8.0 per cent (7.8% in 2014). Start-up intentions in the UK increased from 8.5 per cent to 9.6 per cent, but this was not a statistically significant change.

### **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 thirteenth year in which the WG has participated in GEM. Of the 300,000 respondents to GEM UK surveys for the period 2002-2015, over 50,000 respondents were from Wales. Wales now has one of the largest databases on entrepreneurial attitudes, activity and aspirations of the peripheral regions of the UK for this period. This is particularly useful when conducting trend analysis for important sub-populations 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 also 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

<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.

to social security than employees, for example, employee entrepreneurial activity tends to comprise a higher proportion of overall entrepreneurial activity<sup>3</sup>.

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 2015 adult population survey are explained in more detail in the GEM UK 2015 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 2015, this was increased 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 2015 and the analysis of the thirteen years of GEM data (2002-15).

# Total Early-Stage Entrepreneurial Activity (The TEA Index)

The rate of early-stage entrepreneurship in Wales in 2015 is 6.8 per cent which is not significantly different to the estimate of 7.1 per cent in 2014. The rate is also not significantly different to those in the other home nations, or to the UK estimate of 7.1 per cent (Figure 1).

Overall, a TEA rate of 6.8 per cent in Wales equates to around one in every fifteen adults aged 18-64, or around 126,000 individuals, 64 per cent of whom were in the very early stages of starting a business (nascent entrepreneurs 4.3%) and the remainder those who had a new business which was between 3 and 42 months old.

5

<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.

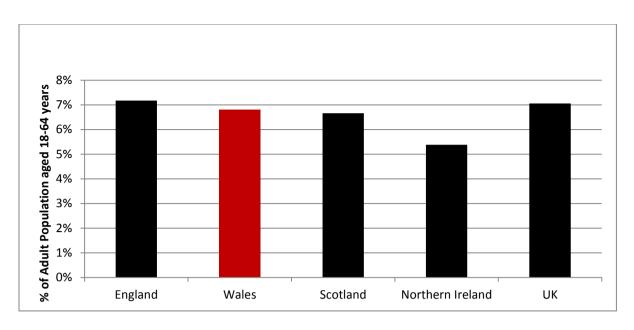


Figure 1: Total early-stage entrepreneurial activity (TEA) in the UK Home Nations 2015 (Source: GEM APS)

As Figure 2a shows the rate of early-stage entrepreneurial activity in Wales, as in the UK, remained relatively flat between 2004 and 2010, rising quite quickly thereafter. The rate in Wales dropped in 2012 and further dropped towards the long run average in 2013; the UK rate also declining between 2012 and 2013. There was a recovery in TEA rates in both Wales and the UK in 2014, and a convergence in 2015, closing the gap observed since 2012.

In 2015 the nascent entrepreneurial activity rate in Wales was 4.3 per cent, virtually unchanged from 4.1 per cent in 2014. The new business rate was down slightly, but not significantly, from 3.2 per cent in 2014 to 2.5 per cent in 2015. Both nascent and new entrepreneurship rates decreased in the UK between 2014 and 2015; the nascent rate falling from 4.9 per cent to 4.0 per cent and the new business owner rate dropping from 3.8 per cent to 3.1 per cent.

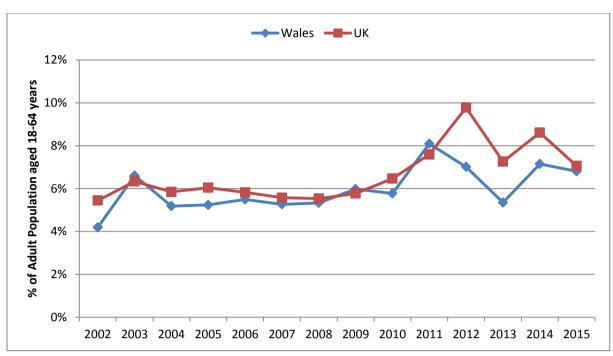


Figure 2a: Total Early-Stage Entrepreneurial Activity in Wales and the UK (2002-15). (Source: GEM APS)

Since 2010 there has been a divergence in the TEA rates of East and West Wales (Figure 2b) although the gap between the two has never been statistically significant. In 2015 the entrepreneurial activity rates of East and West Wales have converged, both with each other and with the UK rate. The apparent peak in entrepreneurial activity in East Wales in 2009 may be an anomaly due to a small sample size.

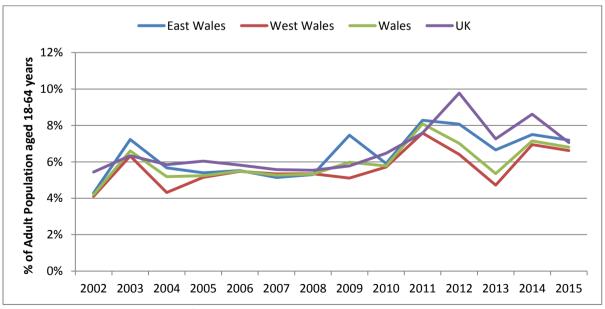


Figure 2b: Total Early-Stage Entrepreneurial Activity in East Wales, West Wales & Valleys, Wales and the UK (2002-15). (Source: GEM APS)

Necessity-driven TEA in Wales in 2015 was 1.4 per cent, identical to that in 2014. Opportunity-driven TEA was 5.4 per cent, virtually unchanged from the estimate of 5.6 per cent in 2014. Necessity-driven TEA as a proportion of all TEA was 20 per cent, a lower share than in England, Northern Ireland and the UK (Figure 3).

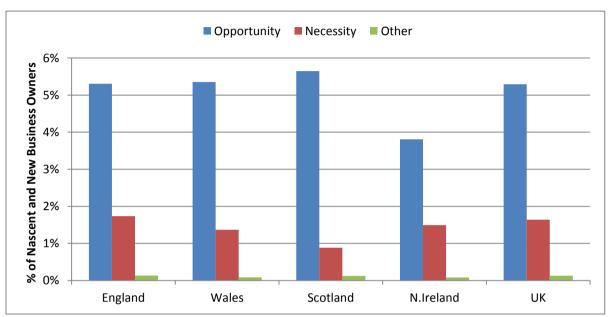


Figure 3: Opportunity and Necessity Entrepreneurship in the UK Home Nations in 2015. (Source: GEM APS 2015)

# Who are the Entrepreneurs in Wales?

**Gender:** In 2015 males had a significantly higher TEA rate than females in all home nations, except Scotland; the latter due to a relatively lower male rate and a relatively higher female rate (Figure 4). There were no significant differences across the home nations in either male or female TEA rates.

Given the similar rates across the home nations, the ratio of female to male early-stage entrepreneurial activity is also quite consistent, only Scotland differing. The ratio in Wales remains at 52 per cent in 2015 compared to a UK ratio of 49 per cent. The ratio in Scotland is considerably higher at 77 per cent. Annual ratios may to vary from year to year however the long run average ratios over the 2002 to 2015 period suggest that Wales has a similar ratio, at 54 per cent, to England (49 per cent) and Scotland (53 per cent) but higher than Northern Ireland (36 per cent).

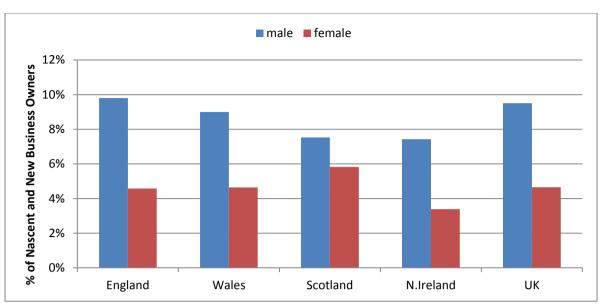


Figure 4: Total Early-Stage Entrepreneurial Activity by Gender in the UK Home Nations in 2015. (Source: GEM APS 2015)

The female TEA rate in Wales fell from a record high of 6.1 per cent in 2011 to its long run average of around 4.0 per cent in 2012 and 2013. Since then it has climbed to just under 5 per cent (Figure 5). The Welsh male TEA rate also fell significantly from 10.1 per cent to 6.5 per cent between 2011-13 but by 2015 had stabilised at around 9 per cent. We can see from Figure 5 that female TEA rates in Wales have, for the most part, matched the UK trend, with some divergence over 2011-13; the medium term trend for both however is upwards.

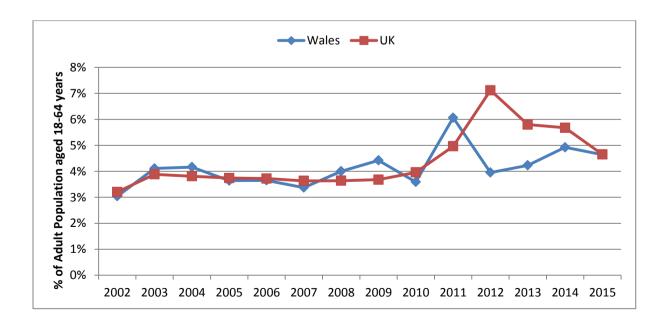
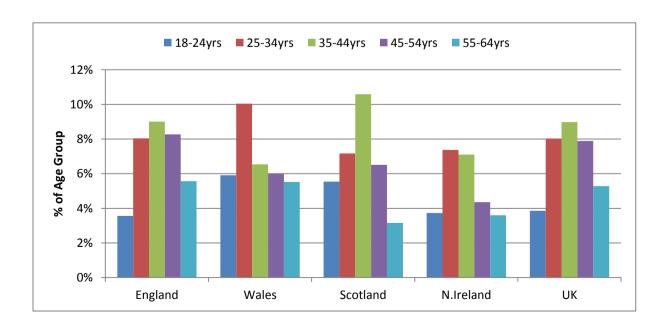


Figure 5: Total Early-Stage Female Entrepreneurial Activity in Wales and the UK, 2002-2015. (Source: GEM APS)

**Age:** As Figure 6 shows, in the UK individuals in the middle age-bands display the highest rate of early-stage entrepreneurial activity; the rate for 35-44 year olds significantly higher than for 18-24 year olds and 55-64 year olds. This is repeated in England but is not consistent across the other home nations; in Scotland the rate for 35-44 year olds is only significantly higher than that for 55-64 year olds, whilst in Northern Ireland the rates do not differ significantly across the age-bands. For several years, the distribution of the TEA rate by age has been shifting towards a younger generation in Wales; in 2015 25-34 year olds display the highest TEA rates however these are not significantly different to any other age groups.

In 2015 the TEA rate for 18-24 year olds in Wales was 5.9 per cent compared to a rate of 3.9 per cent in the UK (Figure 7). The two series have converged again in recent years; the difference between the two in 2015 not statistically significant. The higher rate of early-stage entrepreneurial activity amongst 18-24 year olds in Wales during the recession may suggest a tougher economic climate than the rest of the UK, the lack of jobs necessitating entry into self-employment which has now dissipated as the economy recovers. Alternatively it may reflect the increased provision of youth entrepreneurship activities by the Welsh Government during this period.





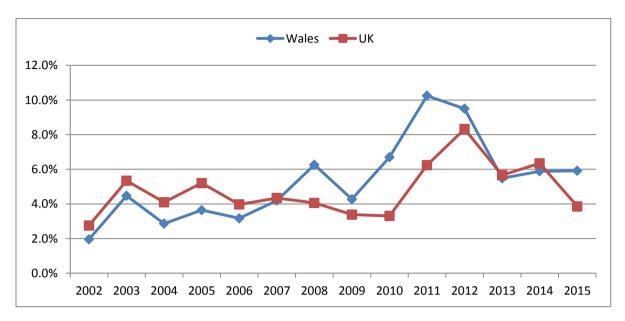


Figure 7: Trend in Total early-stage Entrepreneurial Activity amongst 18-24 year olds in Wales and the UK, 2002 to 2015. (Source: GEM APS, 2002 to 2015)

A potentially more helpful analysis is to assess how the TEA rate has changed in the 18 to 29 age group (where there seems to be a natural break in UK GEM activity data) and compare that to the 30 to 64 age group. Figures 8 and 9 show that, compared to the other home nations, the TEA rate for young adults in Wales has been relatively high since 2008, albeit with a dip in 2013. In contrast, the TEA rate among 30 to 64 year olds in Wales has been consistently lower than that for England, and the UK average. In 2015 there were no significant differences between the home nations in the 18-29 age group or in the 30-64 age group, not were there any significant differences between the two age groups.

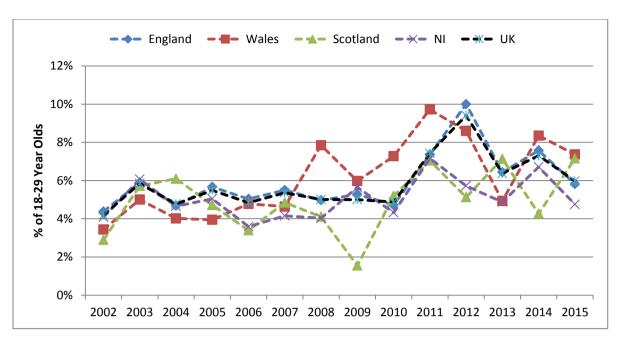


Figure 8: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18 to 29 year olds, 2002 to 2015. (Source: GEM APS, 2002 to 2015)

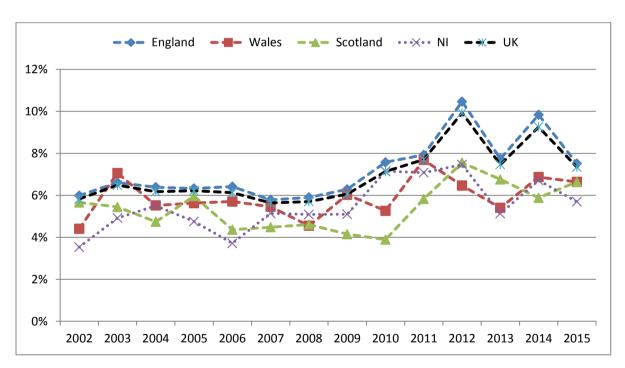


Figure 9: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 30 to 64 year olds, 2002 to 2015. (Source: GEM APS, 2002 to 2015)

**Education:** The TEA rate for graduates in the UK in 2015 was 9.8 per cent which was significantly higher than that for non-graduates at 5.5 per cent (Figure 10); the non-graduate rate was also significantly lower than in 2014 (7.4%). The Welsh

graduate rate in 2015 was also 9.8 per cent compared to the non-graduate rate of 5.2 per cent; this difference again statistically significant, although there were no significant differences in either rate compared to 2014. Wales and England were the only two home nations in which the TEA rates for graduates was significantly higher than for non-graduates in 2015.

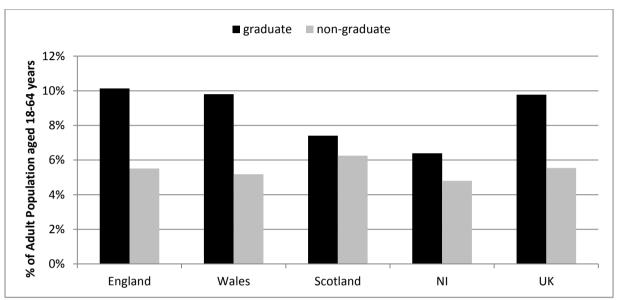


Figure 10: Total Early-Stage Entrepreneurial Activity in the UK Home Nations by Graduate Status, 2015. (Source: GEM APS)

#### **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 number of years, we report attitudinal data only for that portion of the population who are not already entrepreneurs.

In Wales in 2015, one quarter of individuals state that they know an entrepreneur which is the around the same proportion as the UK as a whole (Figure 11), and not significantly different to previous years. Two fifths (38.9%) of non-entrepreneurs believe they have the skills to set up in business – again similar to the UK average at 37.5 per cent. The main difference between Wales and the UK is the significantly lower share of the non-entrepreneurial population in Wales who believe there are good start-up opportunities in their area in the next six months. Despite this gap, there is no difference in the fear of failure rates.

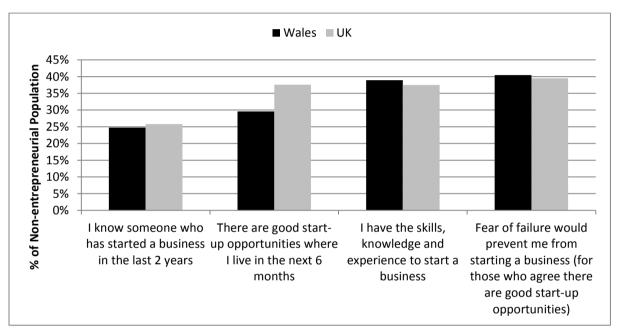


Figure 11: Entrepreneurial Attitudes and Perceptions in Wales and the UK 2015 (Source: GEM APS)

Figure 12 displays the attitudes towards entrepreneurship when restricted to 18-24 year olds only. The only significant difference in attitudes between Wales and the UK is the higher share of those in Wales that know someone that started a business, at 35.5 per cent compared to 28.3 per cent in the UK.

When comparing the attitudes of young people against all non-entrepreneurs (as shown in Fig. 11) a significantly higher proportion of young people in Wales know an entrepreneur, at 35.5 per cent compared to 24.8 per cent for the wider non-entrepreneurial population. In the UK a significantly lower share of young people believe they have the skills, knowledge and experience to start a business; just 30.3

per cent agreed with this statement compared to 37.5 per cent of all UK non-entrepreneurs.

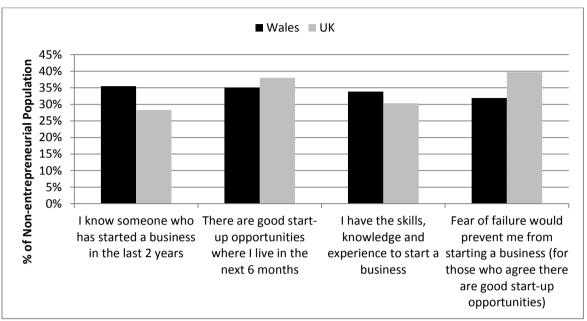


Figure 12: Entrepreneurial Attitudes and Perceptions among 18-24 year olds in Wales and the UK 2015. (Source: GEM APS, 2015)

The proportion of the non-entrepreneurial population in Wales seeing good start-up opportunities but reporting that the fear of failure would prevent them starting a business stood at 31.9 per cent in 2015, which was down, but not significantly so, on 2014. The UK rate was 39.7 per cent, but was not significantly different to Wales. Figure 13 shows that fear of failure rose more sharply in Wales than in other home nations since the onset of the recession in 2008, but in more recent years has fallen in line with the others. In 2015 Northern Ireland was the only home nation with a significantly higher fear of failure rate than England.

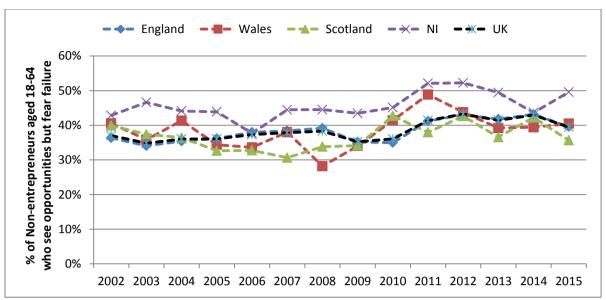


Figure 13: Fear of Failure among those who see Opportunities in the UK Home Nations, 2002-15. (Source: GEM APS 2002-15)

In the 2015 survey, 29.6 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 37.6 per cent in the UK. Neither were significantly different than their 2014 respective estimates however the significant gap in opportunity perception between Wales and the UK remains (Figure 14).

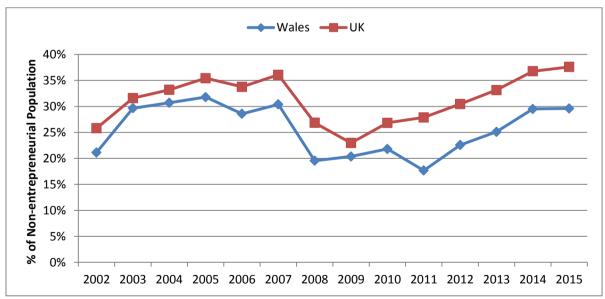


Figure 14: Perception of Start-up Opportunities in Wales and the UK, 2002-15. (Source: GEM APS 2002-15)

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 remained virtually unchanged at 8.0 per cent in 2015 (Figure 15). The UK estimate rose to 9.6 per cent in 2015 but this was not a significant change. There was also an increase in these intention rates during the recession however it is likely that was reflecting necessity reasons; in 2015 it is likely, that in the face of an improving economy, this represents the prospect of more opportunity entrepreneurship.

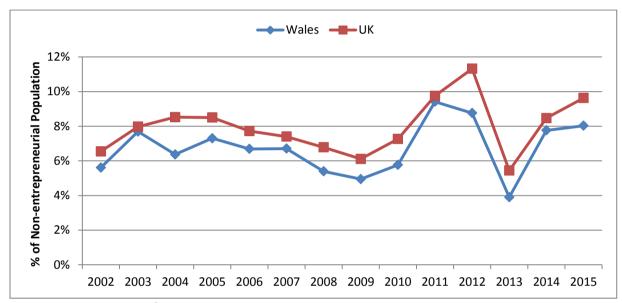


Figure 15: Future Start-up Expectations (within 3 years) in Wales and the UK amongst the non-entrepreneurial population, 2002-15. (Source: GEM APS 2002-15)

In 2015, the proportion of non-entrepreneurially active males in Wales who reported that they intend to start a business in the next three years was significantly higher than that for females (Figure 16) at 10.2 per cent for males and 5.9 per cent for females. Translated into a female to male ratio this equates to 58 per cent; which compares to 63 per cent in England, 54 per cent in Scotland and just 43 per cent in Northern Ireland. Overall, start-up intentions for both males and females in the home nations were not significantly different to those in 2014.

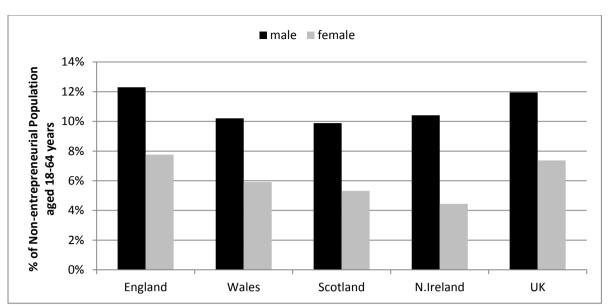


Figure 16: Future Start-up Expectations (within 3 years) in the UK Home Nations by Gender, 2015 (Source: GEM APS)

# Welsh Language fluency and Entrepreneurial Activity

There were no significant differences in 2015 in the TEA rates of those in Wales who were fluent in spoken and written Welsh (7.3%); who could speak and understand some Welsh (7.3%), and who had little or no Welsh skills (6.4%).

# **Training, Awareness and Entrepreneurial Activity**

In 2015 the GEM survey asked 18-29 year olds whether they had ever taken part in any practical entrepreneurial learning activity as part of their education at primary or secondary level. In Wales 35.5 per cent said they had taken part in such activities, compared to 33.9 per cent in England, 40.1 per cent in Scotland and 44.4 per cent in Northern Ireland.

The same age group were also asked whether they had ever taken part in such practical entrepreneurial learning activity in a college or university after leaving school. Again the proportions were similar across the home nations, at 28.7 per cent in Wales compared to 26.6 per cent in England, 28.9 per cent in Scotland and 29.3 per cent in Northern Ireland.

Awareness of entrepreneurial campaigns in the UK in 2015 was also consistent across the home nations. Just under one tenth of people (8.4 per cent) in the UK had heard of Global Entrepreneurship Week in 2015; the proportion in Wales was 9.7 per cent, Northern Ireland's share was 9.6 per cent; England 8.3 per cent and Scotland 8.1 per cent. Similar shares had also heard of Small Business Saturday and the Great Britain Campaign.

# **Concluding Observations**

The optimism with regards to the Welsh economy that was observed in 2014 has carried through into 2015, with the TEA rate remaining at around 7 per cent and start-up intentions persisting at 8 per cent. In recent years entrepreneurial activity in Wales has been concentrated amongst the younger age groups, due in part to necessity reasons during the recession and a greater focus by Government on youth entrepreneurship, however in 2015 all age groups are equally likely to be entrepreneurial. In addition entrepreneurial activity in Wales is on a par with that observed in the UK as a whole, particularly in terms of gender and age.

The attitude metrics again show positive feelings towards entrepreneurship in 2015, with just under two fifths of non-entrepreneurs stating that they have the skills, knowledge and experience to start a business. Where attitudes diverge from the UK is in the proportion that believes there are good start-up opportunities locally within the next six months. The rate for Wales has increased significantly since 2010 but is consistently lower than that for the UK. This may suggest differing local demand issues in Wales or in the conditions that are perceived necessary for setting up a successful business.

Despite the gap with the UK in the perception of opportunity, fear of failure remains unchanged in Wales and compares well with the rate in the UK. The fact that it is down around 20 percentage points from its peak in 2011 reaffirms the confidence within the population of the ability to start a successful business.

#### **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, Finance and Entrepreneurship Group
Aston Business School, Aston University
Aston Triangle, Birmingham, B4 7ET
Email: k.bonner1@aston.ac.uk



Professor Mark Hart Economics, Finance and Entrepreneurship 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

