



# **GEM UK: Wales Report 2017**

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The Global Entrepreneurship Monitor (GEM) is an international project involving 54 economies in 2017 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 in 2017 was 3,008 adults aged over 18 years as a result of the Welsh Government boosting the UK national sample.

## **Main Findings**

- **The rate of total early-stage entrepreneurship (TEA) in Wales in 2017 was 6.3 per cent. This was not significantly different to the 2016 rate; it was, however, significantly lower than the 2017 estimates of 9.1 per cent for England and 8.7 per cent for the whole of the UK.**
- **Early-stage entrepreneurial activity is driven by opportunity reasons; opportunity-driven TEA was 5.1 per cent in Wales in 2017 and necessity-driven TEA 0.9 per cent. Both rates are similar to those observed in 2016.**
- **At 3.8 per cent the female TEA rate in Wales was less than half the male rate of 8.8 per cent. The female to male TEA ratio stood at 43 per cent in 2017; the UK ratio was 47 per cent. The female rate was not significantly different to the UK estimate of 5.6 per cent however the male TEA rate was significantly lower than the UK rate of 11.9 per cent.**
- **There were no differences in the TEA rates of young adults aged 18 to 29 and those of 30-64 year olds. In fact, in 2017 all age groups in Wales were equally entrepreneurial.**
- **Entrepreneurial attitudes were consistent with those reported in 2016. Opportunity perception of the non-entrepreneurial working age population remained at 30 per cent which was not significantly different to that for the UK.**
- **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 relatively stable at just under 40 percent. This was similar to the UK figure.**
- **The key difference in attitudes between Wales and the UK is in the share of the non-entrepreneurial population who perceive good start-up opportunities within the next 6 months, at just 31 per cent in Wales compared to 39 per cent in the UK.**
- **Around 8 per cent of non-entrepreneurial working age adults in Wales expect to start a business within the next three years. The rate in Wales has been relatively**

**stable recently in contrast to the UK where the rate fell significantly from 11 to 9 per cent between 2016 and 2017.**

## **Background**

The Global Entrepreneurship Monitor (GEM) is an international project which seeks to provide information on the entrepreneurial landscape of countries 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) sponsors 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 fifteenth year in which the WG has participated in GEM. Of the 326,000 respondents to GEM UK surveys for the period 2002-2017, almost 60,000 respondents are from Wales. Wales now has one of the largest databases on entrepreneurial attitudes, activity and aspirations of the home nations of the UK for this period. This is particularly useful when conducting trend analysis for important sub-populations in Wales, such as women, the young or older people.

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 to social security than employees, for example, employee entrepreneurial activity tends to comprise a higher proportion of overall entrepreneurial activity<sup>3</sup>. Considering both TEA and EEA together provides a more comprehensive picture of entrepreneurial activity in a nation.

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<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.

<sup>3</sup> World Economic Forum (WEF) and GEM Global (2016) "Europe's Hidden Entrepreneurs: Entrepreneurial Employee Activity and Competitiveness in Europe".  
[http://www3.weforum.org/docs/WEF\\_Entrepreneurship\\_in\\_Europe.pdf](http://www3.weforum.org/docs/WEF_Entrepreneurship_in_Europe.pdf)

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

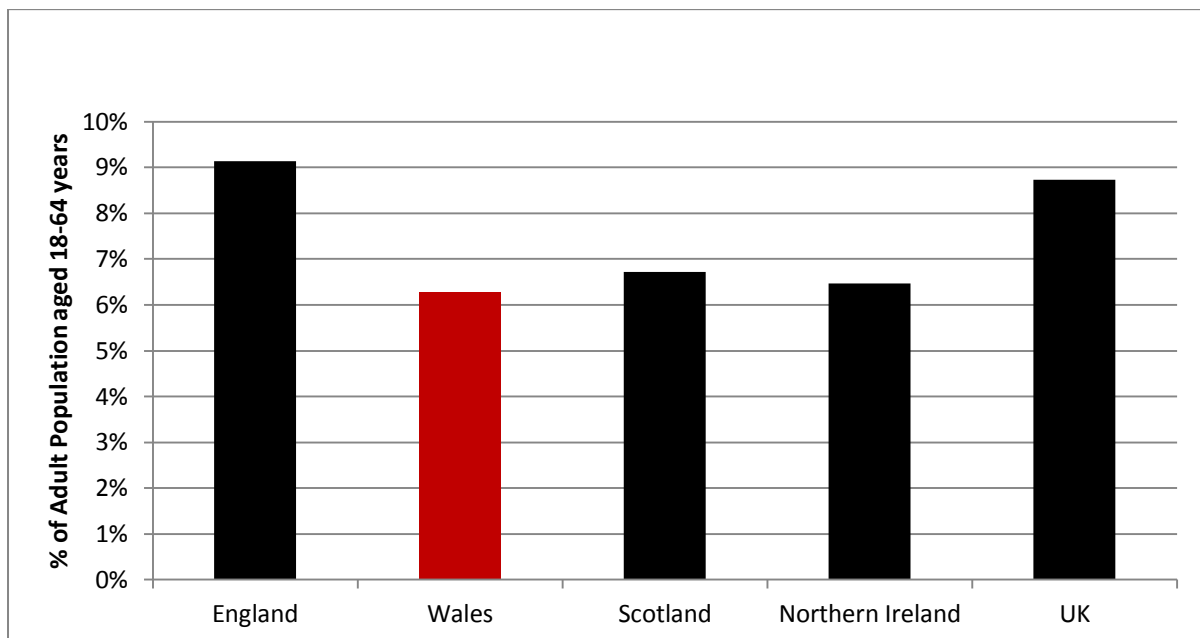
The methodology, sample sizes and weighting systems used for the GEM UK 2017 adult population survey are explained in more detail in the GEM UK 2017 report ([www.gemconsortium.org](http://www.gemconsortium.org)). An important change in the sample design was introduced in 2010 when 10 per cent of respondents 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 2017 and the analysis of the fifteen years of GEM data (2002-17).

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

The rate of early-stage entrepreneurship in Wales in 2017 is 6.3 per cent which is not significantly different to the estimate of 7.6 per cent in 2016. The rate is, however, significantly lower than that in England (9.1%) and the UK estimate of 8.7 per cent (Figure 1).

Overall, a TEA rate of 6.3 per cent in Wales equates to around one in every sixteen adults aged 18-64, or around 121,000 individuals, 60 per cent of whom were in the very early stages of starting a business (nascent entrepreneurs 3.7%) and the remainder those who had a new business which was between 3 and 42 months old.

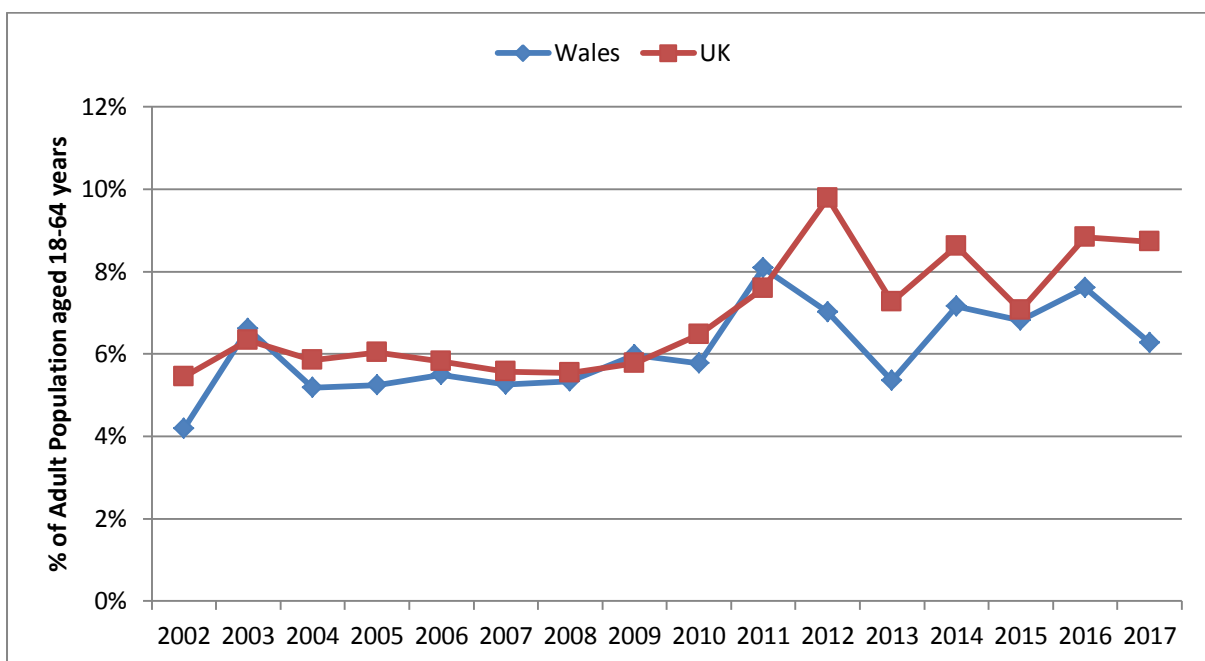


**Figure 1: Total early-stage entrepreneurial activity (TEA) in the UK Home Nations 2017 (Source: GEM APS)**

As Figure 2a shows the rate of early-stage entrepreneurial activity in both Wales and the UK remained relatively stable, at around 6 per cent, between 2004 and 2010. Since then there has been considerable volatility and a divergence in the respective rates. Early-stage

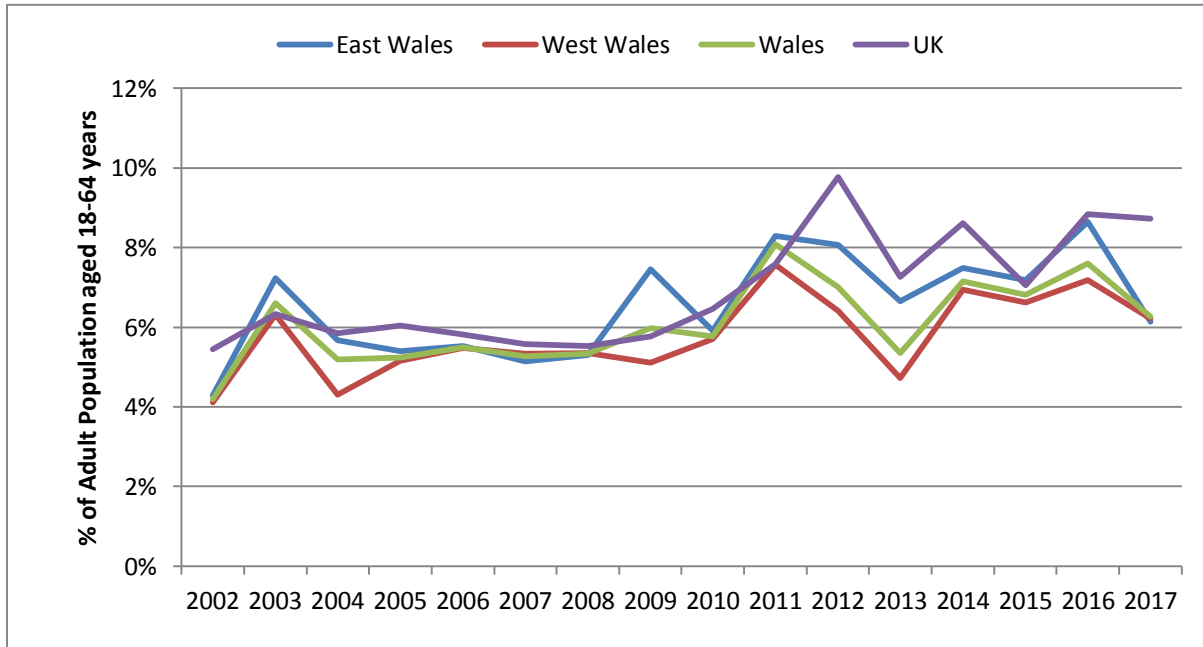
entrepreneurial activity in Wales peaked at 8.1 per cent in 2011 before dropping back to the long-run average rate in 2013. The rates in Wales and the UK converged in 2015 at 7 per cent however a gap of over 2 percentage points arose in 2017.

In 2017 the nascent entrepreneurial activity rate in Wales was 3.7 per cent, down but not significantly so from 4.4 per cent in 2016. The new business ownership rate of 2.7% was also not significantly different to the rate of 3.5 per cent in 2016. Both nascent and new entrepreneurship rates also remained unchanged in the UK between 2016 and 2017; the nascent rate changing from 5.1 per cent to 4.8 per cent and the new business owner rate from 3.8 per cent to 4.1 per cent.



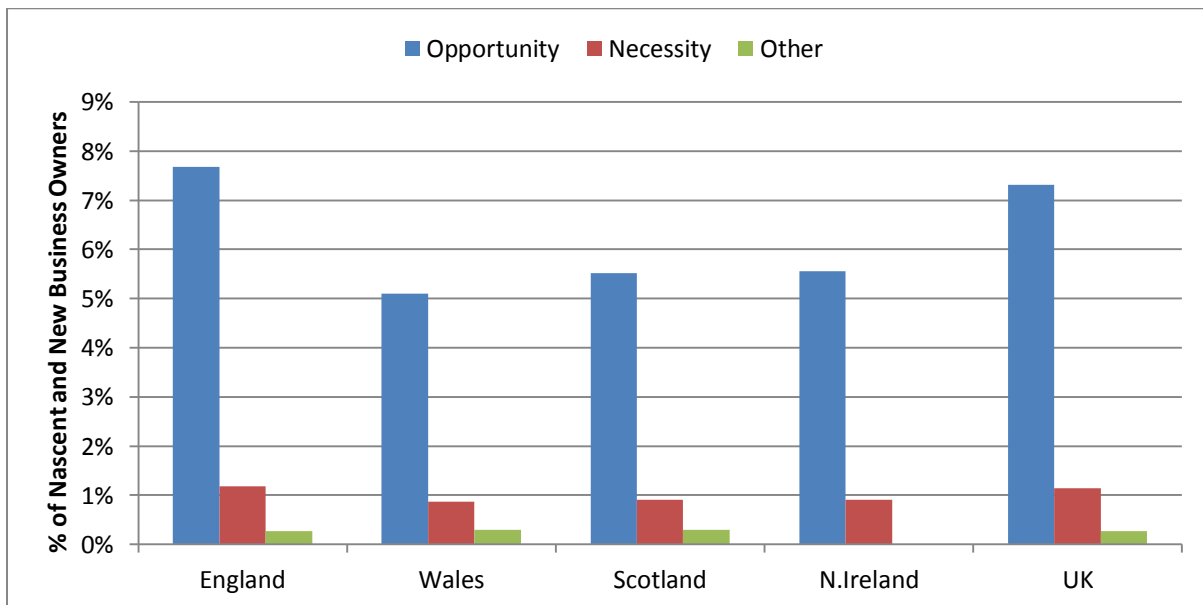
**Figure 2a: Total Early-Stage Entrepreneurial Activity in Wales and the UK (2002-17)**  
(Source: GEM APS)

The TEA rates of East and West Wales have tended to follow similar trends over time (Figure 2b) and although there is a prevailing gap between the two, the rates are not significantly different. The entrepreneurial activity rates in Wales as a whole are driven primarily by the activity in West Wales, particularly since 2011, with the trend in East Wales more closely matched to the UK. In 2017 the rates for both East and West Wales converged at 6 per cent.



**Figure 2b: Total Early-Stage Entrepreneurial Activity in East Wales, West Wales & Valleys, Wales and the UK (2002-17)** (Source: GEM APS)

Necessity-driven TEA in Wales in 2017 was 0.9 per cent, relatively unchanged from the rate of 1.6 per cent in 2016. Opportunity-driven TEA was 5.1 per cent, again virtually unchanged from the estimate of 5.6 per cent in 2016. Necessity-driven TEA as a proportion of all TEA was 14 per cent, similar to the other home nations and the UK (Figure 3).

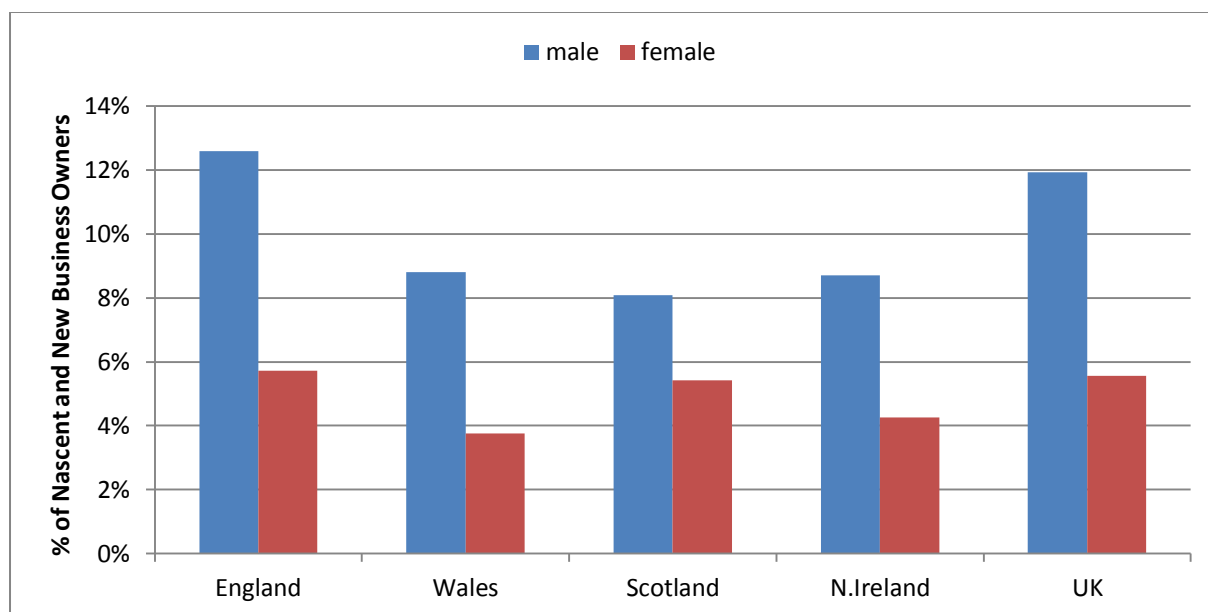


**Figure 3: Opportunity and Necessity Entrepreneurship in the UK Home Nations in 2017** (Source: GEM APS)

## Who are the Entrepreneurs in Wales?

**Gender:** Males typically have higher early-stage entrepreneurial activity rates than females; in Wales the male TEA rate was 8.8 per cent in 2017 compared to 3.8 per cent for females. In 2017 male TEA rates in Wales, England and the UK were all significantly higher than for females (Figure 4). Within genders, the male TEA rates in Wales and in Scotland were significantly lower than the male rates in England and the UK. There were no differences in the female rates across the home nations.

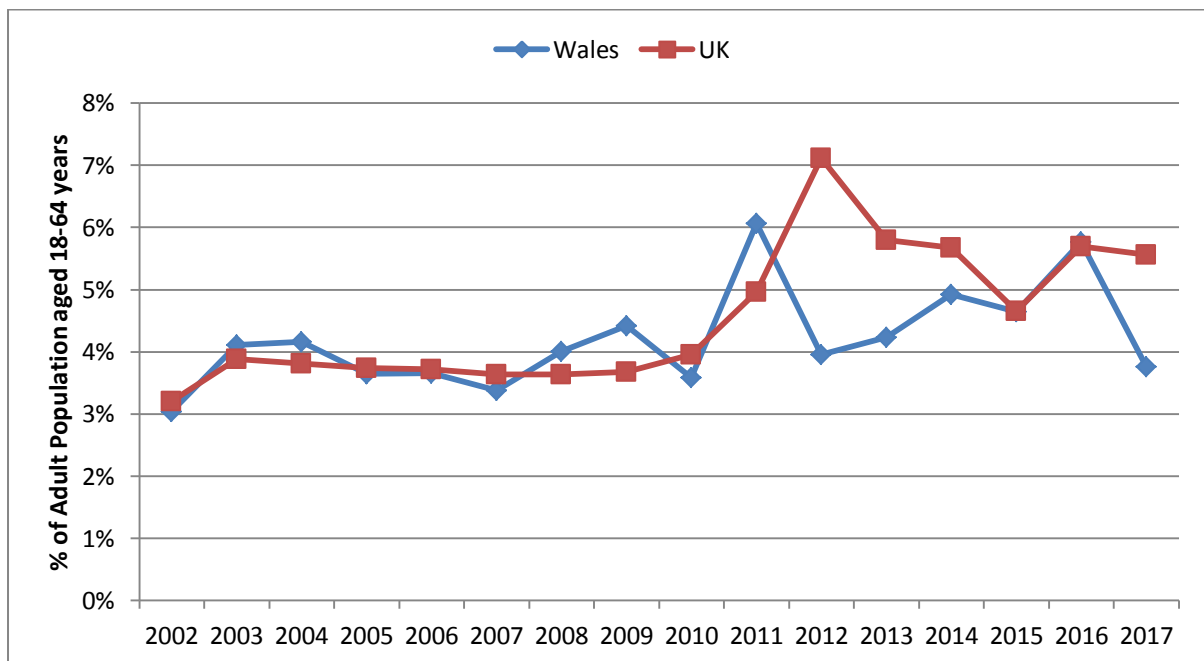
The ratio of female to male early-stage entrepreneurial activity is generally around 50 per cent in the UK. The ratio in Wales was below this at 43 per cent in 2017 compared to a UK ratio of 47 per cent. Scotland had the highest female to male ratio at 67 per cent due to a relatively low male rate and a relatively high female rate. Annual ratios may vary from year to year so they are best viewed over the longer term. The long run average ratios over the 2002 to 2017 period suggest that males are twice as likely to be early stage entrepreneurs as females with a ratio of 53 per cent in Wales, 49 per cent in England and 54 per cent in Scotland. The Northern Ireland female to male TEA ratio is lower at just 39 per cent.



**Figure 4: Total Early-Stage Entrepreneurial Activity by Gender in the UK Home Nations in 2017** (Source: GEM APS)

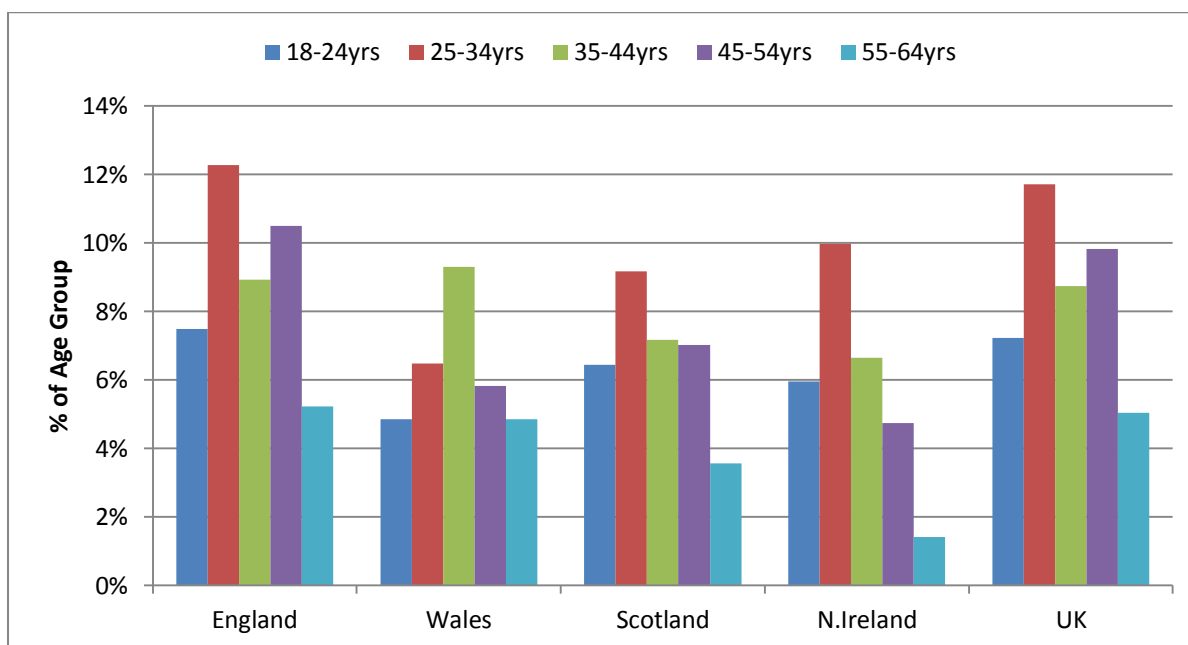


The female TEA rate in Wales fell from a record high of 6.1 per cent in 2011 to its long run average of around 4.0 per cent in 2012. Although the rate increased gradually to 2016, by 2017 it had fallen back to pre-2010 levels (Figure 5). The Welsh male TEA rate also fell significantly from 10.2 per cent to 6.5 per cent between 2011 and 2013 but has since stabilised at around 9 per cent. Figure 5 demonstrates that female TEA rates in Wales matched the UK trend until 2010 but diverged over 2011-15; a similar gap has re-opened in 2017.



**Figure 5: Total Early-Stage Female Entrepreneurial Activity in Wales and the UK, 2002-2017.** (Source: GEM APS)

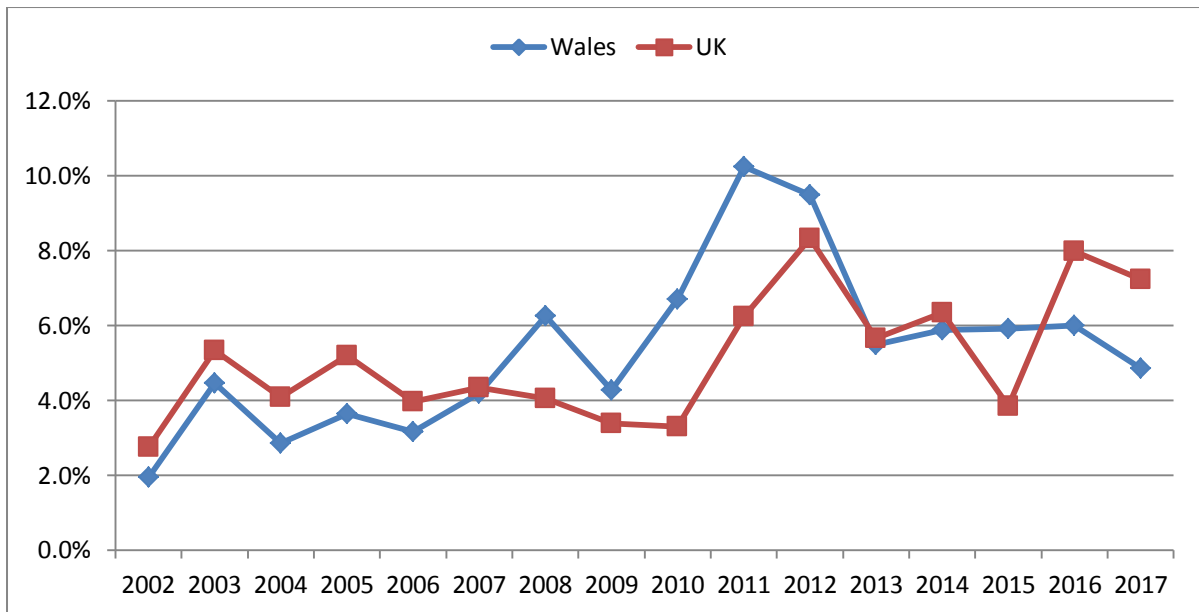
**Age:** In the UK individuals aged between 25-34 years typically display the highest rates of early-stage entrepreneurial activity. In 2017 in the UK those aged 18-24 and 55-64 years old had significantly lower entrepreneurial activity rates than those aged between 25-54. In both Scotland and England, the TEA rate for 55-64 year olds was also significantly lower than for those aged 25-34 years (and lower than those aged 45-54 in England). There were no significant differences in the entrepreneurial activity rates across the agebands in Wales or in Northern Ireland (Figure 6).



**Figure 6: Total Early-Stage Entrepreneurial Activity by Age in the UK Home Nations, 2017** (Source: GEM APS)

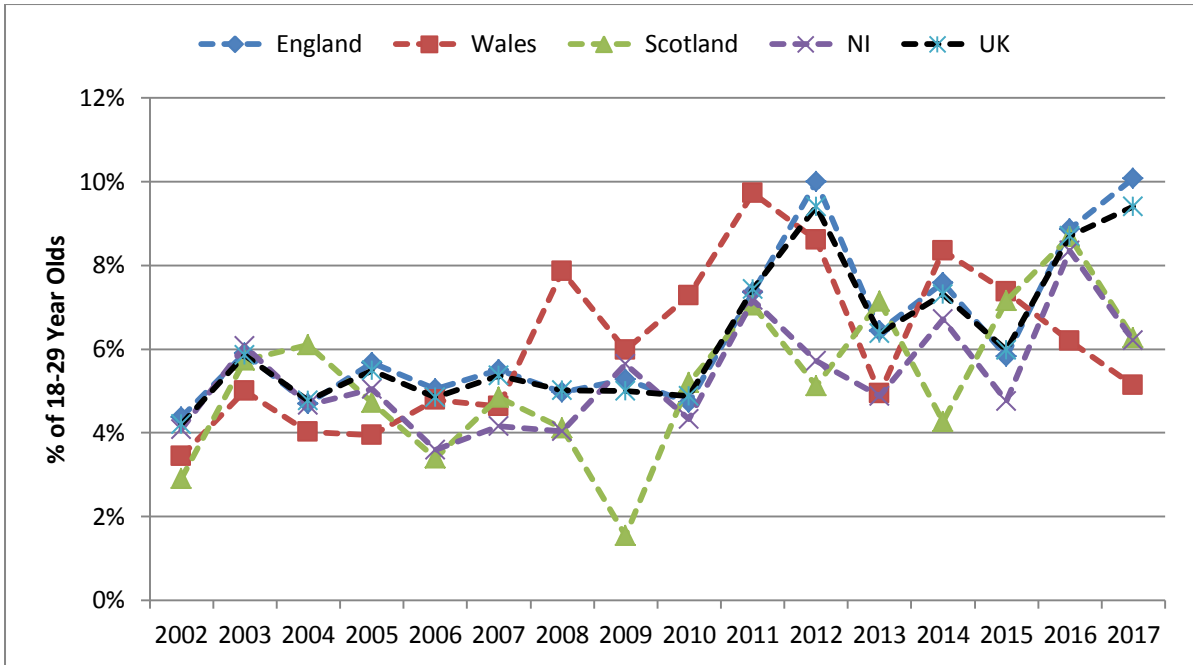
For several years, the distribution of the TEA rate by age had been shifting towards a younger generation in Wales, for example there were particularly high TEA rates for 18-24 year olds during the recession period, peaking at 10 per cent in 2011. The rate has since dropped back to around 6 per cent, remaining relatively stable at this rate in the last few years. In contrast, the UK rate has been more variable recently and in 2017 has remained relatively high at 7.2 per cent.

Compared to the UK the higher rate of early-stage entrepreneurial activity amongst 18-24 year olds in Wales witnessed during the recession suggests they faced a tougher economic climate, the lack of jobs necessitating entry into self-employment which dissipated as the economy recovered. Alternatively, it may also reflect the increased provision of youth entrepreneurship activities by the Welsh Government during this period.

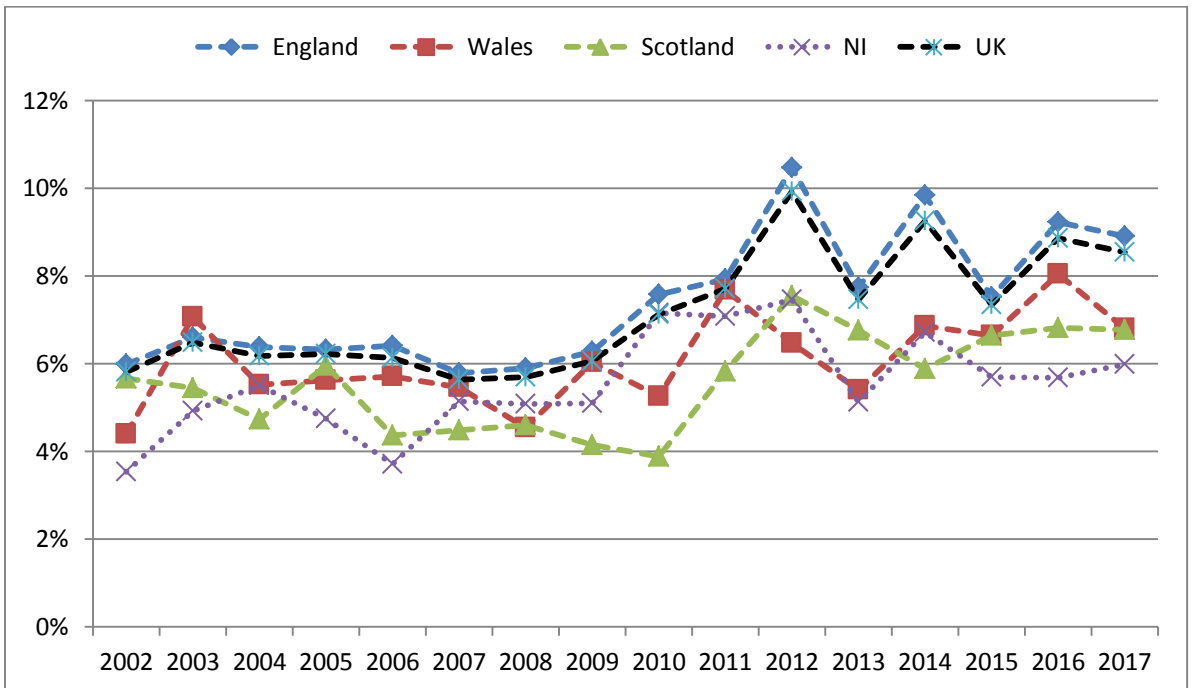


**Figure 7: Trend in Total early-stage Entrepreneurial Activity amongst 18-24 year olds in Wales and the UK, 2002 to 2017 (Source: GEM APS)**

A potentially more helpful analysis is to assess the trend in the TEA rate for 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 was relatively high during the recession, but since 2013 has been on a downward trend, and in 2017 is significantly lower than the rate in England. In contrast, the TEA rate among 30 to 64 year olds in Wales was significantly lower than that for England, and the UK average, during the 2012-14 period but is not significantly different in 2017.



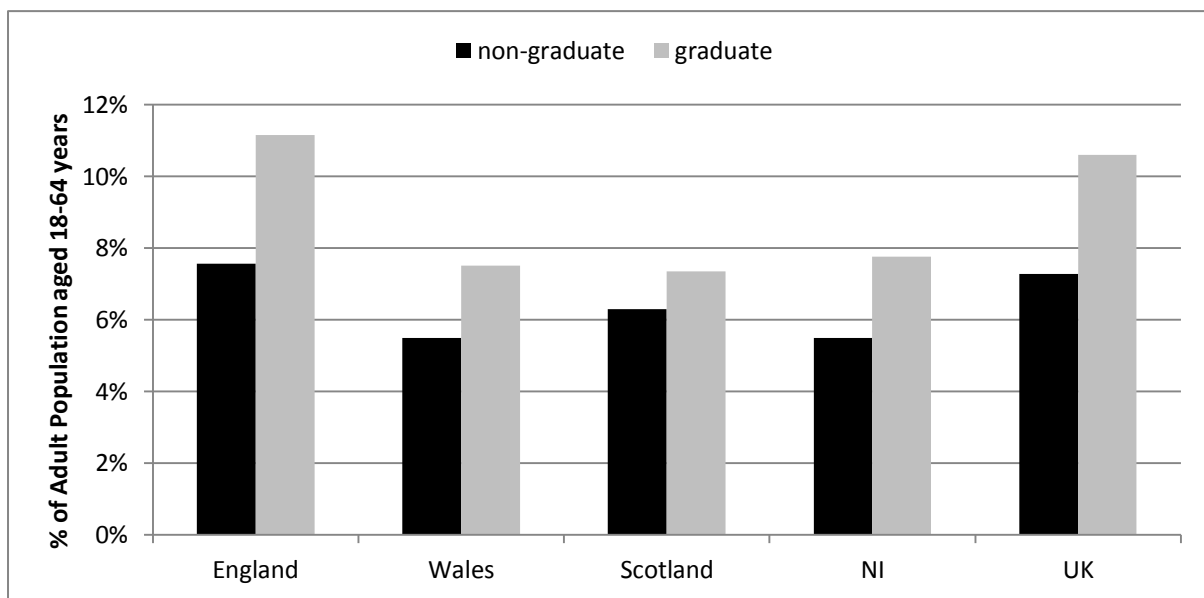
**Figure 8: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18 to 29 year olds, 2002 to 2017 (Source: GEM APS)**



**Figure 9: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 30 to 64 year olds, 2002 to 2017 (Source: GEM APS)**

**Education:** Graduates in the UK typically have higher rates of early-stage entrepreneurial activity than non-graduates. In 2017 the UK graduate TEA rate of 10.6 per cent was significantly higher than the rate of 7.3 per cent for non-graduates (Figure 10). Neither rate was significantly different to that in 2016.

The Welsh graduate TEA rate in 2016 was 7.5 per cent compared to the non-graduate rate of 5.5 per cent; this difference was not statistically significant. There were also no significant differences in the respective rates compared to 2016. England was the only home nation in which the TEA rate for graduates was significantly higher than for non-graduates in 2017.



**Figure 10: Total Early-Stage Entrepreneurial Activity in the UK Home Nations by Graduate Status, 2017** (Source: GEM APS)

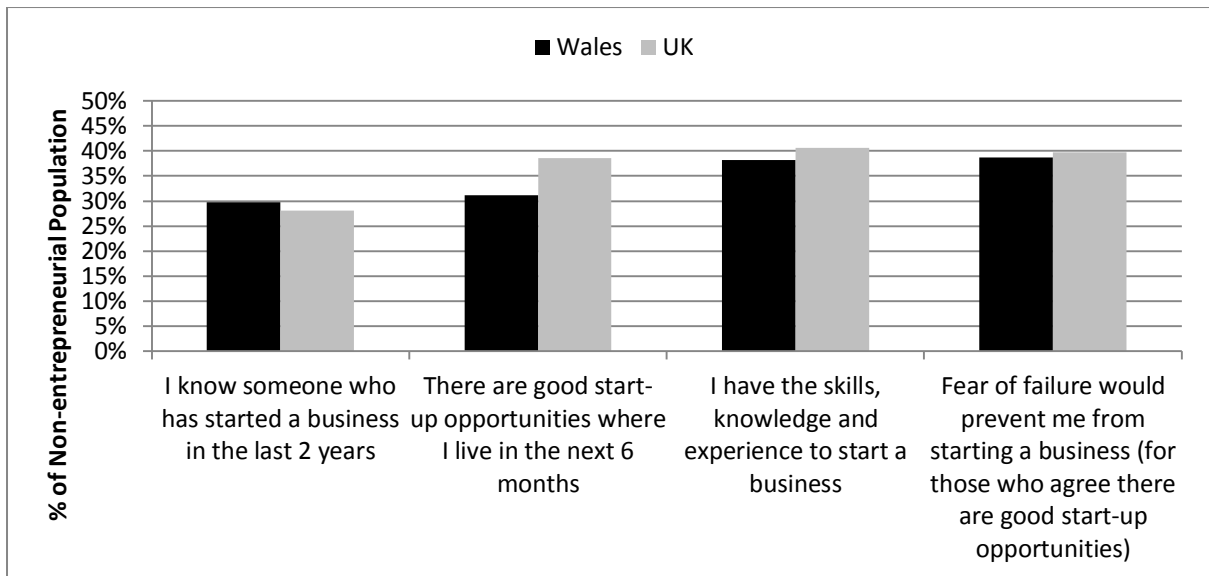
## **Entrepreneurial Attitudes and Intentions**

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 reported here for that portion of the population who are not already entrepreneurs, as individuals who are involved in entrepreneurial activity may feel compelled to provide positive answers in the Adult Population Survey (APS).

In Wales in 2017 almost one third of non-entrepreneurial 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. Around two fifths of non-entrepreneurs believe they have the skills to set up in business, again similar to the UK average.

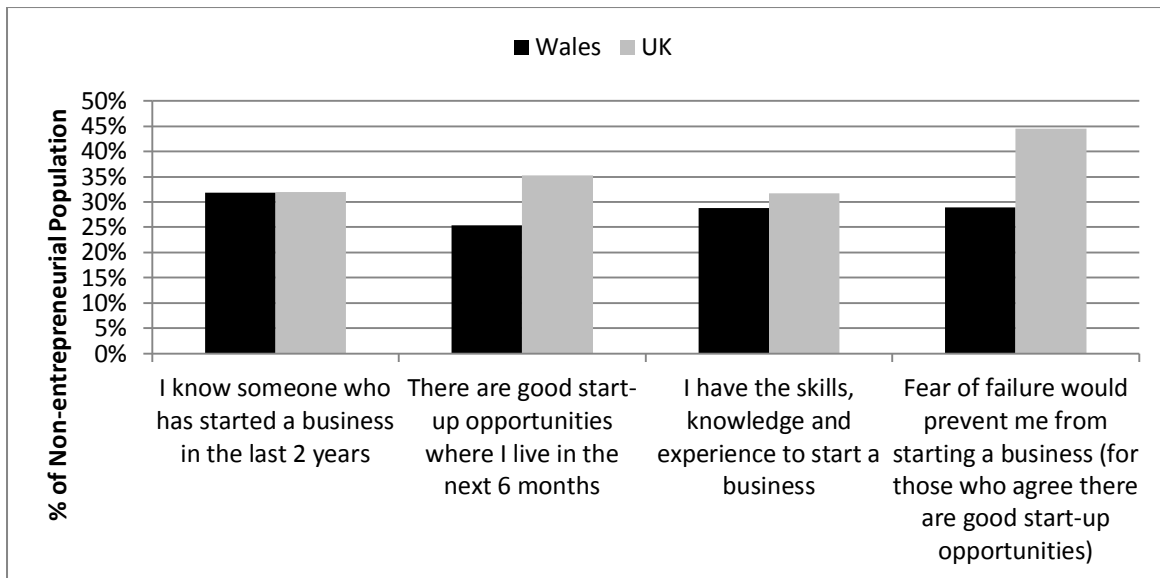
As in previous years, the main difference between Wales and the UK is the significantly lower share of the non-entrepreneurial population in Wales who believe there are good start-up opportunities in their area in the next six months, 31 per cent in Wales versus 39 per cent in the UK. Despite this gap, there is no difference in the fear of failure rates amongst those who perceive good start-up opportunities.



**Figure 11: Entrepreneurial Attitudes and Perceptions in Wales and the UK 2017**  
(Source: GEM APS)

Figure 12 displays the attitudes towards entrepreneurship when restricted to 18-24 year olds only. A significantly lower share of young people in Wales (25 per cent) perceive good start-up opportunities compared to the UK (35 per cent). Despite this gap there was no significant difference in attitudes between Wales and the UK in terms of whether fear of failure would prevent them from starting a business.

When comparing the attitudes of young people against all non-entrepreneurs (as shown in Fig. 11) a significantly lower proportion of young people in Wales believe that they have the skills, knowledge and experience to start a business, at 28.9 per cent compared to 38.2 per cent for the wider non-entrepreneurial population. This was also the case in the UK with just 31.7 per cent of young people agreeing with this statement compared to 40.6 per cent of all UK non-entrepreneurs.

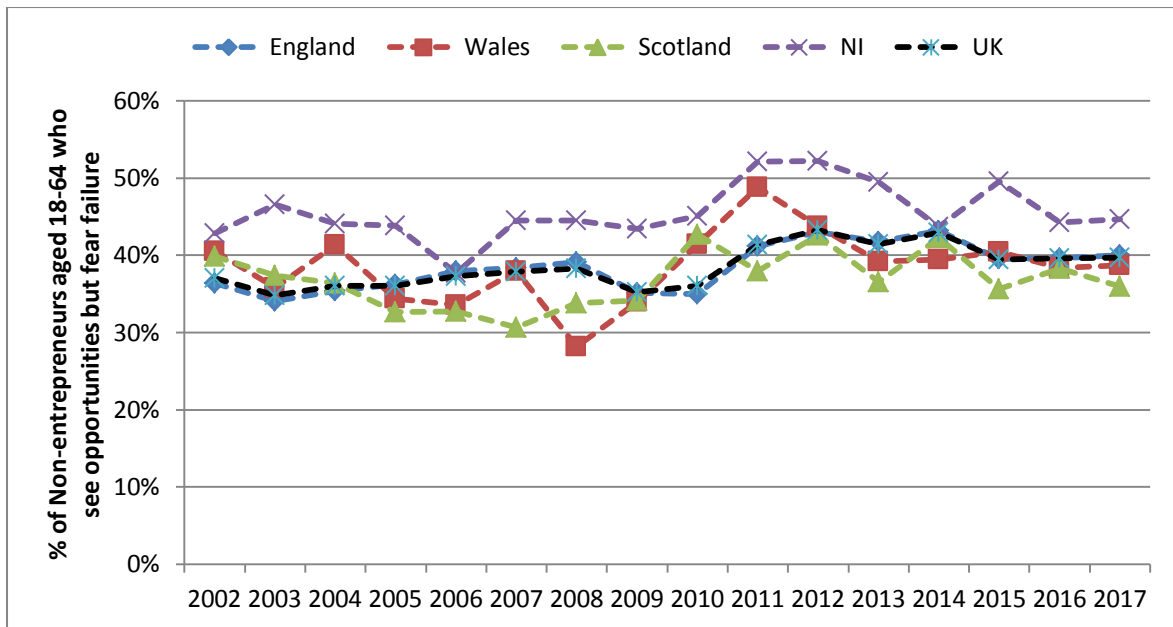


**Figure 12: Entrepreneurial Attitudes and Perceptions among 18-24 year olds in Wales and the UK 2017** (Source: GEM APS)

The proportion of the non-entrepreneurial population in Wales that see good start-up opportunities but report that the fear of failure would prevent them starting a business stood at 38.7 per cent in 2017, which was virtually unchanged on 2016. The UK rate at 39.7 per cent was also unchanged, and was not significantly different to Wales.

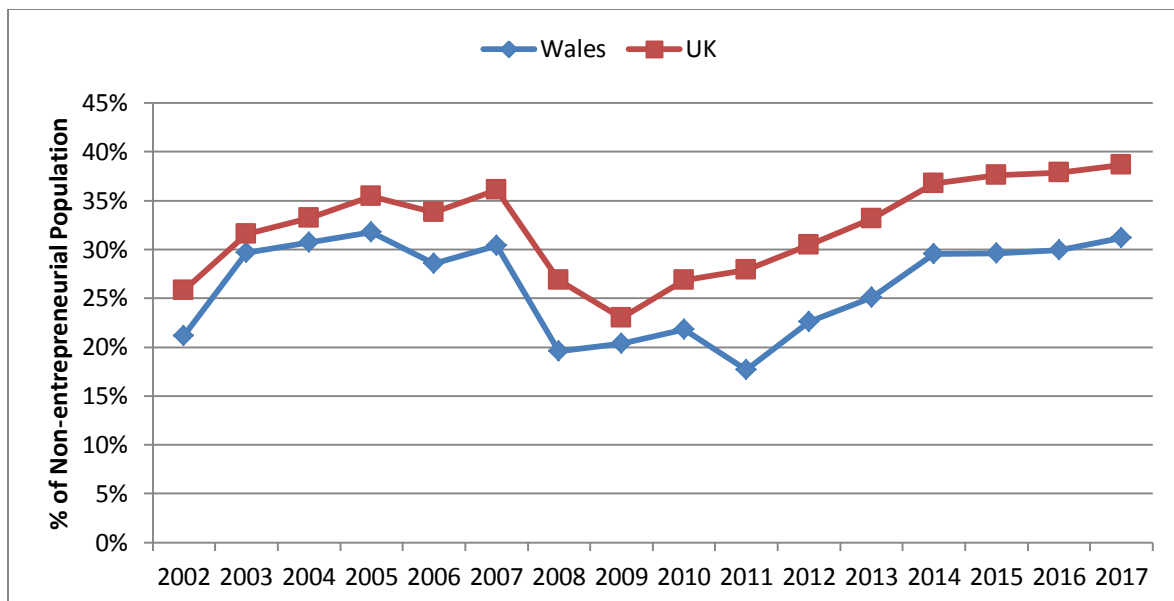
Figure 13 shows that fear of failure rose more sharply in Wales than in other home nations during the recession but in more recent years has stabilised in line with the others. In 2017 there were no significant differences in the fear of failure rates across the home nations.





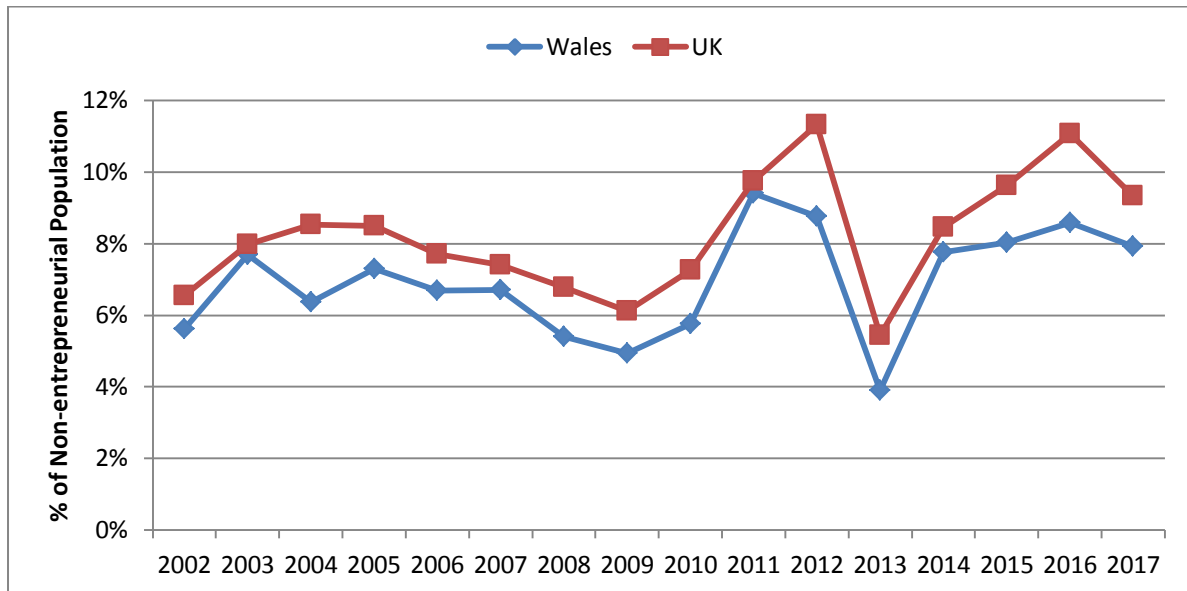
**Figure 13: Fear of Failure among those who see Opportunities in the UK Home Nations, 2002-17** (Source: GEM APS)

In the 2017 survey 31.2 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 to 38.6 per cent in the UK. Neither were significantly different than their 2016 respective estimates and, although the trend for both is upward, the statistically significant gap in opportunity perception between Wales and the UK remains (Figure 14).



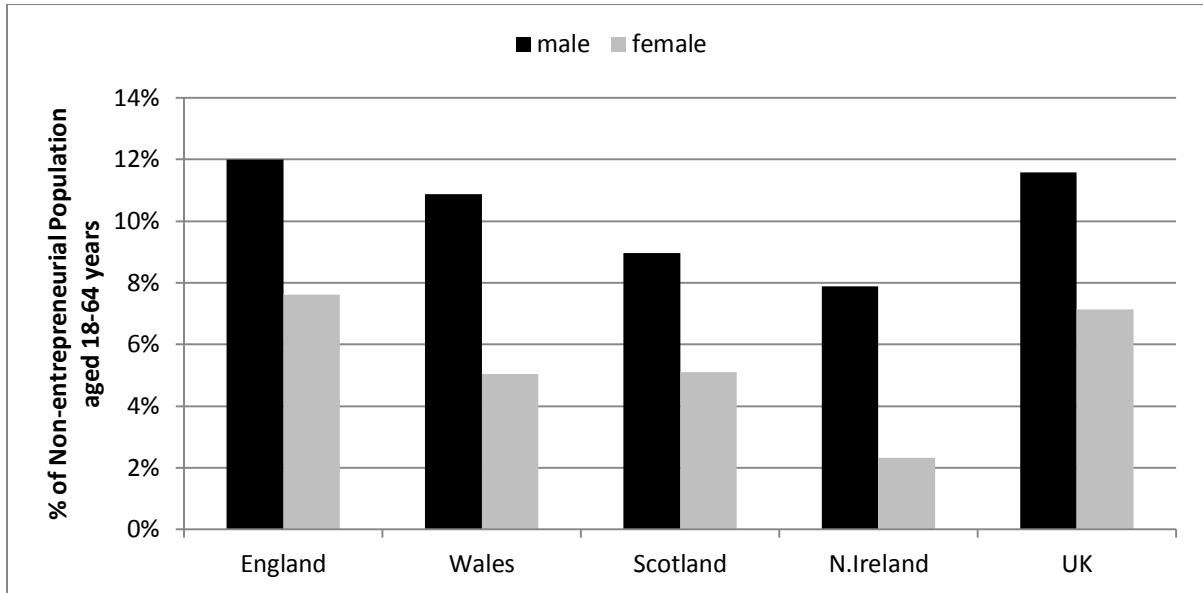
**Figure 14: Perception of Start-up Opportunities in Wales and the UK, 2002-17** (Source: GEM APS)

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 remained virtually unchanged at 7.9 per cent in 2017 (Figure 15). The UK estimate fell significantly from 11.1 per cent in 2016 to 9.3 per cent in 2017. The previous increases in these intention rates during the recession potentially reflected necessity reasons; in more recent years it is likely that in the face of an improving economy prospects for start-up reflect more opportunity entrepreneurship.



**Figure 15: Future Start-up Expectations (within 3 years) in Wales and the UK amongst the non-entrepreneurial population, 2002-17 (Source: GEM APS)**

In 2017, at 10.9 per cent, 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 at 5.0 per cent (Figure 16). Similar to the ratio of entrepreneurial activity by gender, when translated into a female to male ratio this equates to just 46 per cent, which compares to 64 per cent in England, 57 per cent in Scotland and just 29 per cent in Northern Ireland; the latter due primarily to the lower than average female intention rate. Overall, start-up intentions for both males and females in the home nations were not significantly different to those in 2016.



**Figure 16: Future Start-up Expectations (within 3 years) in the UK Home Nations by Gender, 2017 (Source: GEM APS)**

## Welsh Language fluency and Entrepreneurial Activity

There were no significant differences in 2017 in the TEA rates of those in Wales who were fluent in spoken and written Welsh (6.4%); who could speak and understand some Welsh (7.3%), and who had little or no Welsh skills (5.8%).

## Concluding Observations

Entrepreneurial activity in Wales in 2017 has continued to remain strong with the TEA rate standing at over 6 per cent and start-up intentions at around 8 per cent. During the recession there was a move towards increased entrepreneurial activity amongst the younger age groups in Wales, due in part to necessity reasons and a greater focus by Government on youth entrepreneurship, however in 2017 all age groups are equally likely to be entrepreneurial.

The attitude metrics reinforce this positivity; around two-fifths of non-entrepreneurs state that they have the skills, knowledge and experience to start a business and almost one third know an entrepreneur that has started a business within the past two years. Fear of failure remains unchanged in Wales in 2017 and compares well with the rate in the UK; at its peak in 2011 around half of those that identified start-up opportunities stated that fear of failure would prevent them from starting a business, in 2017 this remains below 40 per cent. Together these measures highlight the more confident view within the population of the ability to start a successful business and the conditions to do so

Despite the buoyancy, there are some prevailing issues. Entrepreneurial activity and intention to start-up is half the rate for females as for males. There are also some measures which diverge from the UK position; total early-stage entrepreneurial activity in Wales in 2017 is significantly lower than that observed in the UK as a whole and in England. This is also the case for male activity. Attitude-wise there is a smaller proportion of non-entrepreneurs in Wales than in the UK who believe 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 and has remained unchanged over the year. Perceived lower opportunities may be reflective of differing local demand issues in Wales or in the conditions that are recognised as necessary for setting up 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.

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