

# **Global Entrepreneurship Monitor**

# **Northern Ireland Report 2018**

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## **Main Findings**

The Global Entrepreneurship Monitor (GEM) is an international project, involving 49 economies in 2018, which seeks to provide information on the entrepreneurial landscape of countries. Many studies have shown that entrepreneurship is an important driver of 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 in 2018 was 1,002 adults over 18 years of age.

- Levels of entrepreneurial activity are a vital sign of any economy as it has been shown that the creation of new ventures is positively connected to the drivers of economic growth and productivity through increased innovation, competition and job creation.
- Northern Ireland has historically lagged behind the rest of the UK in terms of enterprise start-up activity and the GEM Global project tracks this through its unique annual survey which focuses on the measurement of new business formation at the level of the individual.
- The rate of total early-stage entrepreneurship (TEA) in Northern Ireland in 2018 is 6.5%, unchanged from 2017. The 2018 rate compares to a figure of 7.9% in the UK overall, 8.1% in England, 6.9% in Wales, and 6.3% in Scotland.
- The TEA rate in Northern Ireland in 2018 is not significantly lower than the UK, however when the rates are combined over 2016-18 Northern Ireland has a significantly lower rate than both England and the UK.
- Entrepreneurial activity is driven by opportunity motives; necessity-driven TEA in Northern Ireland is 0.9% in 2017 while opportunity-driven TEA is 5.6%.
- The female TEA rate in Northern Ireland in 2018 is 3.2% compared to a male rate of 9.9%. The female to male entrepreneur ratio in Northern Ireland of 32% compares to a UK ratio of 50%.
- TEA rates tend to vary by age with those aged over 30 generally more likely to be engaged in entrepreneurial activity. In 2018, those aged between 25-34 in Northern Ireland were most entrepreneurial, with their rate significantly higher than for those aged 35 and over.
- Within Northern Ireland the highest TEA rates are typically found in the Mid-Ulster Council area, while Derry City and Strabane have the lowest. The rate in Mid-Ulster is driven by male entrepreneurial activity; in Derry City and Strabane there are relatively low female rates of entrepreneurship.
- Just under one third of the non-entrepreneurial working age population perceive good start-up opportunities locally in Northern Ireland in 2018. The UK rate, which is 40%, continues to be significantly higher than that for Northern Ireland.

- Over two-fifths of non-entrepreneurial individuals of working age in Northern Ireland who agreed there were good start-up opportunities report they are afraid of starting a business in case it might fail however this is not significantly different to the UK.
- The proportion of non-entrepreneurial working age adults in Northern Ireland who expect to start a business within the next three years is 6.7% in 2018. Northern Ireland's rate continues to remain significantly lower than the UK rate of 8.5%.
- High job expectation rates amongst TEA entrepreneurs in Northern Ireland fell to 14% over 2016-18 compared to a stable UK rate of 19%. High job expectation is typically lower for established businesses; in Northern Ireland the high job expectation rate fell to less than half the UK rate over 2016-18, at just 2%.

### 1 Background

The Global Entrepreneurship Monitor (GEM) research consortium is an international project which tracks rates of entrepreneurship. It is the world's most authoritative comparative study of entrepreneurial activity in the general adult population and 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.

In 2018 the Department for the Economy sponsored the Northern Ireland component of the GEM UK research project. Stimulating entrepreneurship remains an important challenge for the region; Invest NI has committed significant resources over the years in ensuring that it is embedded within their core activities. Of the 335,000 respondents to GEM UK surveys for the period 2002-2018, around 40,000 respondents were from Northern Ireland. The region now has a large longitudinal database on entrepreneurial attitudes, activity and aspirations. This is particularly useful in conducting trend analysis for important sub-populations in Northern Ireland, such as females and young people, and enables comparisons to the other UK home nations.

The results from the 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.

# 2 How GEM Measures Entrepreneurial Activity

The Global Entrepreneurship Monitor (GEM) research consortium has been measuring the entrepreneurial activity of working age adults across a wide range of countries in a comparable way since 1998. In 2018, GEM Global conducted surveys in 49 sovereign nations and represented the world's most authoritative comparative study of entrepreneurial activity in the general adult population. A telephone survey of a random sample of the adult population is conducted each year between May and September.

GEM's primary focus is on the study of three areas:

- To measure differences in the level of entrepreneurial activity between countries.
- To uncover factors leading to appropriate levels of entrepreneurship.
- To suggest policies that may enhance the national level of entrepreneurial activity.

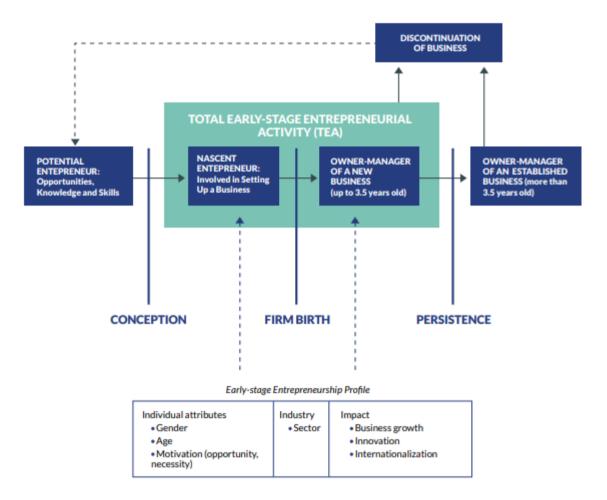
The 2018 GEM Global study was based on an analysis of adult population survey (APS) results from 49 economies. The core of the APS is identical in each country and asks respondents about their attitudes towards entrepreneurship; whether they are involved in some form of entrepreneurial activity, and if so, about their aspirations for their business. The global GEM Executive 2018 Report was published in February 2019<sup>1</sup> and can be downloaded from www.gemconsortium.org.

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

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

<sup>&</sup>lt;sup>1</sup> Bosma, N., and Kelley, D. (2019) Global Entrepreneurship Monitor 2018/19 Global Report. London: Global Entrepreneurship Research Association.

In addition, we measure general intention to start a business by asking individuals if they expect to start a business within the next three years. Finally, we ask individuals if they have sold, shut down, discontinued or quit a business in the past year. It is important to understand that the main subject of study in GEM is entrepreneurs rather than the businesses that they run. GEM measures the entrepreneurial activity of people from intention to exit. The first two stages of active business development, the nascent entrepreneur stage<sup>2</sup> and the new business ownermanager stage<sup>3</sup>, are combined into one index of Total early-stage Entrepreneurial Activity, or TEA, which is represented in Figure 2.1 below.



**Figure 2.1: The Entrepreneurial Process and GEM Operational Definitions** (Source: Bosma and Kelley, 2019, pg.16)

 $<sup>^{2}</sup>$  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> 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.

As much of this entrepreneurial activity is pre-start-up or includes very small new businesses that do not have to register, TEA rates will not necessarily match with published official statistics on business ownership and, indeed, should not be interpreted as such. Rather, GEM enables the measurement of the propensity of individuals in particular countries to be entrepreneurial given the current social, cultural and economic framework conditions that exist there.

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.

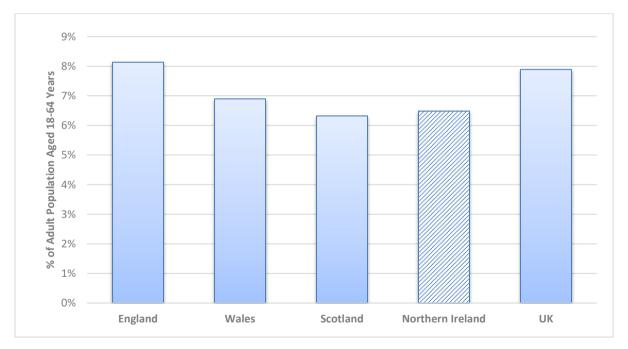
One way of distinguishing between different types of entrepreneurial activity is the extent to which the activity is based on necessity (i.e. there are no better alternatives for work) or opportunity (where entrepreneurs may be exploiting the potential for new market creation). In addition since 2011, entrepreneurial activity among employees has been 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 2018 adult population survey are explained in more detail in the GEM UK 2018 report (www.gemconsortium.org). An important change in the sample design was introduced in 2010 when 10% 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 to 20%, 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 2018 and the analysis of the sixteen years of GEM data (2002-18).

## **3** Total Early-Stage Entrepreneurial Activity

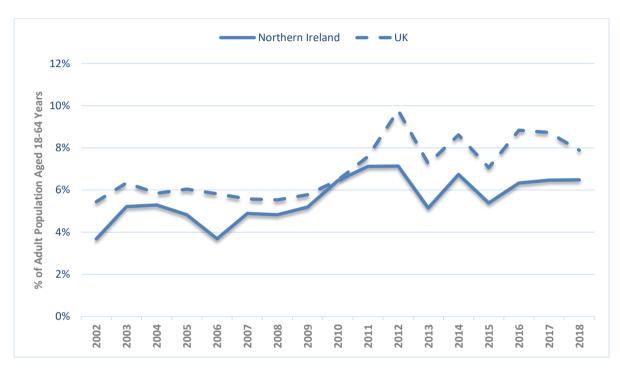
The rate of early-stage entrepreneurship in Northern Ireland in 2018 was 6.5%. This compares to 7.9% in the UK overall, 8.1% in England, 6.3% in Scotland and 6.9% in Wales. There were no significant differences in the TEA rates across the home nations or compared to the UK rate in 2018 (Figure 3.1). Pooling the data over the most recent three years (2016-18), to remove annual fluctuations, gives a TEA rate of 6.4% for Northern Ireland. This rate, along with that in Scotland (6.8%) and Wales (6.9%) is significantly lower than the rate of 8.8% in England and 8.5% in the UK.

Overall, the TEA rate of 6.5% in Northern Ireland in 2018 equates to around one in every fifteen adults aged 18-64, or over 73,500 individuals, engaged in early-stage entrepreneurial activity, 47% of whom were in the very early stages of starting a business (nascent entrepreneurs: 3.1%) and the remainder those who had a new business which was between 3 and 42 months old (3.4%).



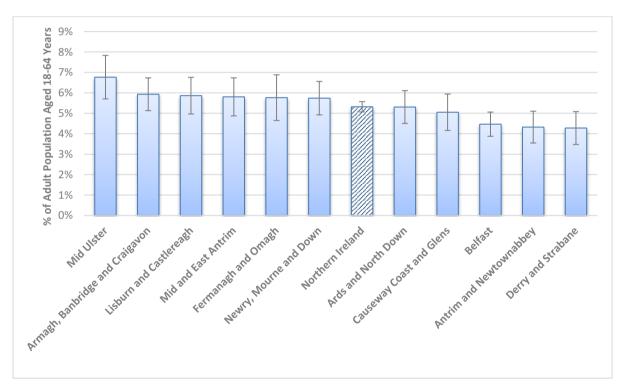
**Figure 3.1: Total early-stage Entrepreneurial Activity (TEA) in the UK Home Nations 2018** (Source: GEM APS)

Entrepreneurial activity in both the UK and Northern Ireland has been on an upward trend over the long-term 2002-18 period (Figure 3.2). Although there has been a gap in the level of earlystage entrepreneurial activity between Northern Ireland and the UK this narrowed over the recent 2008 recession. Since 2011 a gap of around 2-3 percentage points has re-opened between the two, although in 2018 this was not statistically significant.



**Figure 3.2: Total early-stage Entrepreneurial Activity in Northern Ireland and the UK 2002-2018** (Source: GEM APS 2002-18)

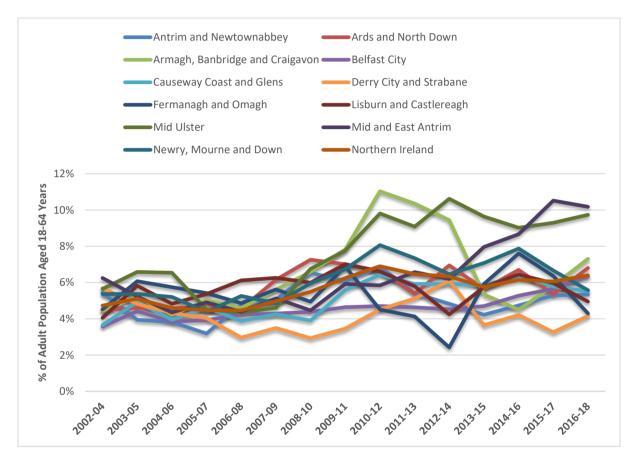
There are no significant differences in the TEA rates across Northern Ireland Council areas in 2018 however, one year observations on GEM, particularly at localised areas, can be unreliable due to small sample sizes. Figure 3.3 plots the pooled TEA rates over the 2003-2018 period, this method averaging out any random annual fluctuations. It indicates that over the entire period of observation the highest rate of entrepreneurial activity was in the Mid Ulster area with a TEA rate of 6.8% whilst the lowest was the Derry City and Strabane area with a rate of just 4.3%; the difference between these two statistically significant. Although Belfast's rate of 4.5% lies below the Northern Ireland average, the difference is not statistically significant, however it is significantly lower than that for Mid Ulster.



**Figure 3.3: Total early-stage Entrepreneurial Activity in Northern Ireland in 2003-2018 by Council Area, with 95% confidence intervals**<sup>4</sup> (Source: GEM APS 2003-17)

<sup>&</sup>lt;sup>4</sup> Confidence intervals for a mean specify a range of values within which the unknown population mean may lie. At the 95% level we are 95% confident that the interval contains the true population mean.

Depicting the TEA rates in a slightly different way, Figure 3.4 displays the trend by Council area using 3 year rolling averages from 2002-04 to 2016-18. In the early part of the last decade there was little difference in the entrepreneurial activity rates across Council areas. Since the recession of 2007-08 there has been a divergence. Entrepreneurial activity surged in the Mid Ulster Council area while more recently Mid and East Antrim have seen a strong increase in entrepreneurial activity. In 2016-18 Derry City and Strabane, along with Fermanagh and Omagh, have lower entrepreneurial activity rates than the bulk of the council areas.



**Figure 3.4: Total early-stage Entrepreneurial Activity in Northern Ireland by Council Area, rolling averages 2002-2004 to 2015-2018** (Source: GEM APS)

Northern Ireland's TEA rate remained unchanged between 2017 and 2018, at 6.5%. As found in previous years, entrepreneurial activity is largely opportunity-motivated. Opportunity TEA in 2018 is 5.2% (5.6% in 2017) in Northern Ireland while necessity TEA is 1.1% (0.9% in 2017).

Neither the opportunity nor the necessity TEA rate in Northern Ireland in 2018 is significantly different to the respective UK rates (Figure 3.5). In 2018, amongst the home nations, necessity-driven TEA accounted for around 15% of all early-stage entrepreneurial activity.

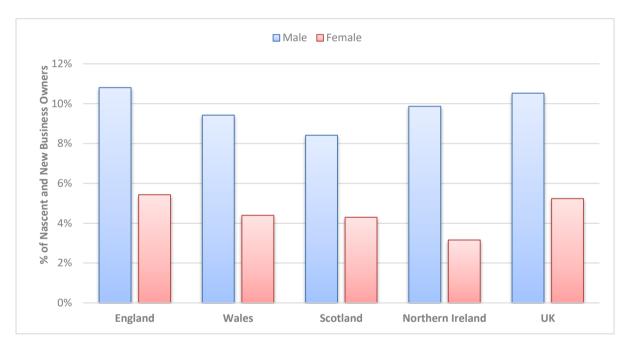


**Figure 3.5: Opportunity and Necessity Entrepreneurship in the UK Home Nations in 2018** (Source: GEM APS)

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

#### 4.1 Gender

In 2018 males in the UK have a significantly higher TEA rate than females, at 10.5% compared to 5.2%. This is also the case across all the home nations (Figure 4.1). In Northern Ireland not only is there a significant difference in the rates, the gap is also wider, with a male TEA rate of 9.9% compared to a female rate of 3.2%.

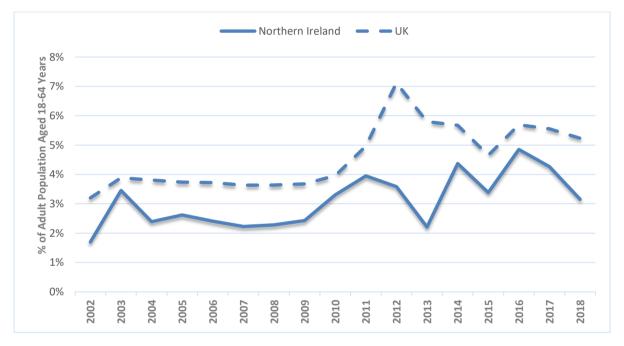




For the UK as a whole the rates translate into a female to male early-stage entrepreneurship ratio of 50%, Scotland and England have similar ratios at 51% and 50% respectively. The rate in Wales is 47% while Northern Ireland has the lowest ratio at 32% due to the lower than average female entrepreneurial activity rate of 3.2%.

Annual ratios in female to male entrepreneurial activity may vary therefore it is useful to take a longer perspective. Using the long run average ratios over the 2002 to 2018 period suggests a ratio of 39% in Northern Ireland compared to 50% in England, 53% in Wales and 55% in Scotland. The significantly lower female to male ratio in Northern Ireland over the long term is due to historically lower female TEA rates compared to males. The female TEA rate for the period has averaged around 3% compared to a male rate of 8%. In the UK the equivalents are 4.5% and 9% respectively.

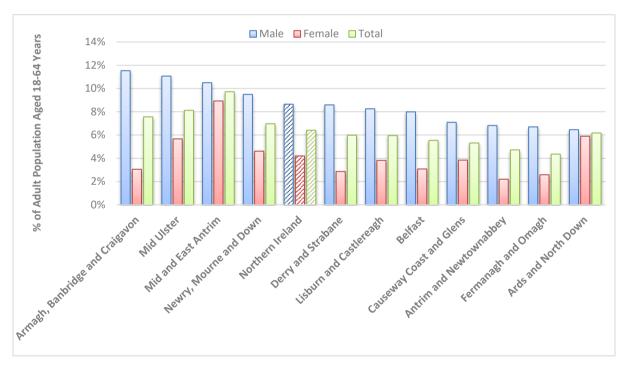
Neither the male nor female TEA rates in Northern Ireland in 2018 were significantly different to their 2017 rates. Compared to the UK the female TEA rate in Northern Ireland has been consistently lower than the respective UK rate (Figure 4.2). The gap narrowed somewhat during the last recession but diverged strongly as the economy recovered. Although there remains a gap between the two rates in 2018 the difference is not statistically significant.



**Figure 4.2: Total early-stage Female Entrepreneurial Activity in Northern Ireland and the UK, 2002-2018** (Source: GEM APS)

Figure 4.3 shows TEA rates for males and females by Council area over the 2016-18 period combined. The male rates are plotted in descending order although there is no significant difference between them. There is also no correlation between the entrepreneurial activity rates of males and females, for example Armagh, Banbridge and Craigavon Council has the highest male TEA rate but the fourth lowest female rate. Conversely, Ards and North Down has the lowest male TEA rate but the second highest female rate. This suggests differing opportunities for entrepreneurship by gender in each council area.

On average female TEA rates over the 2016-2018 period are around half the male TEA rate although the ratios vary from 27% in Armagh, Banbridge and Craigavon to 91% in Ards and North Down.



**Figure 4.3: Total early-stage Male and Female Entrepreneurial Activity in Northern Ireland by Council Area, combined over 2016-2018** (Source: GEM APS)

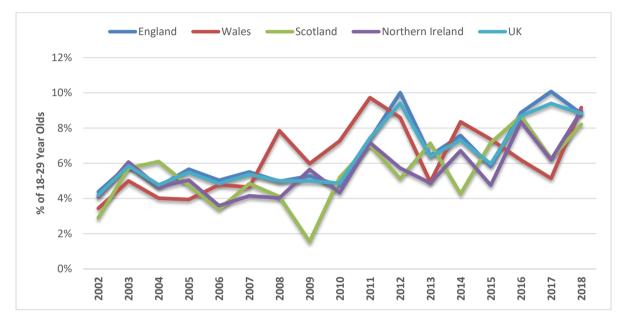
#### 4.2 Age

Figure 4.4 shows TEA rates by age combined over the 2016-18 period. In the UK individuals aged between 25 and 34 typically have higher rates of early-stage entrepreneurial activity than other groups. In fact, the TEA rate for that age group is statistically significantly higher than that for those aged 18-24 and over 45 (Figure 4.4). In Northern Ireland the difference across age-bands is also particularly stark, with a significantly higher share of those aged 25-34 years old engaged in early stage entrepreneurial activity than those aged 35 and over.



**Figure 4.4: Total early-stage Entrepreneurial Activity in the UK Home Nations, 2016-2018** (Source: GEM APS)

An alternative analysis is to assess how the TEA rate has changed in the 18 to 29 age group over time compared to the 30 to 64 age group. Figures 4.5 and 4.6 show that since 2010 entrepreneurial activity for 18-29 years olds has been relatively more volatile than for 30-64 year olds. This was particularly the case for Northern Ireland whereby the TEA rate for 30-64 years olds was relatively stable over the period compared to the more changeable rate for the younger age group.



**Figure 4.5: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18-29 year olds, 2002 to 2018** (Source: GEM APS)

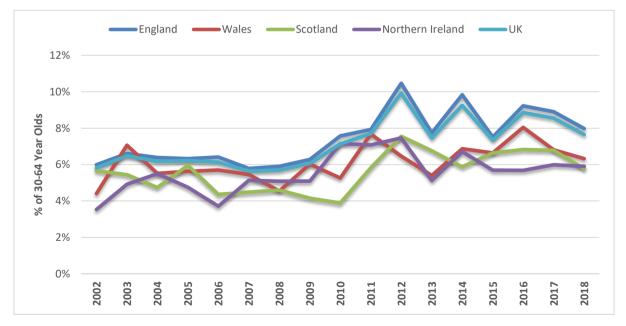
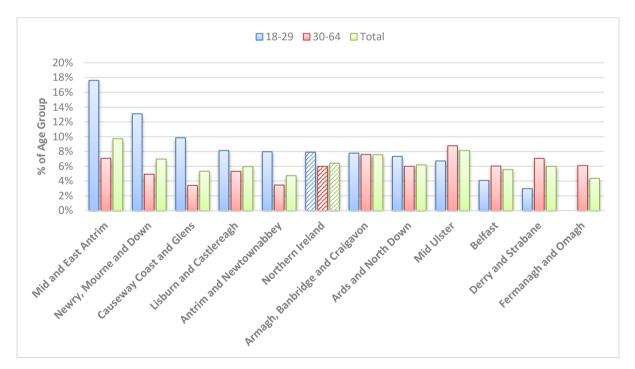


Figure 4.6: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 30-64 year olds, 2002 to 2018 (Source: GEM APS)

In 2018 there were no statistically significant differences in the TEA rates across the home nations in either the 18-29 age group or for those aged 30-64. There was also no difference in the TEA rates between the two age groups.

The average TEA rate for those aged 18-29 in the UK in 2018 was 8.8%; this was at least double that of 2002. In 2018 the UK TEA rate for 30-64 year olds was 7.7%; the increase since 2002 was much smaller for this age group, with a typical increase of around 2 percentage points.

Total early-stage entrepreneurial activity by these broad age groups is plotted in Figure 4.7 for the Council areas, combined over 2016-18<sup>5</sup>. For Northern Ireland as a whole there is little difference in the TEA rates of the two age groups with a rate of 7.9% for 18-29 year olds and 6.0% for 30-64 year olds. Figure 4.7 plots the series in descending order for 18-29 year olds and despite the wide variation in the rates the differences are not significant. Likewise for the 30-64 age group across council areas.



**Figure 4.7: Total early-stage Entrepreneurial Activity in Northern Ireland by Age and Council Area, combined over 2016-2018** (Source: GEM APS)

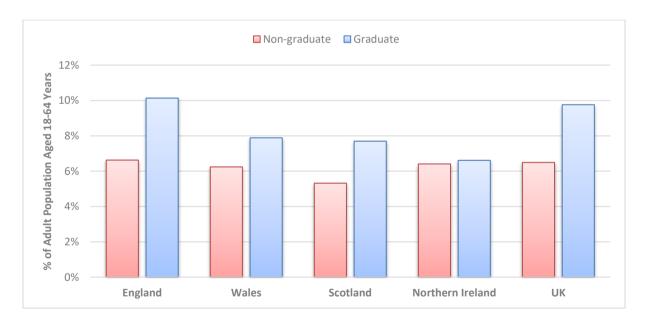
<sup>&</sup>lt;sup>5</sup> Note that due to small sample sizes it was not possible to calculate a TEA rate for 18-29 year olds in Fermanagh and Omagh.

Along with Antrim and Newtownabbey the top three Council areas all have TEA rates for 18-29 year olds that are more than twice the rate for 30-64 year olds although these are not statistically significant differences. Mid Ulster, Belfast and Derry and Strabane are the only council areas where the TEA rates for 30-64 year olds exceeds that of the 18-29 year olds.

#### 4.3 Education

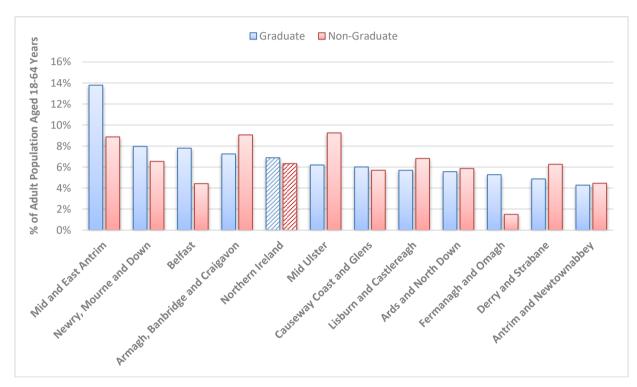
The rate of total early-stage entrepreneurial activity for graduates in the UK in 2018 is 9.8% (Figure 4.8), significantly higher than for non-graduates (6.5%). Graduate TEA rates in England are also significantly higher than non-graduates.

The comparable rate for graduates currently residing in Northern Ireland is 6.6% which is not significantly higher than the TEA rate for non-graduates (6.4%). The rates in Wales and Scotland are also not significantly different between graduates and non-graduates.



**Figure 4.8: Total early-stage Entrepreneurial Activity in the UK Home Nations by Graduate Status, 2018** (Source: GEM APS)

The graduate and non-graduate TEA rates by Council area are shown in Figure 4.9 for the combined 2016-18 period. For Northern Ireland there was little difference in the rates, with an overall non-graduate TEA rate of 6.3% and a graduate TEA of 6.9%. Despite the gaps, there were no significant differences in TEA rates between graduates and non-graduates in the 11 district councils. The TEA rate for non-graduates in Fermanagh and Omagh, at 1.5%, was the only rate significantly lower than the NI average.



**Figure 4.9: Total early-stage Entrepreneurial Activity in Northern Ireland by Graduate Status and Council Area, combined over 2016-2018** (Source: GEM APS)

#### 4.4 Migrant Status

Figure 4.10 presents TEA rates for regional in-migrants<sup>6</sup>, immigrants and life-long residents in Northern Ireland, using 3 year rolling averages. As life-long residents comprise the majority of the population, their trend typically mirrors the overall Northern Ireland average. Entrepreneurial activity peaked at just under 7% for this group over 2010-12 although it has been relatively stable at just under 6% since. The TEA rate for in-migrants continued to rise post-2008 peaking at over 8% in 2014-16, although it has since fallen back towards 7%. The TEA rate for immigrants has seen the largest increase over the entire period, with a particularly rapid rise since 2013-15. Entrepreneurial activity for immigrants over the 2016-18 period is now three times higher than it was during 2003-05 and is almost twice as high as the rate for life-long residents. In the UK immigrants have typically been found to be more entrepreneurial than the resident population although 2018 saw a discontinuation in this trend, potentially due to the Brexit-led uncertainty around their status.

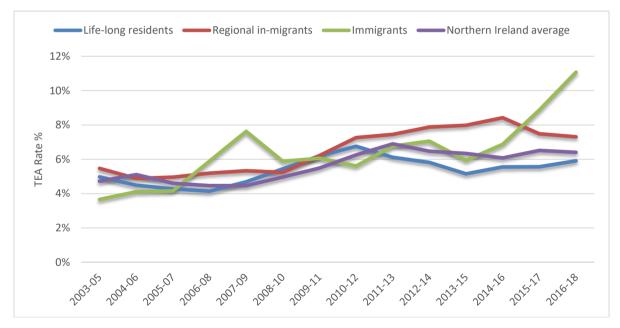


Figure 4.10: Total early-stage Entrepreneurial Activity in Northern Ireland by Migrant Status, rolling averages 2003-05 to 2015-2018 (Source: GEM APS)

<sup>&</sup>lt;sup>6</sup> Regional in-migrants are defined as those born in the UK but currently residing in a different Government Office Region to which they were born.

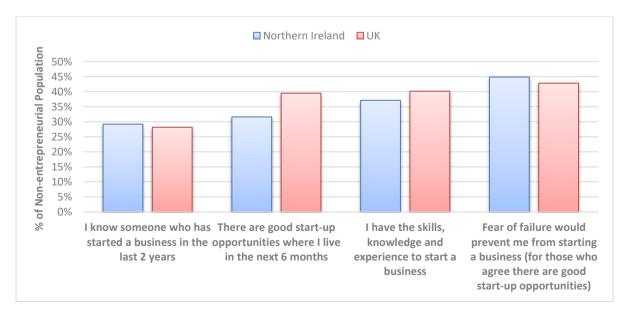
The sample sizes for the ethnic population in NI are too small to produce reliable estimates for entrepreneurial activity rates by ethnicity. However, combining the entire 2002-2018 results gives an average TEA rate of 5.2% for the white population and 7.3% for the non-white population, with no significant difference between the two.

# **5** 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.

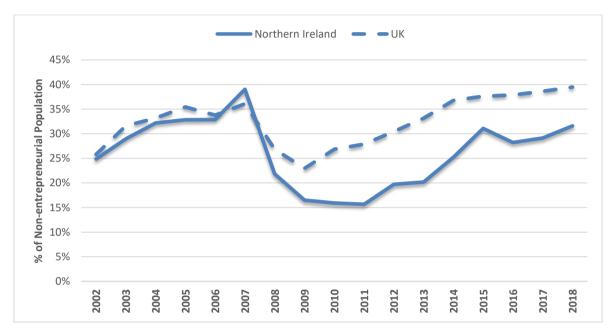
Individuals who are entrepreneurs may feel compelled to provide positive answers in the Adult Population Survey (APS). Hence, as in the last number of years, we report attitudinal data only for that portion of the population who are not already entrepreneurs.

In Northern Ireland, over one in four (29.2%) individual's state that they know an entrepreneur (Figure 5.1), this figure is not significantly different to 2017, nor to that in the UK. Reversing the trend of previous years similar proportions in Northern Ireland and the UK, around two fifths, also feel they have the skills, knowledge and experience to start a business. Where Northern Ireland attitudes are less favourable to the UK is in the perception of start-up opportunities; the percentage shares in Northern Ireland are significantly lower than the UK. There is no difference however in fear of failure for those recognising opportunities for start-up.



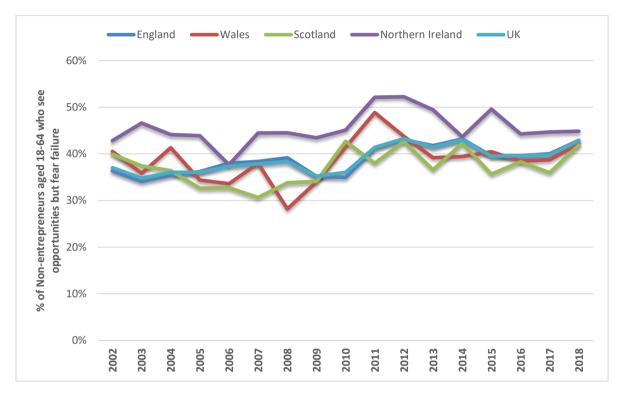
**Figure 5.1: Entrepreneurial Attitudes and Perceptions in Northern Ireland and the UK 2018** (Source: GEM APS)

In the 2018 survey, 31.6% 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 to 39.5% in the UK (Figure 5.2). Prior to the recession, opportunity perception in Northern Ireland and the UK were similar however a significant difference has since opened between the two and continues to prevail.



**Figure 5.2: Perception of Start-up Opportunities in Northern Ireland and the UK, 2002-2018** (Source: GEM APS)

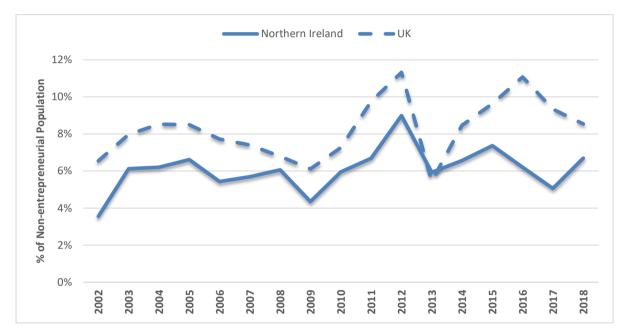
Around 45% of those who see good opportunities in their local area in the next 6 months in Northern Ireland state that fear of failure would prevent them from starting a business. Unlike in previous years there is no significant difference in this measure between Northern Ireland and the UK. Figure 5.3 further shows that the fear of failure rate in Northern Ireland has declined from a peak of over 50% in 2011-12.



**Figure 5.3: Fear of Failure among those who see Opportunities in the UK Home Nations, 2002-2018** (Source: GEM APS)

Looking to the future, the proportion of non-entrepreneurial working age adults in Northern Ireland in 2018 who expect to start a business within the next three years is 6.7% (Figure 5.4). This is not significantly different to the UK estimate of 8.5%.

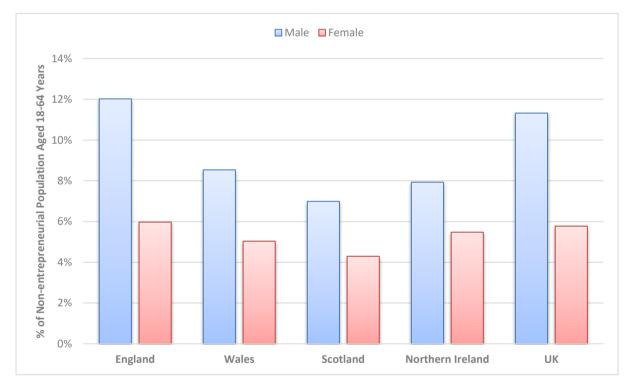
Figure 5.4 shows the increase in start-up intention rates during the recession and the subsequent decline as the economy recovered. Northern Ireland's rate has diverged from the UK in recent years and in 2018 the rates in both areas are lower than their respective peak in 2012.



**Figure 5.4: Future Start-up Expectations (within 3 years) in Northern Ireland and the UK, 2002-2018** (Source: GEM APS)

In 2018 males in the UK, England and Wales are significantly more likely than females to report that they intend to start a business in the next three years. There is no significant difference in the intention rates between the genders in either Wales or Northern Ireland (Figure 5.5).

In 2018, 5.5% of females in Northern Ireland expect to start a business compared to 7.9% of males. Translated into a female to male ratio this equates to 69%; considerably higher than the UK average of 50%. If future intention rates translated into actual start-ups the gap between male and female early stage entrepreneurial activity in Northern Ireland would narrow to match the UK trend.



**Figure 5.5: Future Start-up Expectations (within 3 years) in the UK Home Nations by Gender, 2018** (Source: GEM APS)

# 6 High Growth

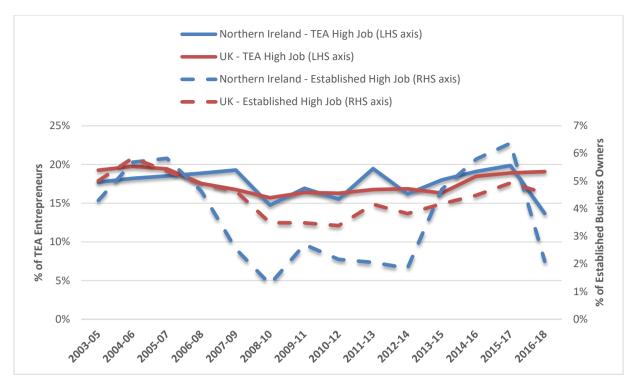
Recent research has suggested that a relatively small number of firms can create a disproportionate number of jobs<sup>7</sup>. If an entrepreneur expects to create a large number of jobs then his or her potential contribution to growth and regeneration through entrepreneurship may be greater.

To identify such individuals GEM generates a variable which measures the percentage of all early-stage entrepreneurs (and separately established business owners) who expect to create more than ten jobs with a growth of more than 50% in the next five years. Figure 6.1 displays the trend in these high growth expectation entrepreneurs for both Northern Ireland and the UK, using 3 year rolling averages. High growth expectation rates amongst TEA entrepreneurs (measured by the left hand axis) in the UK are around four times higher than those for established business owners (measured by the right hand axis) although in Northern Ireland the ratio has been higher.

Between 2003-17 high expectation rates were broadly similar for Northern Ireland and UK TEA entrepreneurs, with an average of 18%, in both areas, over the entire period. The 2016-18 period saw a divergence with high expectation in Northern Ireland dropping to around 14% while the UK rate remained stable.

The trend in high growth expectation for established business owners has been less consistent over time. Until 2006-08 the share reporting high job expectation averaged around 5% in both Northern Ireland and the UK. During the recession the rate in Northern Ireland dropped to around 2% and stayed at half the UK rate until 2012-14. There was a dramatic increase in the high job expectation rates of Northern Ireland established business owners thereafter but this has again reverted to 2% over 2016-18 while the UK rate has remained relatively stable.

<sup>&</sup>lt;sup>7</sup> Hart, M. and Anyadike-Danes, M. (2014) "Moving on from the vital 6%"; Enterprise Research Centre Insight Report, February



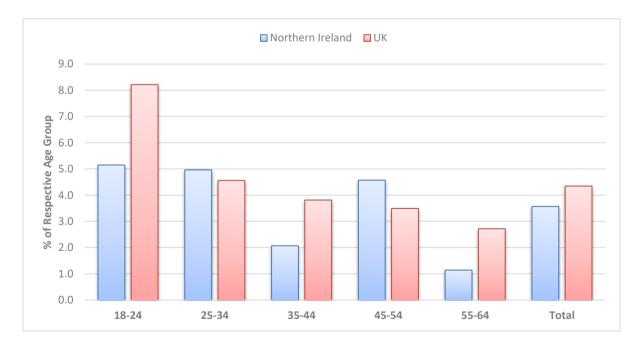


# 7 The Gig Economy

There has been a recent rise in the number of people working in the gig economy, including in temporary contracts typical of internet platform-based services (such as Uber and Deliveroo). People can be employed elsewhere whilst working in the gig economy and it may offer the flexibility and income needed by nascent or new entrepreneurs while they start-up their own business. In 2018 GEM included questions about the gig economy in the survey for the first time.

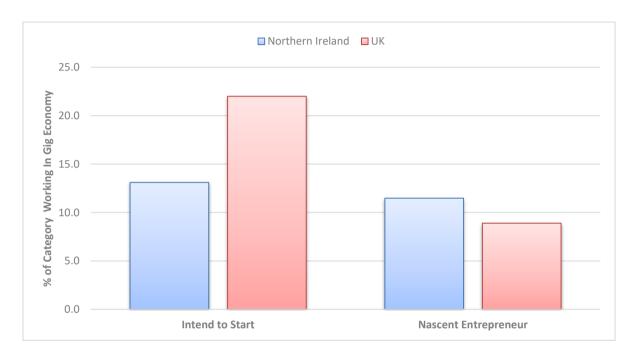
In Northern Ireland in 2018 3.6% of the adult population participate in the gig economy, not significantly different to the UK figure of 4.3%. More than twice as many males as females are gig workers in Northern Ireland, at 5.5% and 1.7% respectively. There is a similar gap in the UK with equivalent rates of 6.0% and 2.7%.

In the UK younger people aged 18-24 are significantly more likely to work in the gig economy than those in all other age groups. In Northern Ireland there is no significant difference across age groups (Figure 7.1).



**Figure 7.1: Participation in the Gig Economy in NI and the UK by age group 2018** (Source: GEM APS)

Figure 7.2 shows the rates of participation in the gig economy in NI and the UK amongst nascent entrepreneurs and those intending to start a business. In the UK participation in the gig economy is more prevalent amongst those intending to start a business than those in the early start-up stages. In Northern Ireland there is little difference between the two with around 12% of those either intending to start or who are in the first few months of starting (nascent entrepreneurs) working in the gig economy.



**Figure 7.2: Participation in the Gig Economy by Future and Nascent Entrepreneurs in NI and the UK 2018** (Source: GEM APS)

### 8 Funding

Obtaining funding is a key issue for many start-up businesses. Combining data for 2015-18 (Table 8.1) shows that in Northern Ireland just over half of all nascent entrepreneurs expected to self-fund, similar to the UK figure. Compared to the UK, around half the share in Northern Ireland, 3%, expect that they will not need any funding, and half as many expect that they personally will fund none of the start-up costs. Of those expecting funding from elsewhere, close family members and banks are most favoured in Northern Ireland followed by government programmes. In the UK bank funding ranks highest. One in ten nascent entrepreneurs expect funding from private investors or venture capital in Northern Ireland, slightly less than the UK figure. Around 6%, in both areas, expect to raise funds from online crowdfunding.

Type of Funding Expected	Northern Ireland %	UK %	
No funding needed	3.0	5.8	
All funded by entrepreneur	51.7	48.0	
None funded by entrepreneur	0.8	1.6	
Sources of Funding			
Close family member (spouse, parent, sibling)	16.7	18.5	
Other relatives, kin or blood relations	7.5	6.3	
Employer or work colleagues	5.1	4.8	
Private investor or venture capital	10.4	14.4	
Friends or neighbours	3.8	6.8	
Banks or other financial institutions	15.1	21.6	
Government programmes, donations or grants	11.6	20.2	
Online crowdfunding	5.8	6.5	
Any other source	6.2	8.3	

**Table 8.1: Percentage of nascent entrepreneurs expecting funding from differentsources 2015-18** (Source: GEM UK APS 2015-2018)

The finding above that most nascent entrepreneurs in Northern Ireland expect to source funding primarily from family coincides with the pattern of informal investment, or investment by individuals in other people's new businesses in the last three years, as shown in Table 8.2. The informal investment rate over the combined 2015-2018 period stood at 2.1% in Northern Ireland, a similar share to the UK. Investment into companies owned by close family was the most common investment choice in Northern Ireland and, at around 60%, was twenty percentage points higher than the UK share. Consequently, Northern Ireland had lower shares investing in friends, neighbours or strangers' businesses, potentially suggesting a lower level of angel investment in the region than in the UK.

Informal investment rate	Northern Ireland %	UK %	
% aged 18-64 who have invested in someone else's new business in the last 3 years	2.1	2.8	
Relationship of latest investee (% of latest investments)			
Close family member (spouse, parent, sibling) Other relative, kin or blood relations	57.0	38.8	
Work colleague	3.5	4.9	
Friend or neighbour	21.2	33.9	
A stranger with a good business idea	11.0	17.5	
Other	3.4	3.1	

**Table 8.2: Percentage of individuals aged 18-64 who have invested in someone else's new business in the last 3 years, and the distribution of relationships to the latest investee, 2015-18** (Source: GEM APS 2015-18)

### 9 Concluding Observations

Levels of entrepreneurial activity are a vital sign of any economy as the creation of new ventures is positively connected to the drivers of economic growth and productivity through increased innovation, competition and job creation. While recent years have seen record levels of start-up in the UK in an international context there still remains an 'entrepreneurial deficit' in Northern Ireland, as measured by business start-up activity. In the 12 months to the Spring/Summer of 2018 there was no change in the overall entrepreneurial activity rate of Northern Ireland whilst the combined Northern Ireland rate for 2016-18 was significantly lower than the UK.

Northern Ireland has historically lagged behind the rest of the UK in terms of enterprise startup activity. It also still lags the UK in terms of some of the attitudinal measures of entrepreneurship, particularly in the perception of start-up opportunities in the local area and in self-perception of skills to start a business. In recent years the share perceiving good opportunities for start-up had been increasing in Northern Ireland however the gap with the UK that opened in 2008 has persisted to 2018. As a result, perceptions of opportunity to start a business are now at a higher rate in the UK than those observed pre-recession. In Northern Ireland the rates are still lower than those previously recorded.

Despite this, and on a more positive note, similar proportions in Northern Ireland and the UK state that they know someone that started a business. This may reflect the increased presence of entrepreneurs in society and/or may be a sign of increased networking. Additionally, fear of failure which has also historically been higher in Northern Ireland is, in 2018, not significantly different to the UK figure.

Typically, where Northern Ireland performs well is in the reported rates of future high job expectation. Over 2016-18 the rates in Northern Ireland dropped below those in the UK for both early-stage entrepreneurs and established business owners. This decline, if it persists, has implications for growth in the economy in the short to medium-term. This is important as the attention in UK enterprise policy turns to address the long-established weakness of the number of businesses that grow. Stimulating start-ups is important but providing a support framework from both the private and public sector to help them survive and grow is a crucial element of

any developing policy framework. Both the UK Industrial Strategy White Paper and the Northern Ireland draft Industrial Strategy stress the importance of growth and set out the Government's intention to support high potential businesses to scale up. This will help rebalance the focus from the encouragement of an increased number of start-ups, the majority of whom fail quickly or survive and exhibit very little growth, to the support of businesses with the ambition and potential to grow.

# 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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