

# **Global Entrepreneurship Monitor**

**Northern Ireland Report 2019** 

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# **Main Findings**

The Global Entrepreneurship Monitor (GEM) is an international project which seeks to provide information on the entrepreneurial landscape of 50 countries in 2019. This is important as 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 entrepreneurial benchmarking indicators by regional and national authorities around the world. The sample size in Northern Ireland in 2019 was 587 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 2019 is 6.6%, a slight increase from 2018. The 2019 rate compares to a figure of 9.9% in the UK overall, 10.5% in England, 7.0% in Wales, and 7.2% in Scotland.
- The TEA rate in Northern Ireland in 2019 is significantly lower than the UK and England. This result is confirmed when the rates are combined over 2017-19.
- The female TEA rate in Northern Ireland in 2019 is 3.1% compared to a male rate of 10.1%. This gap between females and males is the highest amongst the UK nations.
- TEA rates tend to vary by age with those aged over 30 generally more likely to be engaged in entrepreneurial activity. In 2019, those aged between 25-34 in Northern Ireland were the most entrepreneurial.
- 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. In 2017-19, Lisburn and Castlereagh is the only council area in which the female TEA rate is significantly lower than the male rate.
- Just under one third of the non-entrepreneurial working age population perceive good start-up opportunities locally in Northern Ireland in 2019. The UK rate, which is nearly 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 8.3% in 2019. There remains a

gap between Northern Ireland and the UK regarding intention to start a business, however in 2019 rates in both areas increased towards their previous peaks.

- In the UK just one in five early-stage business owners expect to achieve high growth (i.e. to more than ten jobs with a growth in employment of more than 50% in the next five years), with the rate in Northern Ireland just below this at 17%.
- Motivation to start a business can be varied and more multi-faceted than the previous opportunity and necessity measures reveal. As a result, GEM also measures motivation to start a business across four main categories, they are: to make a difference in the world; to build great wealth or a very high income; to continue a family tradition; or to earn a living because jobs are scarce.
- In both Northern Ireland and the UK, starting a business to continue a family tradition is the least motivating factor, and is significantly lower than all other reasons. More than half of early-stage entrepreneurs in Northern Ireland were motivated by making a difference, building wealth and seeking to earn a living. None of the motivation factors were significantly different between Northern Ireland and the UK.

# 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 2019 the Department for the Economy and Invest NI 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 342,000 respondents to GEM UK surveys for the period 2002-2019, around 41,500 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 subpopulations 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 the 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 2019, GEM Global conducted surveys in 50 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.

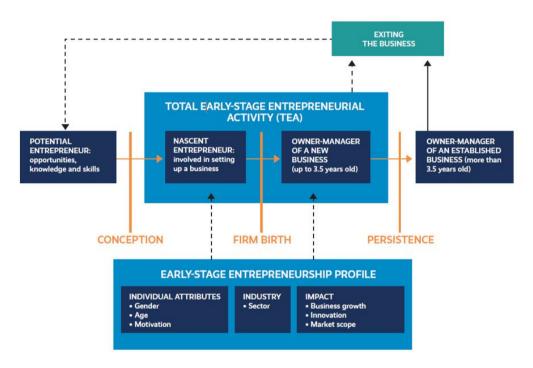
The 2019 the GEM Global study was based on an analysis of adult population survey (APS) results from 50 economies. The core of the APS is identical in each country and asks respondents about their attitudes towards entrepreneurship; whether they are involved in some form of entrepreneurial activity, and if so, about their aspirations for their business. The global GEM Executive 2019/20 Report was published in March 2020<sup>1</sup> and can be downloaded from GEM website.

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., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J. and Tarnawa, A., (2020) Global Entrepreneurship Monitor 2019/20 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 owner-manager 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, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J. and Tarnawa, A., 2020, pg.26)

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

<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.

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 2019 adult population survey are explained in more detail in the GEM UK 2019 report (GEM website). 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 2019 and the analysis of the seventeen years of GEM data (2002-19).

# 3. Total Early-Stage Entrepreneurial Activity

The rate of early-stage entrepreneurship in Northern Ireland in 2019 was 6.6%. This compares to 9.9% in the UK overall, 10.5% in England, 7.2% in Scotland and 7.0% in Wales. The TEA rates in England and the UK were statistically significantly higher than in the other home nations in 2019 (Figure 3.1). Pooling the data over the most recent three years (2017-19), to remove annual fluctuations, gives a TEA rate of 6.5% for Northern Ireland. This rate, along with that in Scotland and Wales (6.7% each) is significantly lower than the rate of 9.2% in England and 8.7% in the UK.

Overall, the TEA rate of 6.6% in Northern Ireland in 2019 equates to around one in every fifteen adults aged 18-64, or over 74,500 individuals, engaged in early-stage entrepreneurial activity, around 70% of whom were in the very early stages of starting a business (nascent entrepreneurs: 4.5%) and the remainder those who had a new business which was between 3 and 42 months old (2.2%).

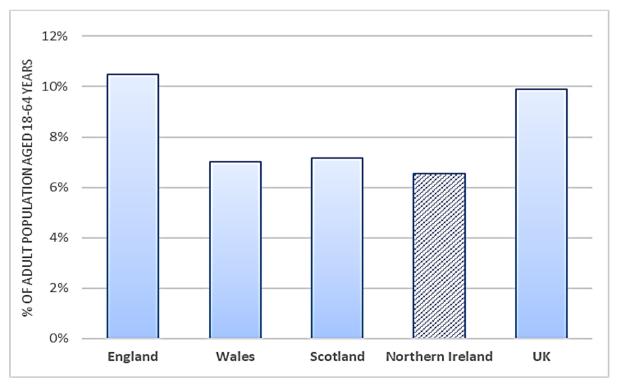
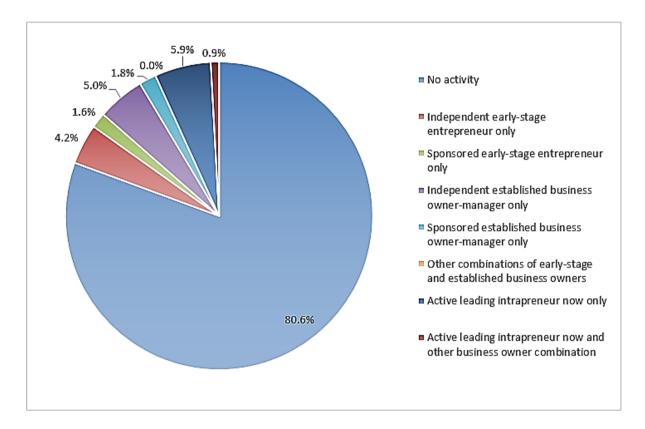


Figure 3.1: Total early-stage Entrepreneurial Activity (TEA) in the UK Home Nations 2019 (Source: GEM APS)

Figure 3.2 further breaks down entrepreneurial activity into a more refined categorisation which includes entrepreneurial employees (intrapreneurs) and separates early-stage and established entrepreneurs into those who are independent, and those whose business is sponsored by their employer. The majority of active entrepreneurs are within three categories, the "Independent early-stage entrepreneur only", "Independent established business ownermanager only" and "Active leading intrapreneur now only" categories with over 4% of the population in each. This pattern is similar to the UK.



**Figure 3.2: Modes of Entrepreneurial Activity in Early-stage and Established Businesses** (Source: GEM APS 2002-19)

Entrepreneurial activity in both the UK and Northern Ireland has been on an upward trend over the long-term 2002-19 period (Figure 3.3). Although there has been a gap in the level of early-stage entrepreneurial activity between Northern Ireland and the UK this narrowed over the 2008/09 recession. Since 2011 a gap of around 2-3 percentage points has re-opened between the two, widening to over 3 percentage points in 2019 due to the increase in UK activity.

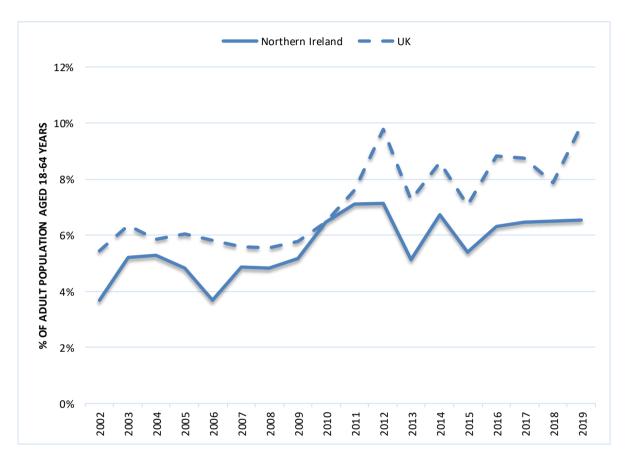


Figure 3.3: Total early-stage Entrepreneurial Activity in Northern Ireland and the UK 2002-2019 (Source: GEM APS 2002-19)

Analysing annual TEA rates in Northern Ireland Council areas can be problematic due to small sample sizes in localised areas. Pooled analysis over periods of time helps remove this variability by averaging out random annual fluctuations. Figure 3.4 presents TEA rates over the entire 2003-2019 period. 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 4.2%; the difference between the two is statistically significant. Belfast's rate of 4.5% lies below the Northern Ireland average, the difference is also statistically significant. Belfast's rate is also significantly lower than that for both Mid Ulster, and Armagh, Banbridge and Craigavon.

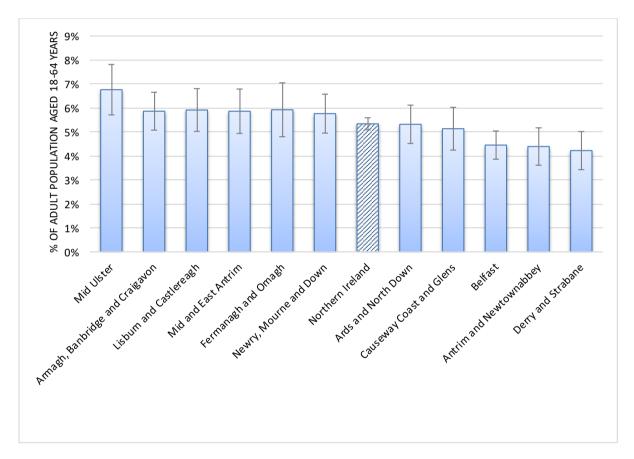


Figure 3.4: Total early-stage Entrepreneurial Activity in Northern Ireland in 2003-2019 by Council Area, with 95% confidence intervals<sup>4</sup> (Source: GEM APS 2003-19)

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<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.

Figure 3.5 displays the trend by Council area using 3 year rolling averages, rather than combined data, from 2002-04 to 2017-19. There was little variation in entrepreneurial activity rates across Council areas in the decade to 2010, with rates for some areas diverging thereafter. Entrepreneurial activity surged in the Mid Ulster Council area while more recently Mid and East Antrim has had the largest increase and continues to outpace all other areas. In 2017-19 the average TEA rate for Mid and East Antrim was 10.6% compared to a Northern Ireland average of 6.5%.

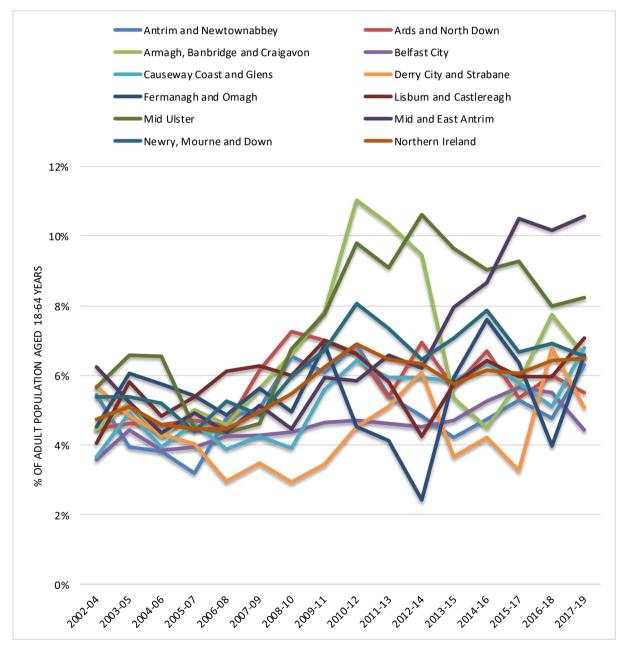


Figure 3.5: Total early-stage Entrepreneurial Activity in Northern Ireland by Council Area, rolling averages 2002-2004 to 2017-2019 (Source: GEM APS)

otivation to start a business can be varied and more multi-faceted than the previous opportunity and necessity measures revealed. As a result, GEM now measures motivation to start a business across four main categories, rather than the previous binary approach, they are: to make a difference in the world; to build great wealth or a very high income; to continue a family tradition; or to earn a living because jobs are scarce. In both Northern Ireland and the UK, starting a business to continue a family tradition is the least motivating factor, and is significantly lower than all other reasons (Figure 3.6). More than half of early-stage entrepreneurs in Northern Ireland were also motivated by making a difference, building wealth and to earn a living. None of the motivation factors were significantly different between Northern Ireland and the UK<sup>5</sup>.

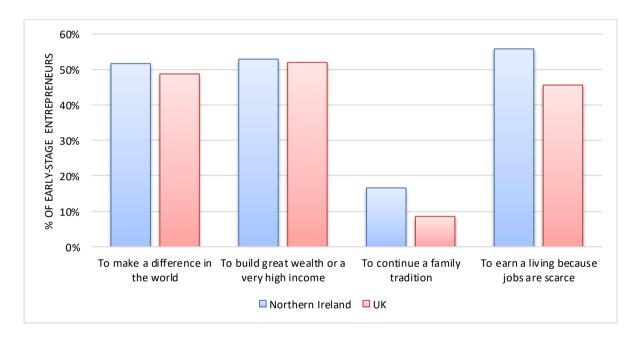


Figure 3.6: Motivation for Early-stage Entrepreneurship in Northern Ireland and the UK 2019 (Source: GEM APS)

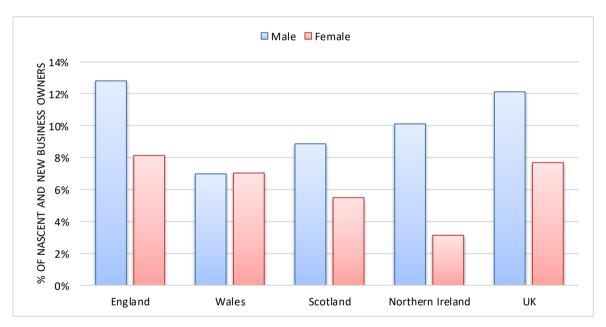
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<sup>&</sup>lt;sup>5</sup> Caution is urged in interpreting these results due to the small sample sizes in Northern Ireland.

# 4. Who are the Entrepreneurs in Northern Ireland?

#### 4.1 Gender

In 2019 males in the UK have a significantly higher TEA rate than females, at 12.1% compared to 7.7%. Significant differences in rates are also found in Northern Ireland and England (Figure 4.1). In contrast to previous years the male and female TEA rates in Wales are identical, although caution must be urged in one-year point estimates due to sampling variability. In Northern Ireland not only is there a significant difference in the TEA rates between males and females, the gap is also wider than all other home nations, with a male TEA rate of 10.1% compared to a female rate of 3.1%.



**Figure 4.1: Total early-stage Entrepreneurial Activity in the UK Home Nations in 2019** (Source: GEM APS)

For the UK as a whole the TEA rates translate into a female to male early-stage entrepreneurship ratio of 63%, England and Scotland have similar ratios at 63% and 62% respectively. Northern Ireland has the lowest ratio at 31% due to the lower than average female entrepreneurial activity rate of 3.1%; a rate that is significantly lower than the corresponding female rates in England and the UK.

Annual ratios in female to male entrepreneurial activity can vary, for example, previous ratios for the UK have been around 50%, with twice as many male entrepreneurs as females. Using

the long run average ratios from 2002-19, to get a longer perspective, suggests a ratio of 38% in Northern Ireland compared to 49% in England, 53% in Wales and 54% 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.

Comparing female TEA rates in Northern Ireland with the UK over the long term shows a longstanding gap (Figure 4.2). This narrowed somewhat during the recession but diverged strongly as the economy recovered during 2011/12. The gap between the two rates persists in 2019, with a diverging and statistically significant difference emerging due to an increase in the UK rate and a flattening trend for Northern Ireland.

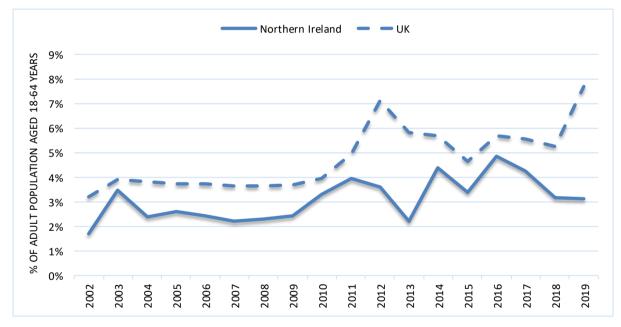


Figure 4.2: Total Early-stage Female Entrepreneurial Activity in Northern Ireland and the UK, 2002-2019 (Source: GEM APS)

Figure 4.3 shows TEA rates for males and females by Council area over the 2017-19 period combined<sup>6</sup>. 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, in that those areas with the highest male rates do not also have the highest

<sup>&</sup>lt;sup>6</sup> Note that due to small sample sizes it was not possible to provide female estimates for Antrim and Newtownabbey or Fermanagh and Omagh.

female rates. This suggests differing opportunities for entrepreneurship by gender in each council area.

On average female TEA rates over the 2017-19 period are around two fifths the male TEA rate although the ratios vary from 14% in Lisburn and Castlereagh to 77% in Causeway Coast and Glens. Lisburn and Castlereagh is the only council area in which the female TEA rate is significantly lower than the male rate.

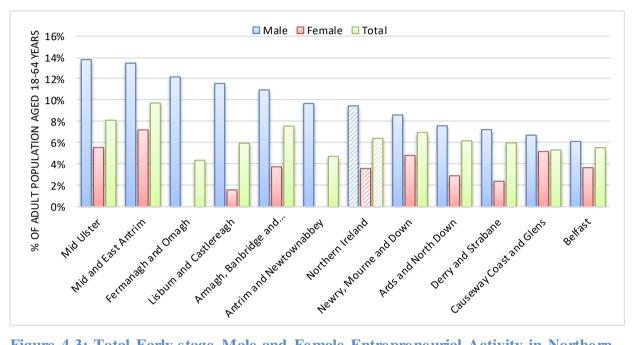


Figure 4.3: Total Early-stage Male and Female Entrepreneurial Activity in Northern Ireland by Council Area, combined over 2017-2019 (Source: GEM APS)

### **4.2** Age

Figure 4.4 shows TEA rates by age combined over the 2017-19 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 for all other age groups (Figure 4.4). In Northern Ireland the entrepreneurial activity rate of those aged 25-34 years old is only significantly different from those aged 55-64.

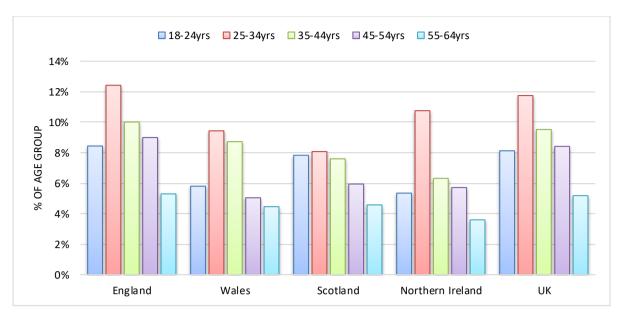


Figure 4.4: Total early-stage Entrepreneurial Activity in the UK Home Nations, 2017-2019 (Source: GEM APS)

An alternative analysis by age 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 for both age groups, rates in England are driving the UK trends and are diverging from the other home nations, particularly in the 30-64 age group. In Northern Ireland rates for both have increased over time with entrepreneurial activity for 30-64 year olds higher than that for 18-29 year olds over 2017-19.

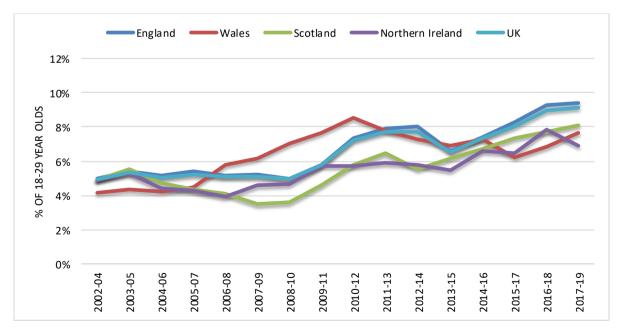


Figure 4.5: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18-29 year olds, rolling averages 2002-4 to 2017-19 (Source: GEM APS)

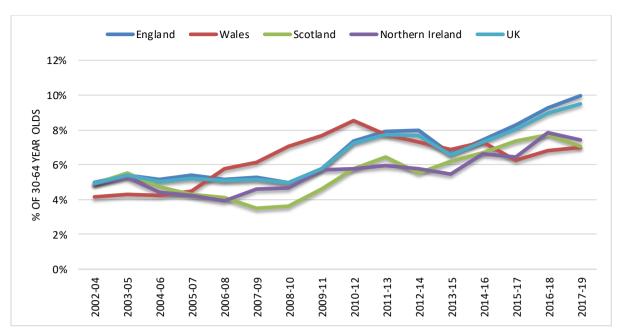


Figure 4.6: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 30-64 year olds, rolling averages 2002-04 to 2017-19 (Source: GEM APS)

Total early-stage entrepreneurial activity by these broader age groups is plotted in Figure 4.7 for the Council areas, combined over 2017-197. For Northern Ireland as a whole there is little difference in the TEA rates of the two age groups with a rate of 6.2% for 18-29 year olds and 6.5% 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.

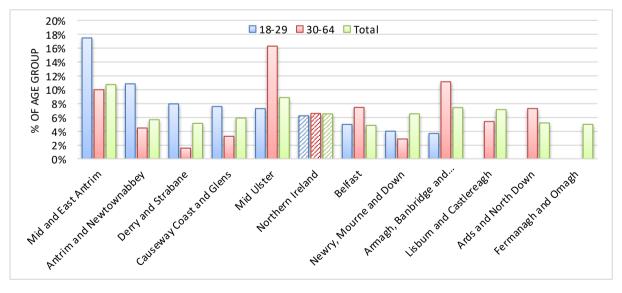


Figure 4.7: Total early-stage Entrepreneurial Activity in Northern Ireland by Age and Council Area, combined over 2017-2019 (Source: GEM APS)

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<sup>&</sup>lt;sup>7</sup> Note that due to small sample sizes it was not possible to calculate TEA rates for 18-29 year olds in Lisbum and Castlereagh, Ards and North Down or Fermanagh and Omagh, nor the TEA rate for 30-64 year olds for Fermanagh and Omagh.

#### 4.3 Education

The rate of total early-stage entrepreneurial activity for graduates in the UK in 2019 is 11.9% (Figure 4.8), significantly higher than for non-graduates (8.2%). Graduate TEA rates in England are also significantly higher than non-graduates, at 12.6% and 8.6% respectively.

The comparable rate for graduates currently residing in Northern Ireland is 6.7% 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.

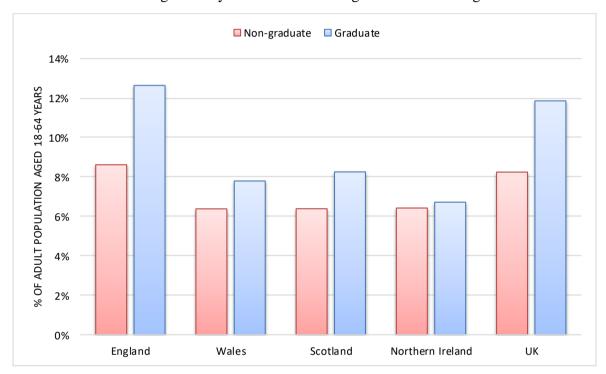


Figure 4.8: Total early-stage Entrepreneurial Activity in the UK Home Nations by Graduate Status, 2019 (Source: GEM APS)

The graduate and non-graduate TEA rates by Council area, for the combined 2017-19 period, are shown in Figure 4.9. For Northern Ireland there was little difference in the rates, with an overall non-graduate TEA rate of 6.1% and a graduate TEA of 7.1%. There were also no significant differences in TEA rates between graduates and non-graduates in the 11 district councils.

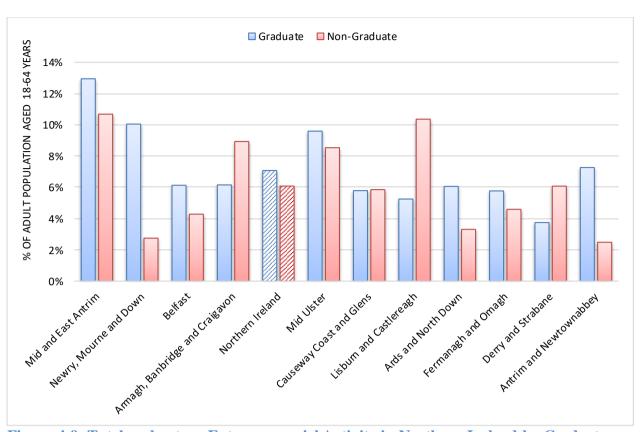


Figure 4.9: Total early-stage Entrepreneurial Activity in Northern Ireland by Graduate Status and Council Area, combined over 2017-2019 (Source: GEM APS)

### 4.4 Migrant Status

Figure 4.10 presents TEA rates for regional in-migrants<sup>8</sup>, immigrants and life-long residents in Northern Ireland, using 3 year rolling averages. As life-long residents comprise the majority of the population, the Northern Ireland average typically mirrors their trend. Entrepreneurial activity peaked around 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 with the rate in 2017-19 peaking at almost 9%. The TEA rate for immigrants has seen the largest increase over the entire period, with a particularly rapid rise from 2013-15 onwards. Entrepreneurial activity for immigrants over the 2017-19 period is now three times higher than it was during 2003-05 and is more than double the rate for life-long residents. In the UK immigrants have also typically been found to be more entrepreneurial than the resident population, driven by opportunity rather than necessity motivations.

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 $<sup>^8</sup>$  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.

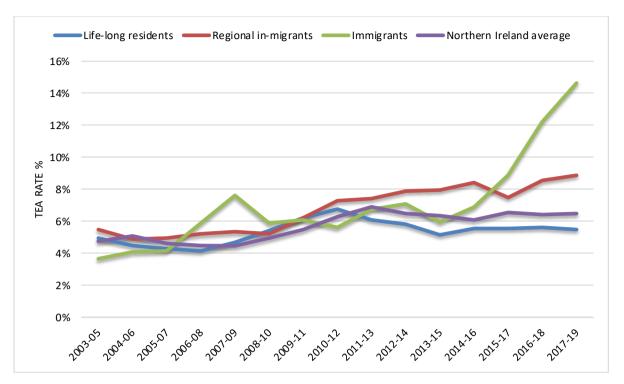


Figure 4.10: Total early-stage Entrepreneurial Activity in Northern Ireland by Migrant Status, rolling averages 2003-2005 to 2015-2018 (Source: GEM APS)

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 2002-2019 results gives an average TEA rate of 5.2% for the white population and 7.7% 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<sup>9</sup>, 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 two fifths (43.4%) of individuals state that they know an entrepreneur (Figure 5.1): this figure is not significantly different from the 46.1% share in the UK. Reversing the trend of previous years, similar proportions in Northern Ireland and the UK around half of the non-entrepreneurial population - feel they have the skills, knowledge and experience to start a business. Northern Ireland attitudes are less favourable to the UK in the perception of start-up opportunities; at 30.9% the percentage share in Northern Ireland is significantly lower than the UK (39.1%). There is no difference however in fear of failure for those recognising opportunities for start-up.

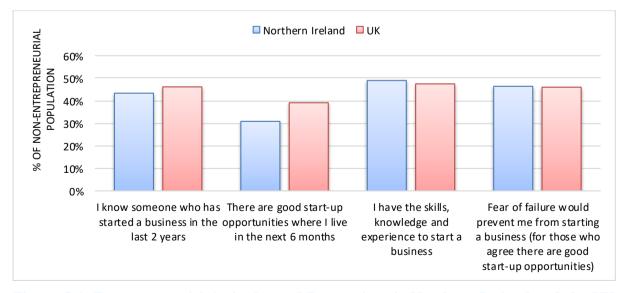


Figure 5.1: Entrepreneurial Attitudes and Perceptions in Northern Ireland and the UK 2019 (Source: GEM APS)

<sup>&</sup>lt;sup>9</sup> Note that the wording of this question has changed in 2019 so rates are not comparable with previous years.

As identified above, 30.9% of the non-entrepreneurial working age population in Northern Ireland agreed that there were good opportunities for starting a business in their local area in the next six months compared to 39.1% 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-up between the two and continues to prevail.

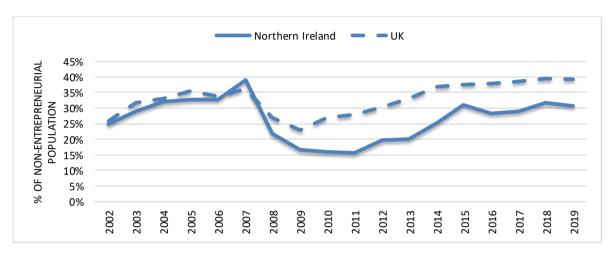


Figure 5.2: Perception of Start-up Opportunities in Northern Ireland and the UK, 2002-2019 (Source: GEM APS)

Around 46% 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.

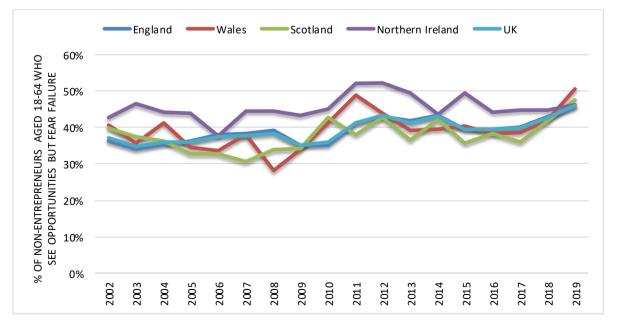


Figure 5.3: Fear of Failure among those who see Opportunities in the UK Home Nations, 2002-2019 (Source: GEM APS)

Looking to the future, the proportion of non-entrepreneurial working age adults in Northern Ireland in 2019 who expect to start a business within the next three years is 8.3% (Figure 5.4). This is not significantly different from the UK estimate of 11.0%.

Figure 5.4 also shows that start-up intention rates increased during the recession but subsequently declined as the economy recovered. The gap between intention to start a business in Northern Ireland and the UK has narrowed over recent years with rates in both areas increasing towards their previous peaks.

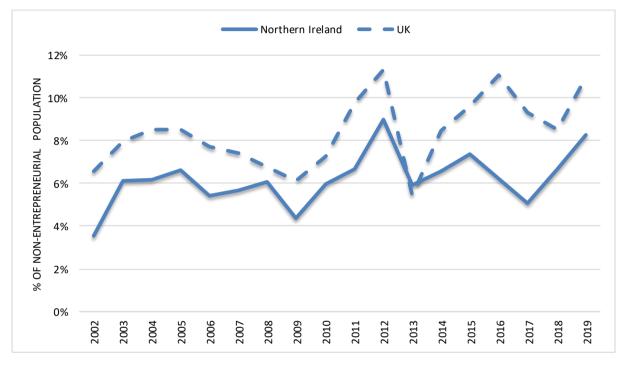


Figure 5.4: Future Start-up Expectations (within 3 years) in Northern Ireland and the UK, 2002-2019 (Source: GEM APS)

In 2019 males in the UK, England, Wales and Scotland are significantly more likely than females to report that they intend to start a business in the next three years. Northern Ireland is the only area to show no significant difference in the intention rates between males and females (Figure 5.5).

In 2019, 5.9% of females in Northern Ireland expect to start a business compared to 10.8% of males. Translated into a female to male ratio this equates to 55% compared to a UK average of 64%. 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 more closely match the UK trend.

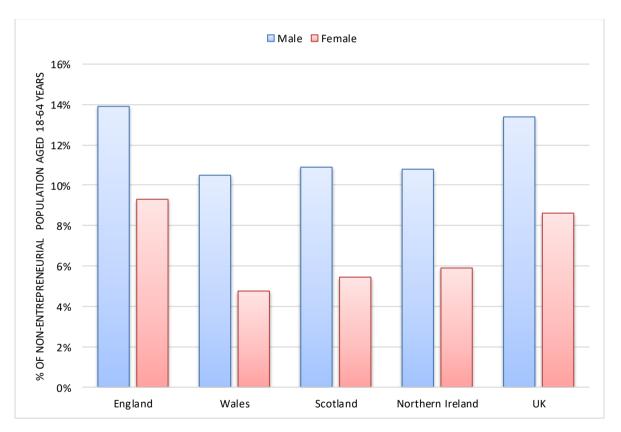


Figure 5.5: Future Start-up Expectations (within 3 years) in the UK Home Nations by Gender, 2019 (Source: GEM APS)

# 6. High Growth

Recent research has suggested that a relatively small number of firms can create a disproportionate number of jobs<sup>10</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 in employment 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 in the UK are typically around three to four times higher than those for established business owners, although still represent relatively low rates of ambition.

In the UK just one in five early-stage business owners expect to achieve high growth, with the rate in Northern Ireland just below this at 17%. High expectation rates in the UK have been broadly more consistent over time than for Northern Ireland, with rates dropping for Northern Ireland between 2015-18, albeit rebounding slightly over 2017-19.

The trend in high growth expectation for established business owners has also been less variable over time for the UK. Until 2006-08 the share reporting high job expectation averaged around 5% in both Northern Ireland and the UK. This subsequently dropped to around 2% in Northern Ireland and, despite the increase in the interim, the rate in 2017-19 has reverted to 2%, a clear divergence emerging with the UK rate.

<sup>-</sup>

<sup>&</sup>lt;sup>10</sup> Hart, M. and Anyadike-Danes, M. (2014) "Moving on from the vital 6%"; Enterprise Research Centre Insight Report, February 2014.

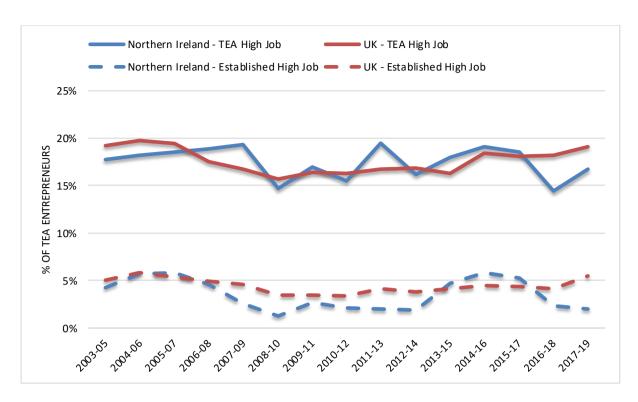


Figure 6.1: Relative Frequency of High Job Expectation Early-stage Entrepreneurs and Established Business Owners in NI and the UK, three year rolling averages, 2003-2005 to 2017-2019 (Source: GEM APS)

Along with high growth, GEM now also measures potential impact of businesses in the national and world markets. Table 6.1 shows that just 1% of Northern Ireland early-stage entrepreneurs have a business with potential national impact compared to a UK share of 2%. The percentages of established business owner-managers whose businesses have potential national impact are, however, similar at around 1%. In terms of international impact, the shares are even smaller, although consistent between Northern Ireland and the UK. Early-stage business have marginally more international scope than established businesses, although still fewer than 1% indicate they will have an impact in international markets.

	Early-Stage Businesses		Established	
			Businesses	
	NI	UK	NI	UK
At least <b>national scope</b> for market and at least national scope	1.1%	1.9%	1.3%	0.9%
for new product or new process				
At least international scope for market and at least	0.7%	0.8%	0.4%	0.5%
international scope for new product or new process				

Table 6.1: Measures of entrepreneurial potential impact rates in Northern Ireland and the UK, 2019 (Source: GEM UK APS 2019)

# 7. Funding

Obtaining funding is a key issue for many start-up businesses. Combining data for 2015-19 (Table 7.1) shows that in Northern Ireland just over half of all nascent entrepreneurs expected to self-fund, slightly higher than the UK figure. Compared to the UK, around half the share in Northern Ireland, 2.6%, expect that they will not need any funding, and less than half as many expect that they personally will fund some of the start-up costs.

Of those expecting funding from elsewhere, banks and government programmes are most favoured in Northern Ireland followed by private investors. In the UK bank funding ranks highest followed by close family. Twice as many nascent entrepreneurs expect funding from government programmes in Northern Ireland compared to the UK, likewise for bank funding. Raising funds from online crowdfunding has become more prevalent in recent years, with 8% in Northern Ireland citing it as a source of funding.

Type of Funding Expected	Northern Ireland %	UK %			
No funding needed	2.6	5.7			
All funded by entrepreneur	52.5	46.6			
None funded by entrepreneur	0.7	1.9			
Sources of Funding					
Close family member (spouse, parent, sibling)	18.5	20.3			
Other relatives, kin or blood relations	11.6	5.8			
Employer or work colleagues	4.2	5.5			
Private investor or venture capital	22.1	14.4			
Friends or neighbours	3.0	6.2			
Banks or other financial institutions	42.7	21.7			
Government programmes, donations or grants	37.8	19.0			
Online crowdfunding	8.0	6.5			
Any other source	5.6	7.6			

Table 7.1: Percentage of nascent entrepreneurs expecting funding from different sources 2015-19 (Source: GEM UK APS 2015-19)

Around one fifth of nascent entrepreneurs in Northern Ireland and the UK expect to source funding primarily from family. This coincides with increasing trends in informal investment, or investment by individuals in other people's new businesses, as shown in Table 7.2. The informal investment rate over the combined 2015-2019 period stood at 2.1% in Northern Ireland, just under the UK rate of 3.1%. Investment into companies owned by close family was the most common investment choice in Northern Ireland and, at just under 60%, was twenty percentage points higher than the UK share. Consequently, Northern Ireland had lower shares investing in friends, neighbours or strangers' businesses.

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	3.1				
Relationship of latest investee (% of latest investments)						
Close family member (spouse, parent, sibling)	57.6	38.4				
Other relative, kin or blood relations	4.3	1.8				
Work colleague	5.8	6.9				
Friend or neighbour	19.1	32.5				
A stranger with a good business idea	10.3	16.6				
Other	2.9	3.8				

Table 7.2: 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, 2015-2019 (Source: GEM APS 2015-19)

# 8. Concluding Observations

Levels of entrepreneurial activity are a vital metric in 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 2019 there was no change in the overall entrepreneurial activity rate of Northern Ireland whilst the combined Northern Ireland rate for 2017-19 remained significantly lower than the UK.

Northern Ireland has historically lagged behind the rest of the UK in terms of enterprise start-up activity. It also 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, even though self-perception of skills to start a business in Northern Ireland has indicated a stronger increasing trend in comparison with the UK. Reversing the trend from previous years, the share perceiving good opportunities for start-up in Northern Ireland has decreased slightly in 2019, however the gap with the UK remains constant.

Despite this, similar proportions in Northern Ireland and the UK (around 45%) state that they know someone that started a business recently. This may reflect the increased presence of entrepreneurs in society and/or may be a sign of increased networking. Additionally, similar to 2018, fear of failure in Northern Ireland is not significantly different from the UK in 2019, despite the fact that it has historically been higher for Northern Ireland.

Entrepreneurs who expect to create a large number of jobs potentially make a greater contribution to growth and regeneration. Unfortunately, the rate of high job expectation in Northern Ireland has declined over recent periods, albeit with a small resurgence over 2017-19. These metrics are worrying as increased entrepreneurial activity, and growth in the economy will become increasingly important in the short to medium-term, particularly as the economy recovers from the effects of the Covid-19 pandemic. Stimulating start-ups will continue to be important but providing a support framework from both the private and public sector to help them survive and grow is now also a crucial element of any developing policy framework. The UK Industrial Strategy White Paper and the Northern Ireland draft Industrial

Strategy had already stressed the importance of growth and set out the Government's intention to support high potential businesses to scale up. Further efforts to stimulate the number of start-ups and those with the potential to provide jobs will now be crucial for economic recovery.

### 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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