



## **Global Entrepreneurship Monitor**

### **Northern Ireland Report 2020**

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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 43 countries in 2020. This is important as many studies have shown that entrepreneurship is an important driver of economic growth, competitiveness and job creation.

As a result of the COVID-19 pandemic and the obvious disruptive impact on the lives of all of us and the huge impact on the economy it was decided that the GEM UK survey, in line with all GEM Global participating countries, should be pushed back until Q4 of 2020 rather than June through August. The UK team felt that this was preferable to not undertaking the survey at all as the pandemic raised many important questions about the ability of entrepreneurs, and indeed the wider population, to navigate their way through the crisis as the economy was effectively closed down and household incomes were under great stress for the majority of the population.

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 2020 was 1,043 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 2020 is 5.4%, a slight decrease from 6.6% in 2019. The 2020 rate compares to a figure of 7.5% in the UK overall, 7.7% in England, 6.5% in Wales, and 7.3% in Scotland.
- The TEA rate in Northern Ireland in 2020 is significantly lower than the UK and England. This result is confirmed when the rates are combined over 2018-20.
- The female TEA rate in Northern Ireland in 2020 is 4.5%, a marked increase from 3.1% in 2019. On the other hand, the male rate decreases from 10.1% in 2019 to only 6.2% in 2020. As a result, the gap between females and males in Northern Ireland is the smallest 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. However, due to the Covid-19 pandemic, the most entrepreneurial group in Northern Ireland, Wales, and Scotland is the 18-24 age group. This is different from the common trend which remains in England and the UK where those aged between 25-34 are the most entrepreneurial.
- Within Northern Ireland the highest TEA rates are typically found in the Mid-Ulster Council area, while Derry City and Strabane remain the lowest. However, probably due

to the effect of the pandemic, the rate in Mid-Ulster has sharply decreased in 2020. Besides, in 2018-20, Ards and North Down; Armagh, Banbridge and Craigavon; and Lisburn and Castlereagh are the three council areas in which the female TEA rate is significantly lower than the male rate.

- Under one third of the non-entrepreneurial working age population perceive good start-up opportunities locally in both Northern Ireland and the UK in 2020.
- The proportion of non-entrepreneurial working age adults in Northern Ireland who expect to start a business within the next three years is 19.5% in 2020, more than double the rate in 2019 (8.3%), and also significantly higher than that for the UK in 2020.
- However, 2020 also saw that over three-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, a marked increase from 46.4% in 2019.
- In the UK approximately one in five early-stage business owners expect to achieve high growth, with the rate in Northern Ireland just below this at around 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 2020, probably due to the Covid-19 pandemic, “to earn a living because jobs are scarce” turned to be a major motivation for entrepreneurs in Northern Ireland, as it increased considerably compared to the figure in 2019 (79.3% and 55.8%, respectively). This is also significantly higher than the UK’s figure for 2020 (65.8%). Still, more than half of early-stage entrepreneurs in both Northern Ireland and the UK were motivated by making a difference, building wealth and to earn a living in 2020. Starting a business to continue a family tradition is the least motivating factor, and is significantly lower than all other reasons.
- Among the 19.5% of Northern Ireland’s working age adults who indicated that they expected to start a business or become self-employed within three years, more than two thirds (71%) indicated that their expectations were influenced by the pandemic with 29% maintaining that these were unrelated to the pandemic.

# 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.

As a result of the COVID-19 pandemic and the obvious disruptive impact on the lives of all of us and the huge impact on the economy it was decided that the GEM UK survey, in line with all GEM Global participating countries, should be pushed back until Q4 of 2020 rather than June through August. The UK team felt that this was preferable to not undertaking the survey at all as the pandemic raised many important questions about the ability of entrepreneurs, and indeed the wider population, to navigate their way through the crisis as the economy was effectively closed down and household incomes were under great stress for the majority of the population. As it turned out Q4 in the UK witnessed another second and third waves of the COVID-19 virus which led to two further lockdowns. The specific COVID-19 questions in the surveys need to be understood against that context.

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.

In 2020 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 351,600 respondents to GEM UK surveys for the period 2002-2020, around 42,500 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 sub-populations in Northern Ireland, such as females and young people, and enables comparisons to the other UK home nations.

## 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 2020, GEM Global conducted surveys in 43 sovereign nations and represented the world's most authoritative comparative study of entrepreneurial activity in the general adult population. In previous years, a telephone survey of a random sample of the adult population was conducted each year between May and September. However, as a result of the COVID-19 pandemic and associated disruption to individuals, businesses and the wider economy, it was decided that the GEM UK survey, in line with all GEM Global participating countries, should be delayed until Q4 of 2020 rather than June through August. In addition, in a major departure in 2020 an online mode for respondents to complete was introduced, and this was provided alongside the traditional mode of CATI surveys. Using both approaches helped to ensure that the UK sample of approximately 10,000 respondents was maintained, providing data for the home nations as well as other important sub-groups of the population such as immigrants, ethnic minorities and women. The methodology, sample sizes and weighting systems used for the GEM UK 2020 adult population survey are explained in more detail in the [GEM UK 2020 report](#).

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 2020 the GEM Global study was based on an analysis of adult population survey (APS) results from 43 economies which cover around two-thirds of the world's population. 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 2020/21 Report was published in May 2021<sup>1</sup> and can be downloaded from [GEM website](#).

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<sup>1</sup> Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Guerrero, M. and Schott, T. (2021) Global Entrepreneurship Monitor 2020/21 Global Report. London: Global Entrepreneurship Research Association.

From the APS 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.

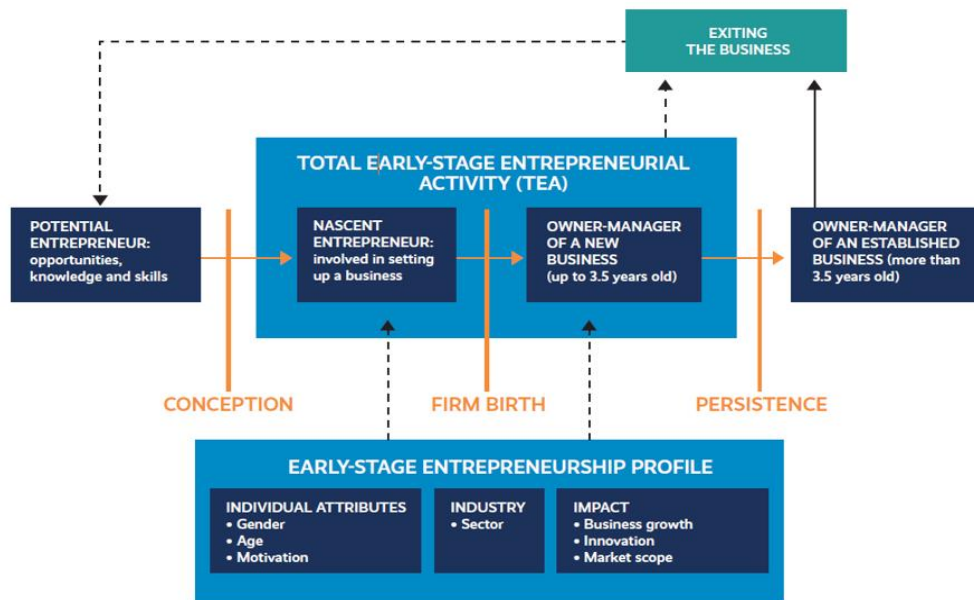
In addition, we measure general intention to start a business by asking individuals if they expect to start a business within the next three years. Finally, we ask individuals if they have sold, shut down, discontinued or quit a business in the past year. It is important to understand that the main subject 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<sup>4</sup>, which is represented in Figure 2.1 below.

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<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>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.

<sup>4</sup> TEA is calculated in an identical way in each country. A telephone and/or face-to-face survey of a representative sample of the adult population in each country is conducted between May and September. Respondents are asked to respond to three questions that are the basis of the TEA index: 1) “are you, alone or with others, currently trying to start a new business independently of your work?”, 2) “are you, alone or with others, currently trying to start a new business as part of your work?”, and 3) “are you, alone or with others, currently the owner or manager of a business?” Those who respond positively to these questions are also asked filter questions to ensure they are actively engaged in business creation as owners and managers, how long they have been paying wages to employees, and other questions about cost and time to start up, sources of finance and numbers of jobs created. A distinction is made between two types of entrepreneurs: nascent entrepreneurs (those whose businesses have been paying wages for not more than three months) and new business owner-managers (those whose businesses have been paying salaries for more than three months but not more than 42 months). The TEA index is the proportion of nascent entrepreneurs and new business owner/managers (minus any double counting, i.e. those who respond positively to both are counted once) in the working age population.



**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 entrepreneurial given the current social, cultural and economic framework conditions that exist there. Another 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. The proportion of mobile-only households in this survey was designed to match Ofcom estimates of the proportion of adults in mobile-only households in 2020 for the UK, to account for the higher mobile phone use (around 20%) of some hard to reach individuals, such as young men. Once again in 2020 there are no significant differences between landline only data and the full sample which includes mobile only households. Consequently, in this report, comparisons with other countries and time-based trends within the UK are made using the full sample (landline and mobile only households as well as the CATI/Online mixed method).

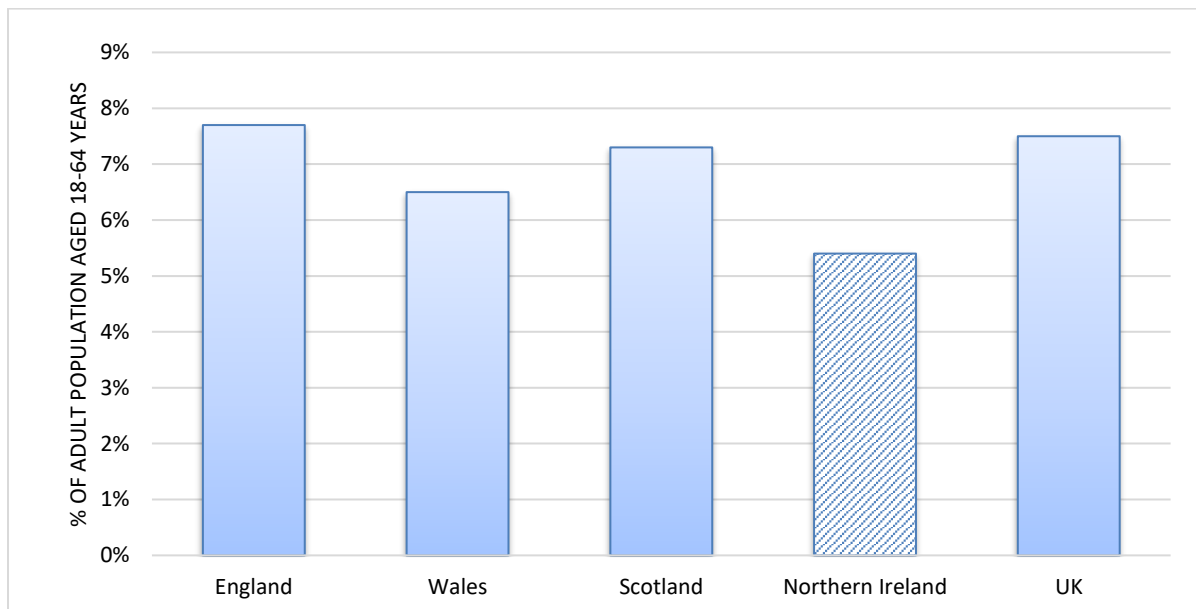
The following report presents a summary of the headline results, and key themes arising from the GEM survey in 2020 and the analysis of the eighteen years of GEM data (2002-20).



### 3. Total Early-Stage Entrepreneurial Activity

The rate of early-stage entrepreneurship in Northern Ireland in 2020 was 5.4%. This compares to 7.5% in the UK overall, 7.7% in England, 7.3% in Scotland and 6.5% in Wales. The TEA rates in England and the UK were statistically significantly higher than that in Wales and Northern Ireland in 2020 (Figure 3.1). Pooling the data over the most recent three years (2018-20), to remove annual fluctuations, gives a TEA rate of 6.0% for Northern Ireland. This rate, along with that in Scotland and Wales (6.9% and 6.8%, respectively) is significantly lower than the rate of 8.5% in England and 8.3% in the UK.

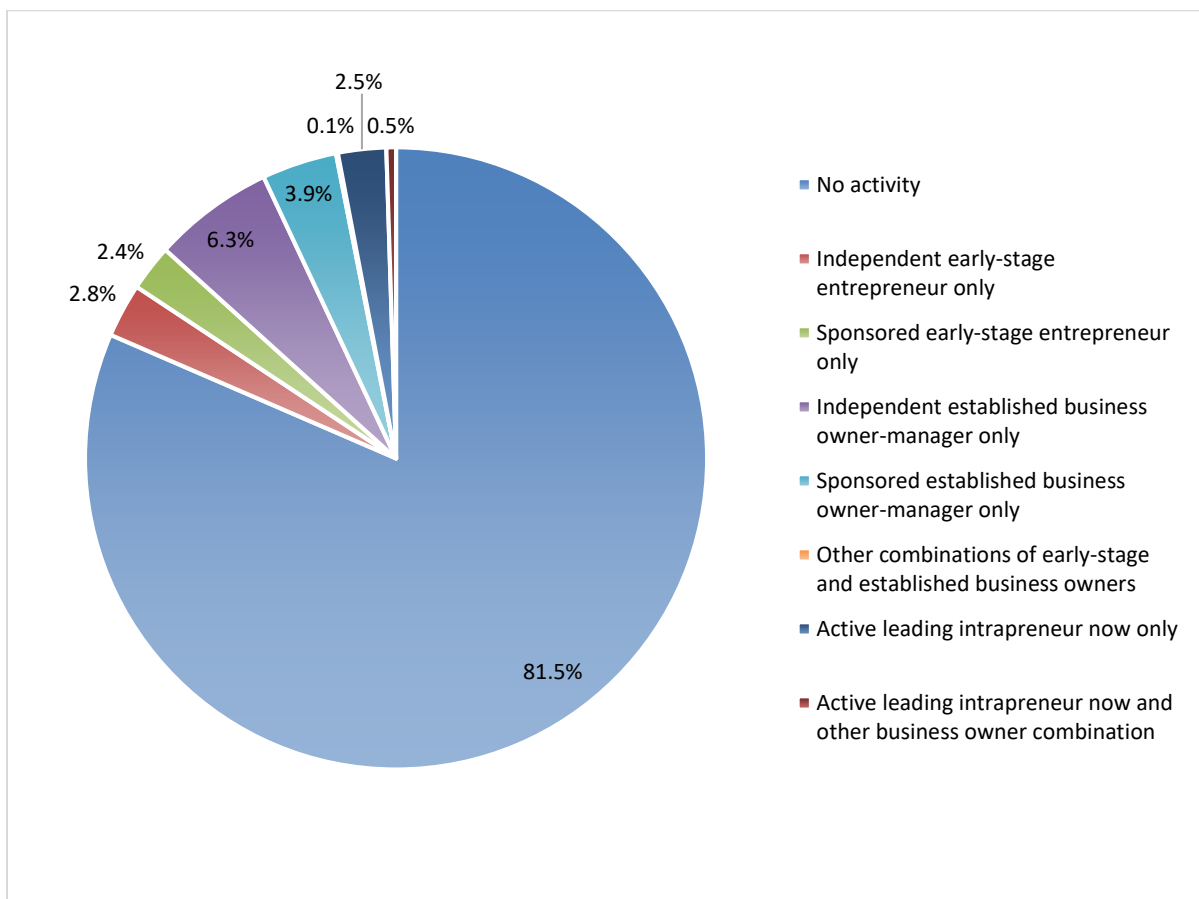
Overall, the TEA rate of 5.4% in Northern Ireland in 2020 equates to around one in every eighteen adults aged 18-64, or over 61,200 individuals, engaged in early-stage entrepreneurial activity, around 65% of whom were in the very early stages of starting a business (nascent entrepreneurs: 3.5%) and the remainder those who had a new business which was between 3 and 42 months old (1.9%).



**Figure 3.1: Total early-stage Entrepreneurial Activity (TEA) in the UK Home Nations 2020** (Source: GEM APS)

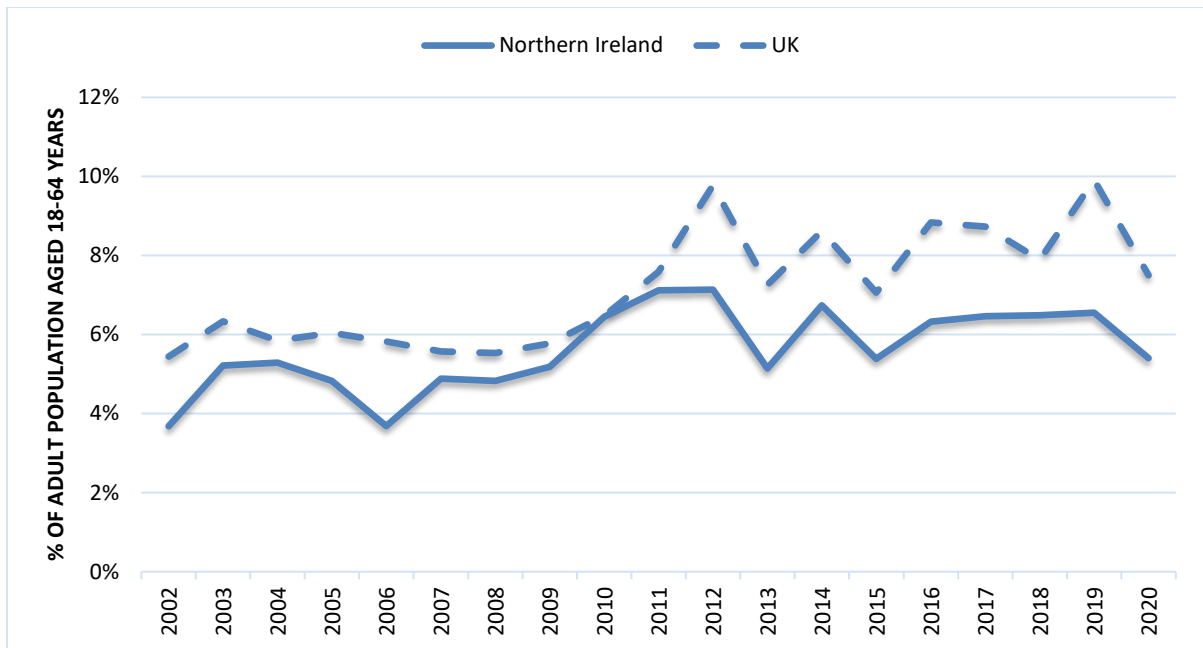
Figure 3.2 further breaks down entrepreneurial activity into a more refined categorisation which includes entrepreneurial employees (intrapreneurs) and separates early-stage and established entrepreneurs into those who are independent, and those whose business is

sponsored by their employer. The majority of active entrepreneurs are within three categories: the “Independent established business owner-manager only” (6.3%); the “Sponsored established business owner-manager only” (3.9%), and the “Independent early-stage entrepreneur only” (2.8%). On the other hand, the “Active leading intrapreneur now only” category documents a marked decrease from 5.9% in 2019 to only 2.5% in 2020.



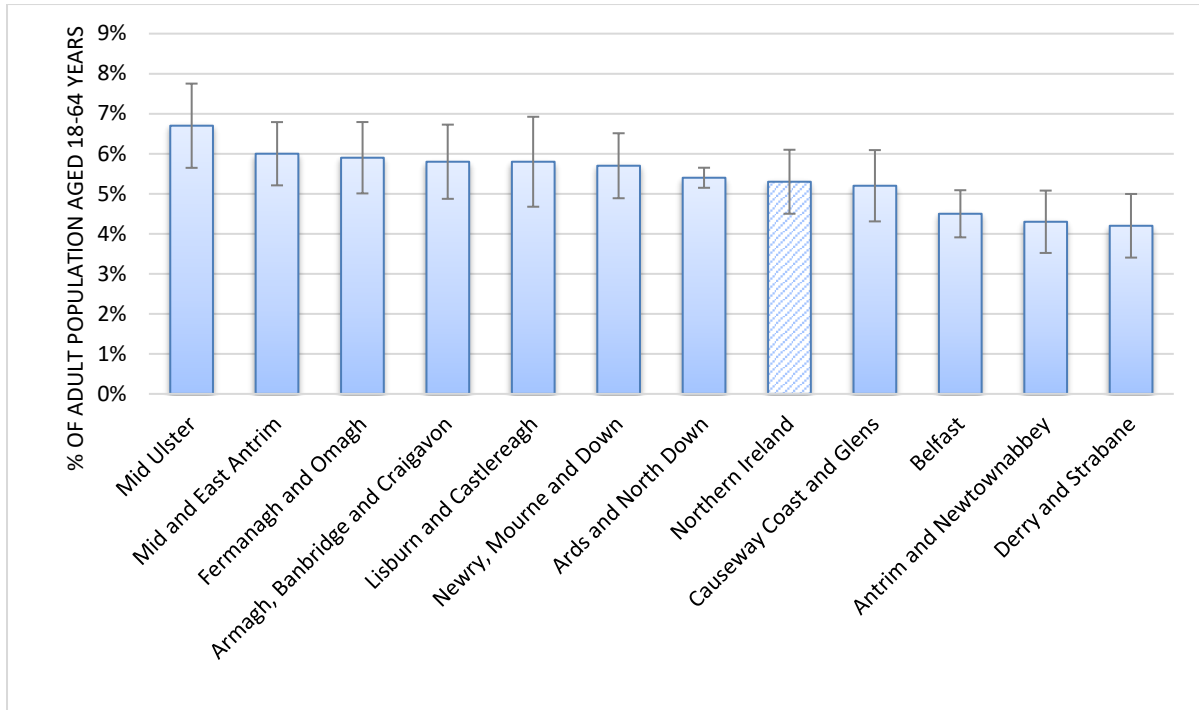
**Figure 3.2: Modes of Entrepreneurial Activity in Early-stage and Established Businesses**  
(Source: GEM APS 2020)

Probably due to the effect of the Covid-19 pandemic, GEM 2020 also sees that entrepreneurial activity in both the UK and Northern Ireland has decreased in 2020, an opposite move from the upward trend that can be seen over the last few years (Figure 3.3). However, the gap between the two lines seem to slightly narrow in 2020, since the decline in the UK’s early-stage entrepreneurial activity is considerably sharper than that in Northern Ireland.



**Figure 3.3: Total early-stage Entrepreneurial Activity in Northern Ireland and the UK 2002-2020** (Source: GEM APS 2002-20)

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 2003-2020 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 6.7% 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 (5.3%), the difference is also statistically significant. Belfast’s rate is also significantly lower than that for several areas, such as Mid Ulster, Mid and East Antrim, and Armagh, Banbridge and Craigavon.



**Figure 3.4: Total early-stage Entrepreneurial Activity in Northern Ireland in 2003-2020 by Council Area, with 95% confidence intervals<sup>5</sup> (Source: GEM APS 2003-20)**

Table 3.1 displays the trend by Council area using 3 year rolling averages, rather than combined data, from 2002-04 to 2018-20. There was little variation in entrepreneurial activity rates across Council areas in the decade to 2010, with rates for some areas diverging thereafter. Recently, Mid and East Antrim has had the largest increase and continues to outpace all other areas. In 2018-20 the average TEA rate for Mid and East Antrim was 10.1% compared to a Northern Ireland average of 6.1%. In contrast, the most remarkable decrease can be seen for Mid Ulster, from 8.2% for 2017-19 period to 4.6% for 2018-20 period.

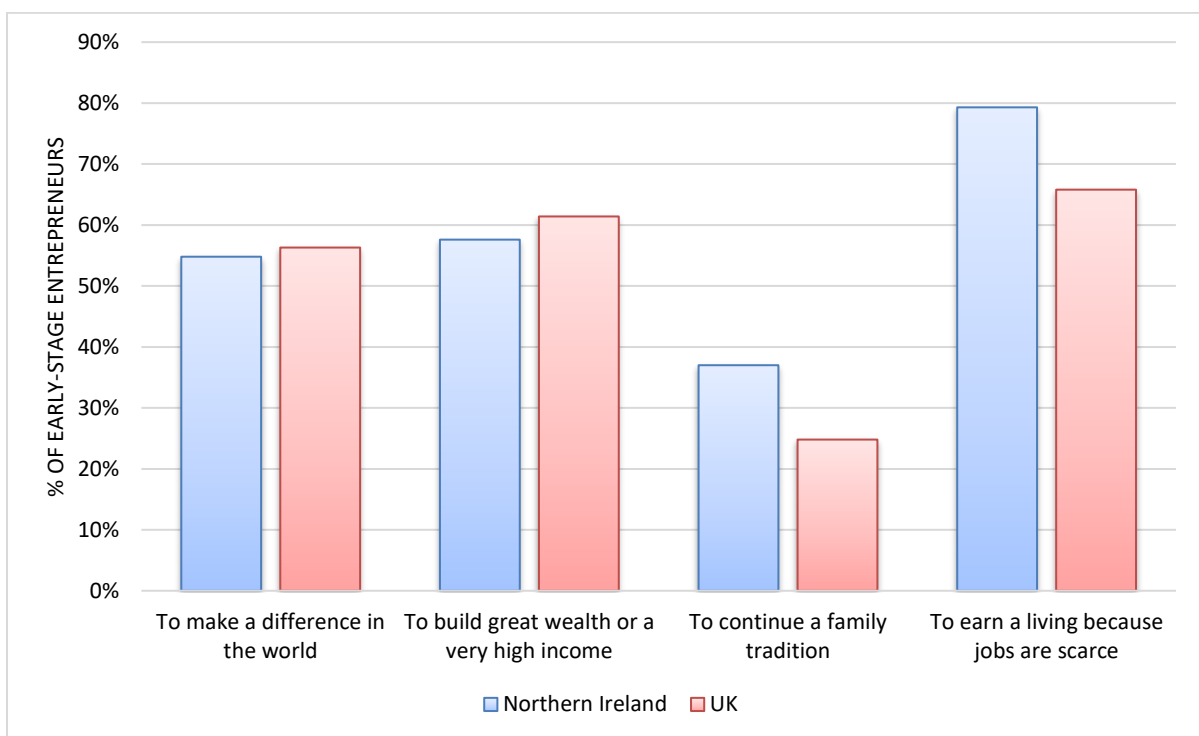
<sup>5</sup> Confidence intervals for a mean specify a range of values within which the unknown population mean may lie. At the 95% level we are 95% confident that the interval contains the true population mean.

	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11	2010-12	2011-13	2012-14	2013-15	2014-16	2015-17	2016-18	2017-19	2018-20
<b>Antrim and Newtownabbey</b>	5.4%	3.9%	3.8%	3.2%	4.8%	5.1%	6.5%	6.1%	6.9%	5.4%	4.8%	4.2%	4.7%	5.3%	4.8%	6.3%	5.1%
<b>Ards and North Down</b>	4.5%	4.6%	4.6%	4.7%	4.6%	6.1%	7.3%	7.0%	6.6%	5.4%	7.0%	5.6%	6.7%	5.4%	6.0%	5.5%	5.8%
<b>Armagh, Banbridge and Craigavon</b>	4.4%	5.2%	4.2%	5.0%	4.6%	5.6%	6.6%	7.8%	11.0%	10.4%	9.4%	5.4%	4.5%	5.8%	7.7%	6.6%	5.3%
<b>Belfast City</b>	3.6%	4.4%	3.8%	3.9%	4.2%	4.3%	4.4%	4.6%	4.7%	4.6%	4.5%	4.7%	5.3%	5.7%	5.5%	4.4%	4.5%
<b>Causeway Coast and Glens</b>	3.7%	4.9%	3.9%	4.6%	3.9%	4.3%	3.9%	5.6%	6.4%	5.9%	5.9%	5.8%	6.4%	5.8%	5.1%	6.8%	8.0%
<b>Derry City and Strabane</b>	5.7%	4.8%	4.3%	4.0%	3.0%	3.5%	2.9%	3.5%	4.5%	5.1%	6.1%	3.7%	4.2%	3.3%	6.8%	5.1%	5.3%
<b>Fermanagh and Omagh</b>	4.5%	6.1%	5.7%	5.4%	4.9%	5.6%	4.9%	6.9%	4.5%	4.1%	2.4%	5.9%	7.6%	6.4%	4.0%	6.6%	8.0%
<b>Lisburn and Castlereagh</b>	4.1%	5.8%	4.8%	5.4%	6.1%	6.3%	6.0%	7.0%	6.6%	5.8%	4.2%	5.8%	6.4%	6.0%	6.0%	7.1%	6.2%
<b>Mid Ulster</b>	5.6%	6.6%	6.5%	4.5%	4.4%	4.6%	6.8%	7.8%	9.8%	9.1%	10.6%	9.6%	9.0%	9.3%	8.0%	8.2%	4.6%
<b>Mid and East Antrim</b>	6.3%	5.2%	4.3%	4.9%	4.4%	5.1%	4.5%	5.9%	5.8%	6.6%	6.2%	8.0%	8.7%	10.5%	10.2%	10.6%	10.1%
<b>Newry, Mourne and Down</b>	5.4%	5.4%	5.2%	4.4%	5.3%	4.9%	6.0%	6.7%	8.1%	7.3%	6.5%	7.1%	7.9%	6.7%	6.9%	6.5%	6.0%
<b>Northern Ireland</b>	<b>4.7%</b>	<b>5.1%</b>	<b>4.6%</b>	<b>4.5%</b>	<b>4.5%</b>	<b>5.0%</b>	<b>5.5%</b>	<b>6.3%</b>	<b>6.9%</b>	<b>6.5%</b>	<b>6.3%</b>	<b>5.8%</b>	<b>6.2%</b>	<b>6.1%</b>	<b>6.4%</b>	<b>6.5%</b>	<b>6.1%</b>

**Table 3.1: Total early-stage Entrepreneurial Activity in Northern Ireland by Council Area, rolling averages 2002-2004 to 2018-2020 (Source: GEM APS)**

Motivation to start a business can be varied and more multi-faceted than the previous opportunity and necessity measures revealed. As a result, since the 2019 a new and improved method of measuring motivation to start a business across four main categories was introduced. They are: (i) to make a difference in the world; (ii) to build great wealth or a very high income; (iii) to continue a family tradition; or (iv) to earn a living because jobs are scarce. The former two can be thought of as more opportunity driven, while the third is more complex as this could be both due to opportunity and necessity. The final option can be thought of as more necessity driven.

Possibly due to the effect of the Covid-19 pandemic, Figure 3.6 shows that “to earn a living because jobs are scarce” turned to be a major motivation for entrepreneurs in Northern Ireland, as it documented a marked increase in 2020 compared to 2019 (79.3% and 55.8%, respectively). This is also significantly higher than the UK’s figure for 2020 (65.8%). However, still more than half of early-stage entrepreneurs in both Northern Ireland and the UK were also motivated by making a difference, building wealth and to earn a living. Starting a business to continue a family tradition is the least motivating factor, and is significantly lower than all other reasons.



**Figure 3.6: Motivation for Early-stage Entrepreneurship in Northern Ireland and the UK 2020** (Source: GEM APS)

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

### 4.1 Gender

In 2020 males in the UK have a significantly higher TEA rate than females, at 9% compared to 6.1%. Significant differences in rates are also found in England and Scotland (Figure 4.1). In contrast to previous years, the gap in TEA rate between males and females in Northern Ireland has narrowed, due to the considerable increase in TEA rate for females from 3.1% in 2019 to 4.5% in 2020. On the contrary, TEA rate for females in Wales has decreased from 7.0% in 2019 to only 5.6% in 2020.



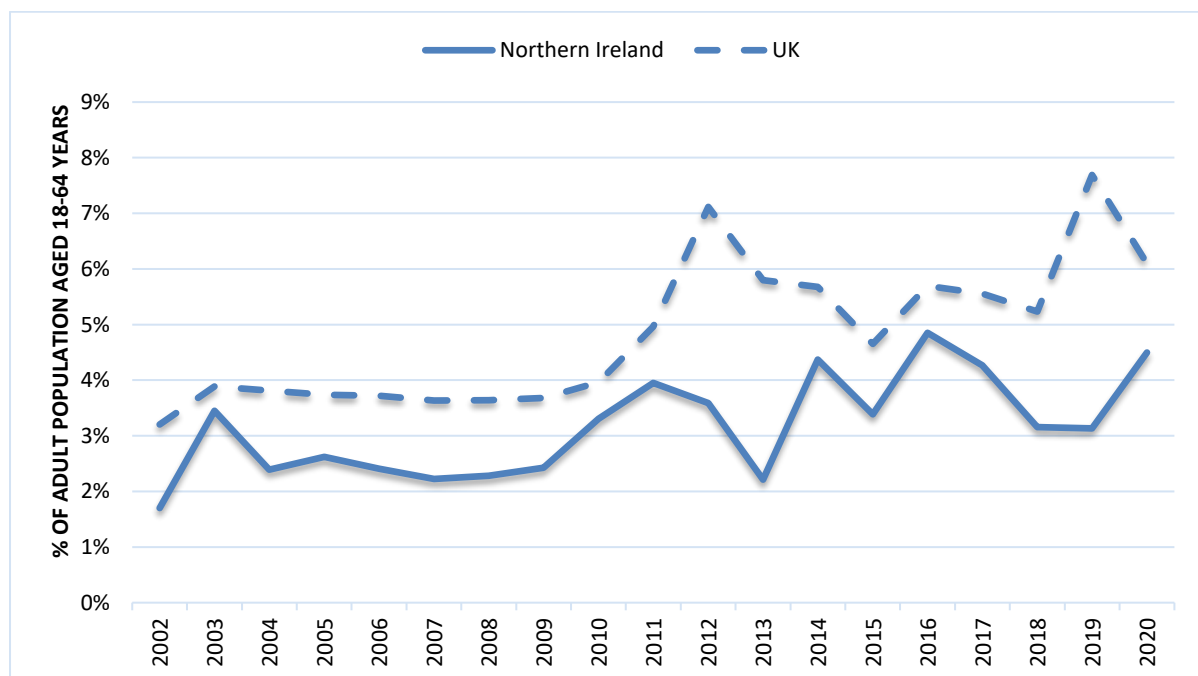
**Figure 4.1: Total early-stage Entrepreneurial Activity in the UK Home Nations in 2020**  
(Source: GEM APS)

For the UK as a whole the TEA rate translates into a female to male early-stage entrepreneurship ratio of 69%, similar to the value of 70% for England. Wales has the highest rate at 75%, followed by Northern Ireland at 73%. This is a somewhat striking figure for Northern Ireland, considering its low ratio of 31% in 2019 where the TEA rate for female was only 3.1% - a rate that was significantly lower than the corresponding female rates in 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 2002-20, to get a longer perspective, suggests a ratio of 40% in Northern Ireland compared to 50% in England, 57% 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. Northern Ireland's female TEA rate for the whole period 2002-20 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 to the UK over the long term shows a long-standing gap (Figure 4.2). This narrowed somewhat during the recession but diverged strongly as the economy recovered during 2011/12. However, as indicated above, the gap seemed to narrow again in 2020, due to both a decline in the UK rate and an increase in the rate for Northern Ireland.



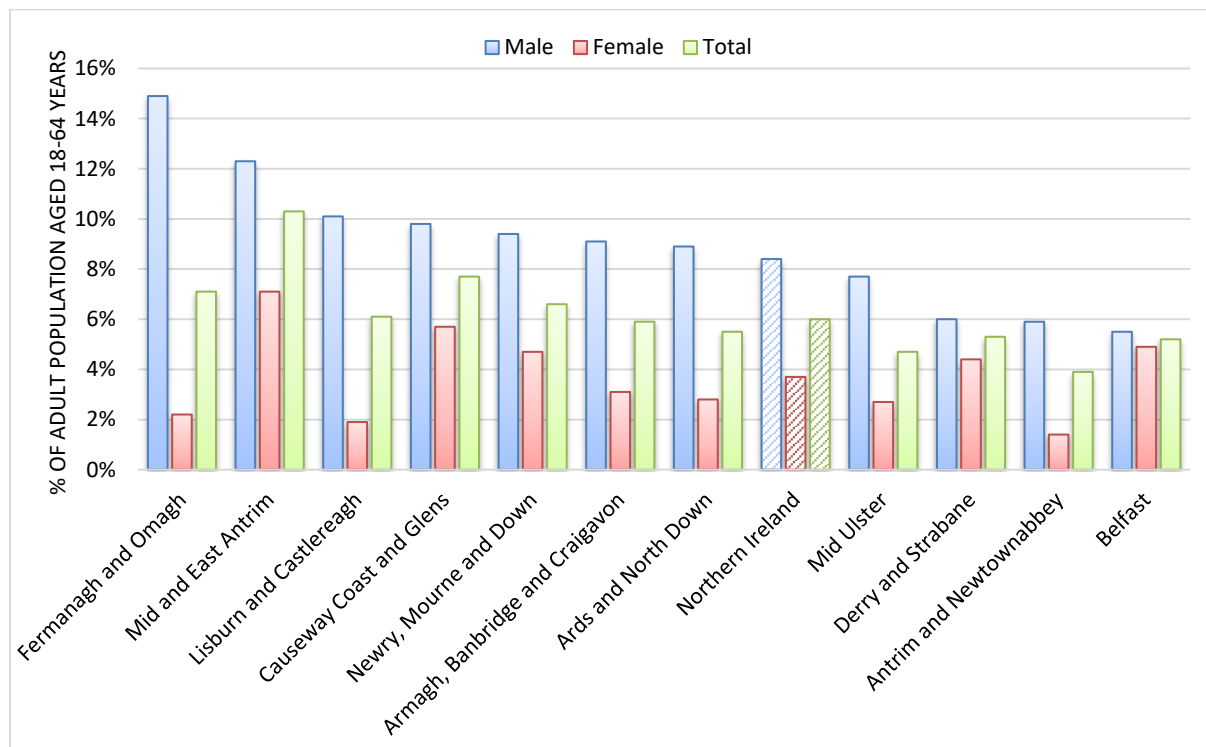
**Figure 4.2: Total Early-stage Female Entrepreneurial Activity in Northern Ireland and the UK, 2002-2020** (Source: GEM APS)

Figure 4.3 shows TEA rates for males and females by Council area over the 2018-20 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

<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.



of males and females, in that those areas with the highest male rates do not also have the highest female rates. This suggests differing opportunities for entrepreneurship by gender in each council area.

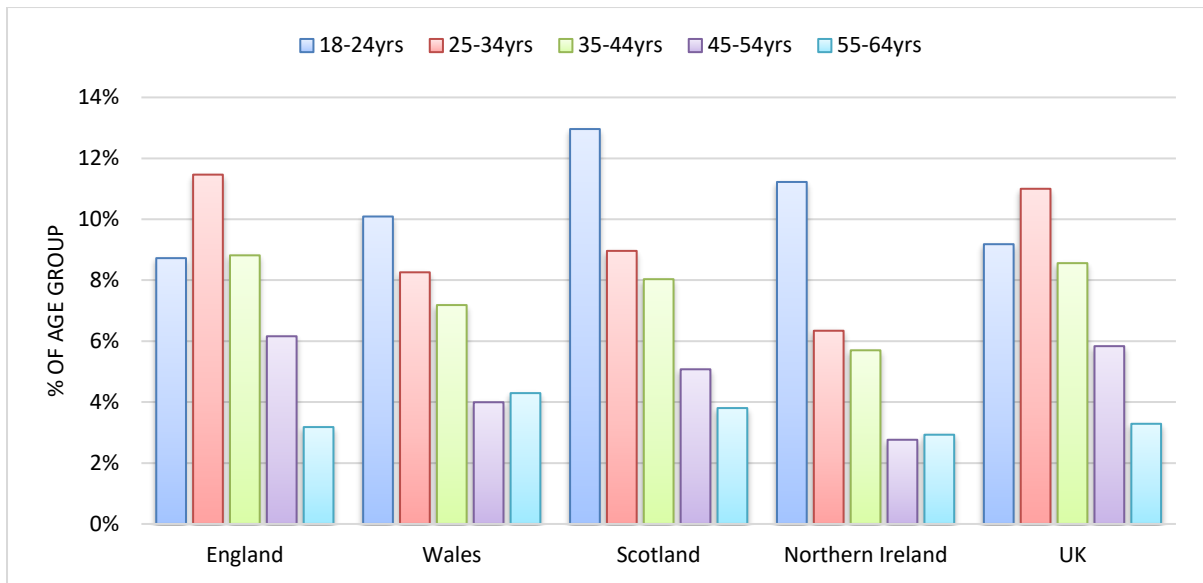


**Figure 4.3: Total Early-stage Male and Female Entrepreneurial Activity in Northern Ireland by Council Area, combined over 2018-2020 (Source: GEM APS)**

On average female TEA rates over the 2018-20 period are around two fifths the male TEA rates although the ratios vary from 15% in Fermanagh and Omagh to 89% in Belfast. Ards and North Down; Armagh, Banbridge and Craigavon; and Lisburn and Castlereagh are the three council areas in which the female TEA rate is significantly lower than the male rate.

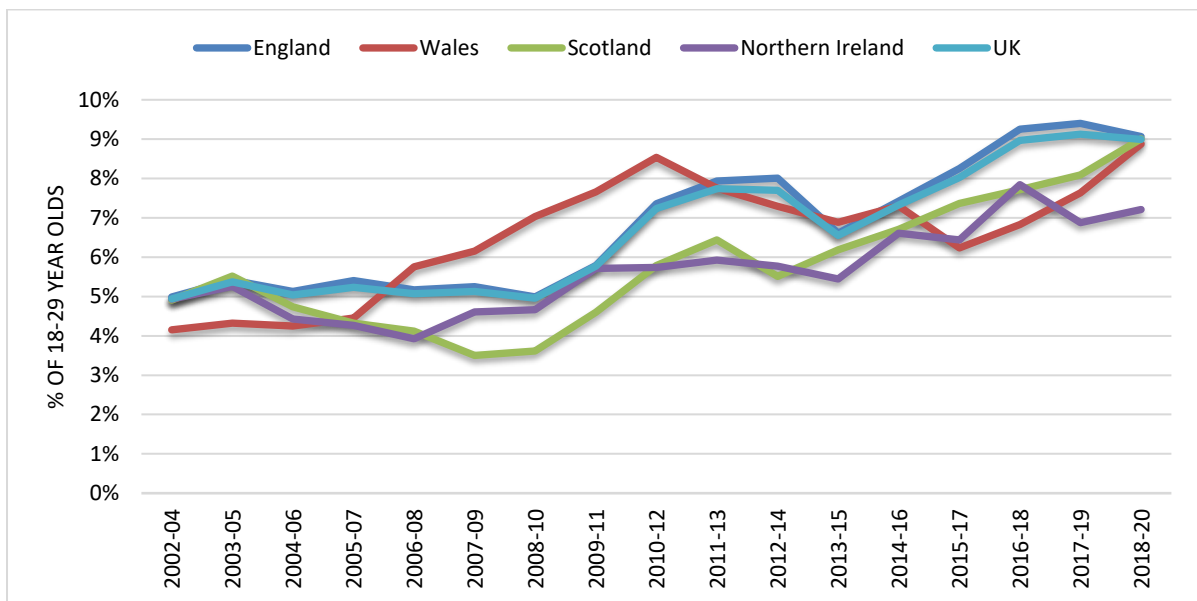
## 4.2 Age

Figure 4.4 shows TEA rates by age combined in 2020. 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). However, 2020 saw a marked increase in the rate of early-stage entrepreneurial activity in the younger group (aged between 18 and 24) in all nations except England. In Northern Ireland, raising from 5.3% in 2019 to 11.2%, this younger group in fact showed the highest rate of early-stage entrepreneurial activity in 2020.



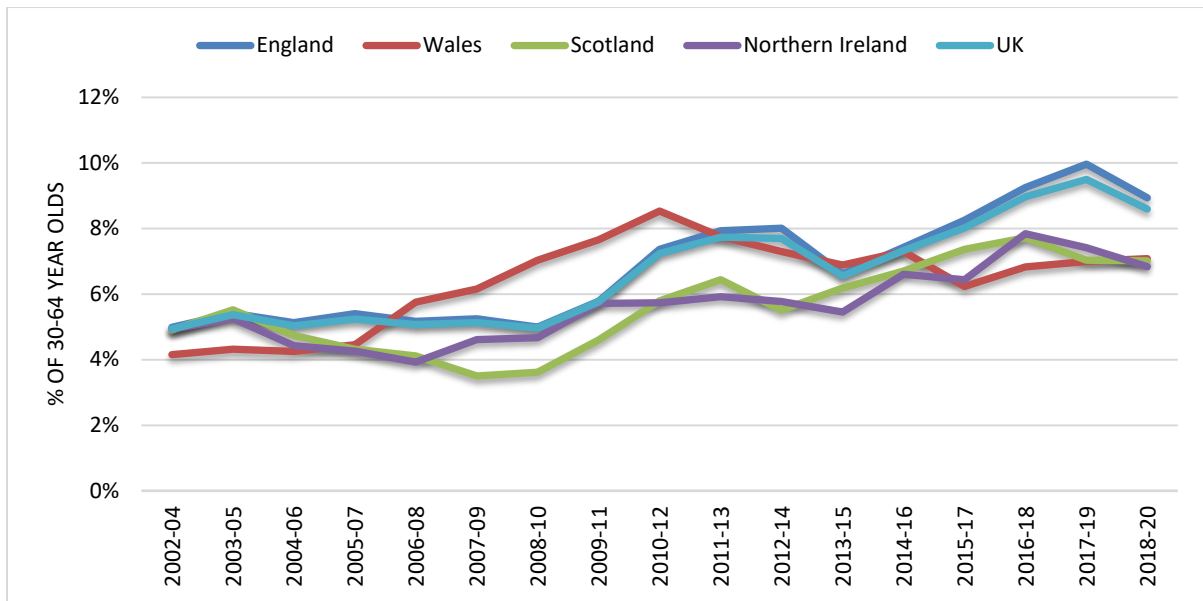
**Figure 4.4: Total early-stage Entrepreneurial Activity in the UK Home Nations 2020** (Source: GEM APS)

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 it is diverging from the other home nations, particularly in the 30-64 age group.



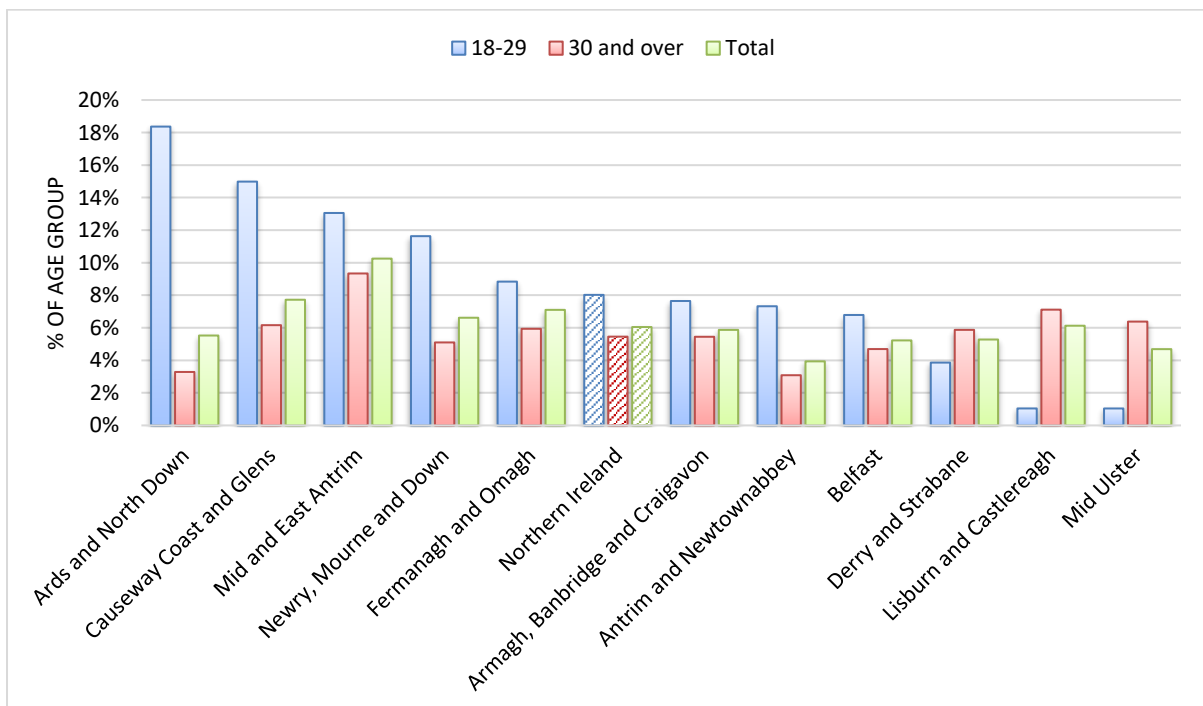
**Figure 4.5: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18-29 year olds, rolling averages 2002-4 to 2018-20** (Source: GEM APS)

In Northern Ireland, despite the fact that TEA rates for both groups have increased over time, the rate for the 30-64 age group seemed to decline over the most recent years.



**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 2018-20 (Source: GEM APS)**

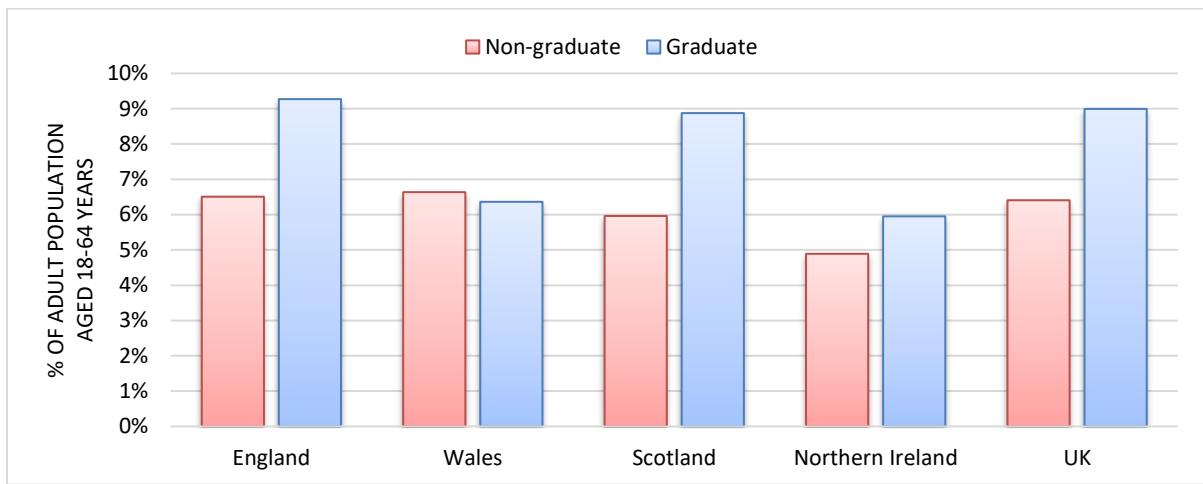
Total early-stage entrepreneurial activity by these broader age groups is plotted in Figure 4.7 for the Council areas, combined over 2018-20. For Northern Ireland as a whole there is little difference in the TEA rates of the two age groups with a rate of 8% for 18-29 year olds and 5.5% for 30 year olds and over. Figure 4.7 plots the series in descending order for 18-29 year olds and despite the wide variation in the rates most of the differences are not significant. Likewise for the 30 years old and over group across council areas.



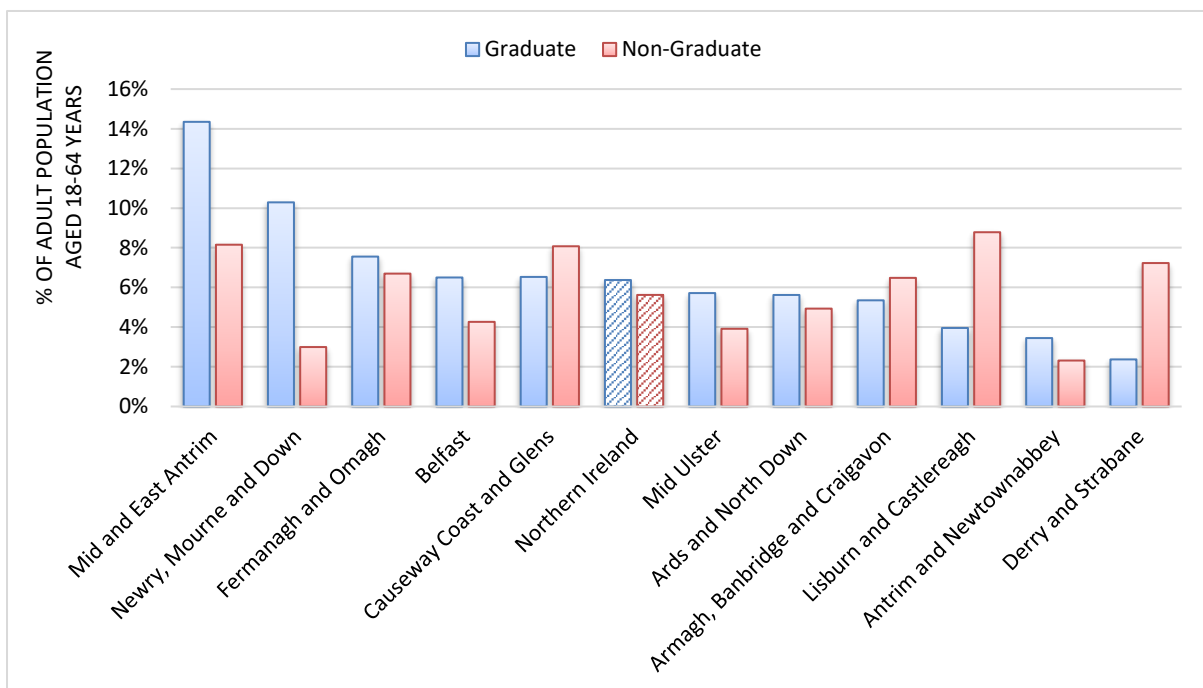
**Figure 4.7: Total early-stage Entrepreneurial Activity in Northern Ireland by Age and Council Area, combined over 2018-20 (Source: GEM APS)**

### 4.3 Education

The rate of total early-stage entrepreneurial activity for graduates in the UK in 2020 is 9% (Figure 4.8), significantly higher than for non-graduates (6.4%). Graduate TEA rates are also significantly higher than non-graduates in England and Scotland, while the differences are smaller and statistically insignificant in Wales and Northern Ireland. More specifically, the comparable rate for graduates currently residing in Northern Ireland is 6% and for non-graduates is 4.9%.



**Figure 4.8: Total early-stage Entrepreneurial Activity in the UK Home Nations by Graduate Status, 2020** (Source: GEM APS)

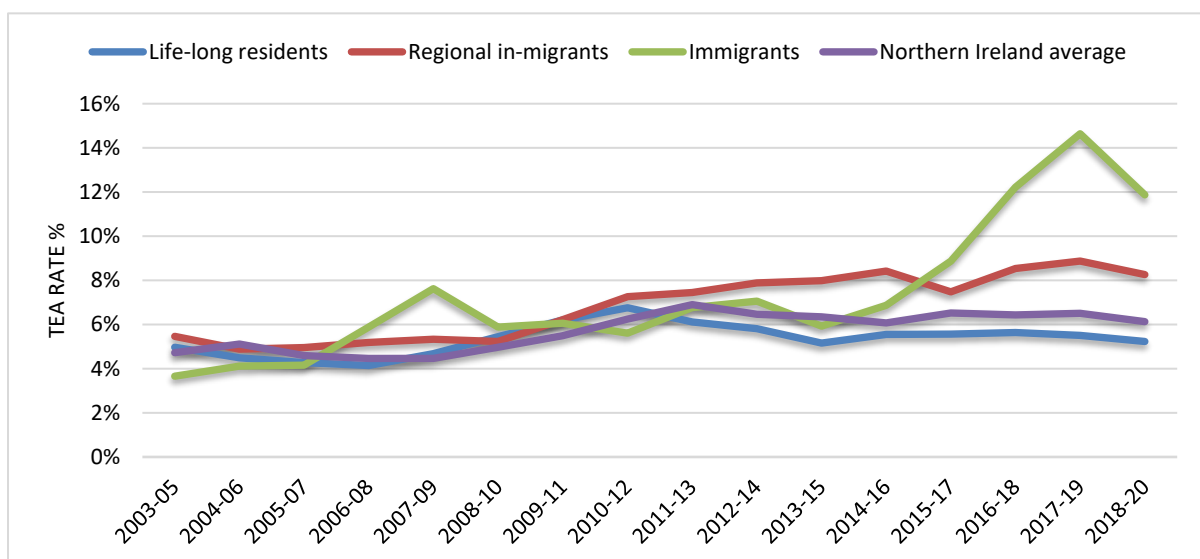


**Figure 4.9: Total early-stage Entrepreneurial Activity in Northern Ireland by Graduate Status and Council Area, combined over 2018-2020** (Source: GEM APS)

The graduate and non-graduate TEA rates by Council area, for the combined 2018-20 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 5.6% and a graduate TEA of 6.4%. Except for the graduate rate for Mid and East Antrim, there were no significant differences in TEA rates between graduates and non-graduates in the other district councils.

#### 4.4 Migrant Status

Figure 4.10 presents TEA rates for regional in-migrants<sup>7</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.



**Figure 4.10: Total early-stage Entrepreneurial Activity in Northern Ireland by Migrant Status, rolling averages 2003-2005 to 2018-2020 (Source: GEM APS)**

The TEA rate for in-migrants continued to rise post-2008 with the rate in 2017-19 peaking at almost 9%. However, this rate has slightly decreased to 8.3% for the 2018-20 period. The TEA rate for immigrants has seen the largest increase over the entire period, with a particularly rapid rise from 2013-15 onwards. But probably due to the effect of the Covid-19 pandemic, this group has also documented a marked decrease in its rate for the 2018-20 period, down to 11.9% compared to the peak of 14.6% for 2017-19 period. Despite this, it is still more than double the

<sup>7</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.

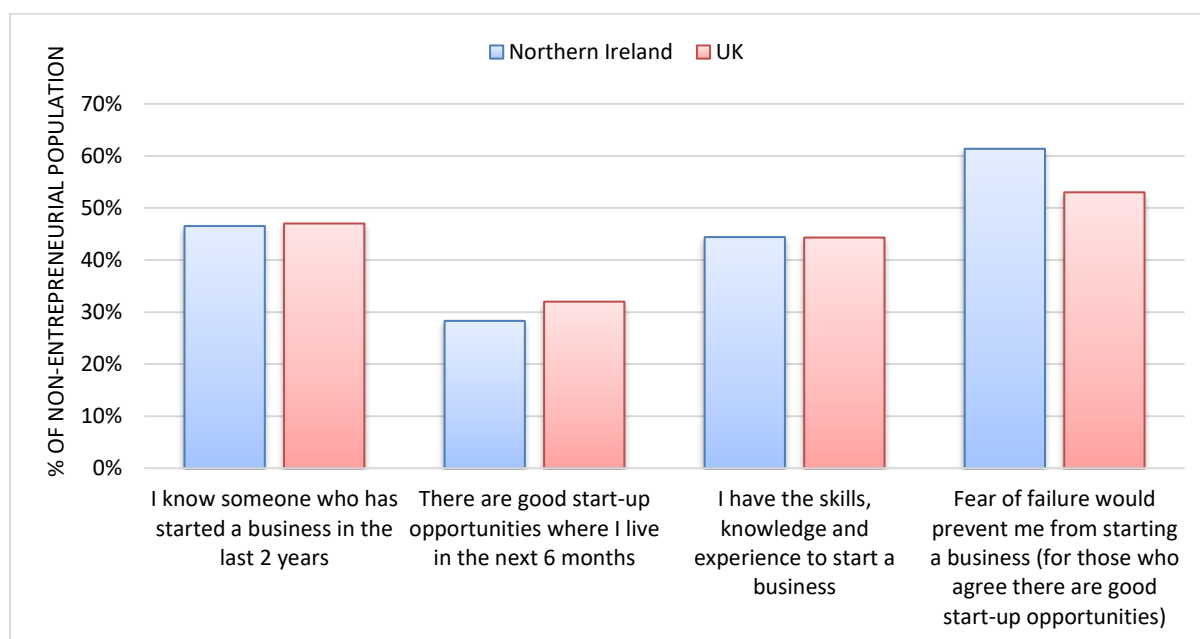
rate for life-long residents for 2018-20 (5.2%). In the UK immigrants have also typically been found to be more entrepreneurial than the resident population, driven by opportunity rather than necessity motivations.

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 2002-2020 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>8</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.



**Figure 5.1: Entrepreneurial Attitudes and Perceptions in Northern Ireland and the UK 2020** (Source: GEM APS)

In Northern Ireland, nearly half (46.5%) of individuals stated that they know an entrepreneur (Figure 5.1), this figure was not significantly different from the 47% share in the UK in 2020. Similarly, nearly half of the non-entrepreneurial population in both Northern Ireland and the UK felt they have the skills, knowledge and experience to start a business. However, 2020 saw a slight decrease in both Northern Ireland and the UK in the perception of start-up opportunities (28.3% and 32%, respectively). In addition to that, while in 2019 less than half of individuals

<sup>8</sup> Note that the wording of this question has changed in 2019 so rates are not comparable with previous years.

in Northern Ireland who recognised opportunities for start-up also stated their fear of failure would prevent them from doing so (46.4%), this rate has increased to 61.4% in 2020. Nonetheless, it is not significantly different from the rate for the UK in the same 2020 (53%).

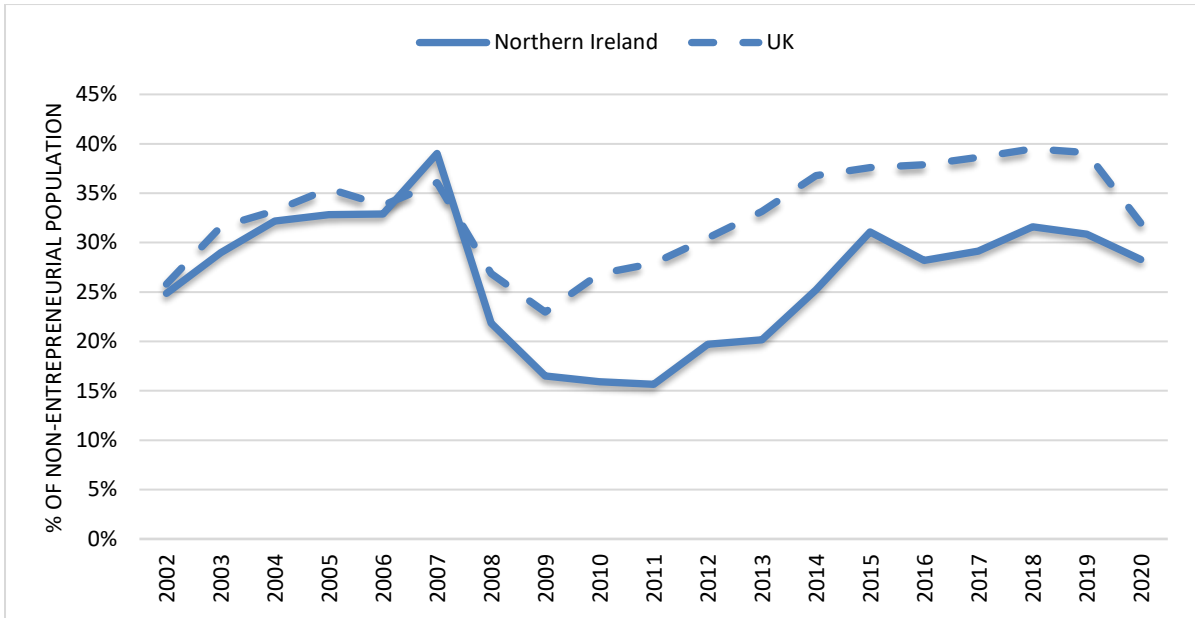
More specifically, for the young aged between 18 and 24 in Northern Ireland, a slightly higher rate in the perception of start-up opportunities was documented in 2020 (33.4%), and they also report higher fear of failure (77.8%). Similar trends can be found for the UK (Figure 5.2).



**Figure 5.2: Entrepreneurial Attitudes and Perceptions among 18-24 year olds in Northern Ireland and the UK 2020** (Source: GEM APS)

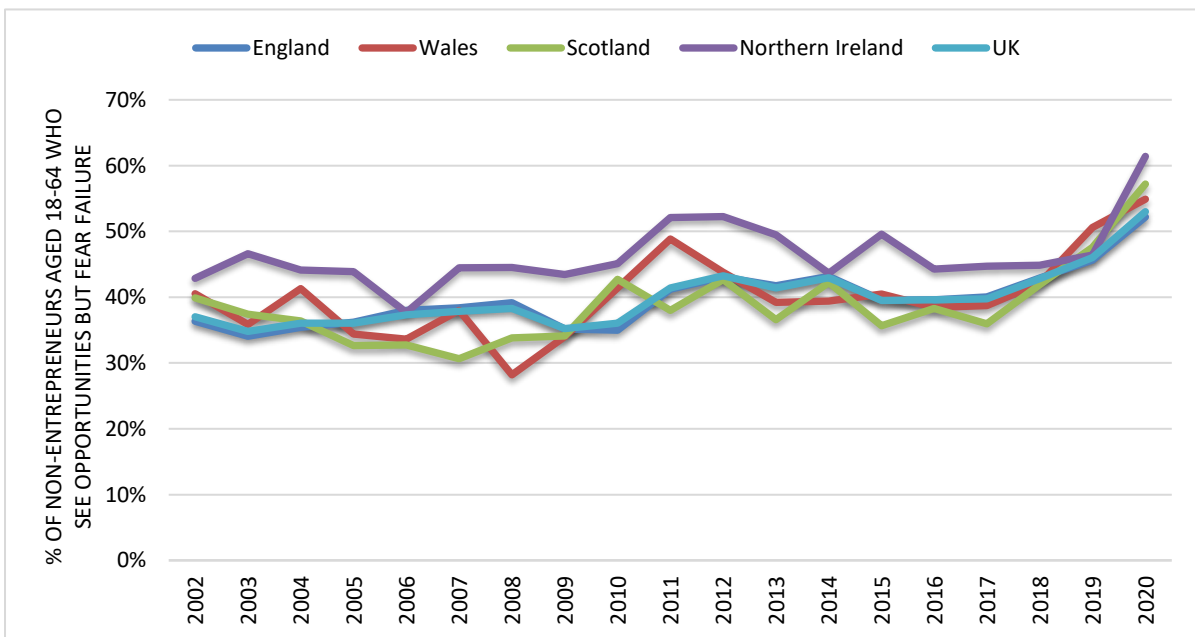
As identified above, 28.3% of the non-entrepreneurial working age population in Northern Ireland agreed that there were good opportunities for starting a business in their local area in the next six months compared to 32% in the UK (Figure 5.1). Prior to the financial recession 2007-2009, opportunity perception in Northern Ireland and the UK were similar however a significant difference has since opened-up between the two and continued to prevail until 2019. Nonetheless, the gap has slightly narrowed in 2020.





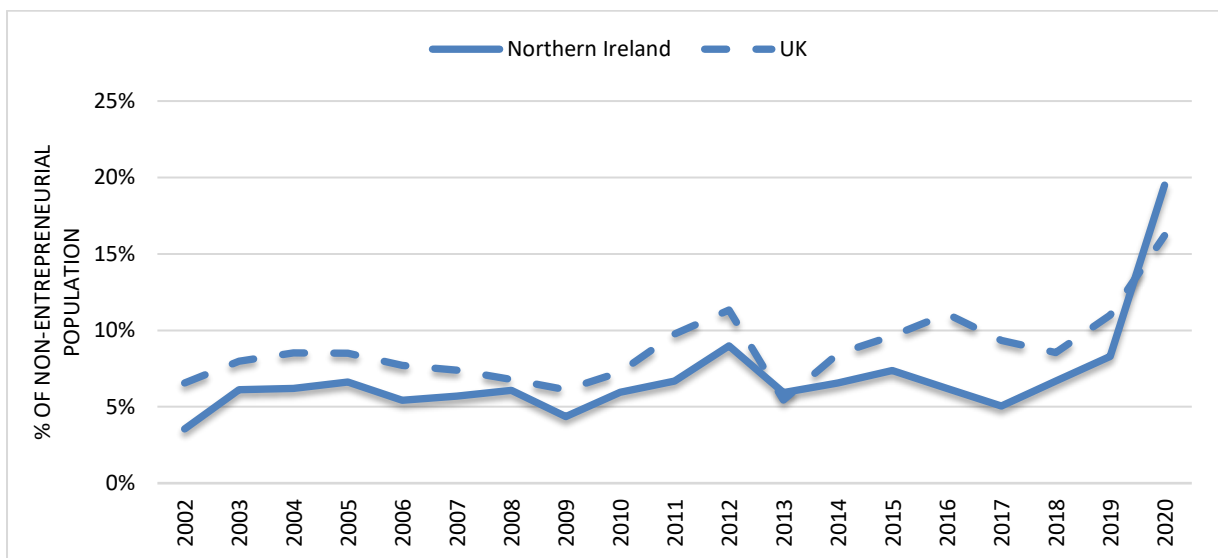
**Figure 5.3: Extent to which good start-up opportunities in the local area, over the next 6 months, are perceived in Northern Ireland and the UK, 2002-2020** (Source: GEM APS)

Besides, around three fifth 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. This is significantly higher than the rate for England, even though it is not significantly different from that for Wales, Scotland, and the UK. Figure 5.4 further shows that the fear of failure rate in Northern Ireland has reached a new peak of over 60% in 2020, the highest rate in the last 2 decades.



**Figure 5.4: Fear of Failure among those who see Opportunities in the UK Home Nations, 2002-2020** (Source: GEM APS)

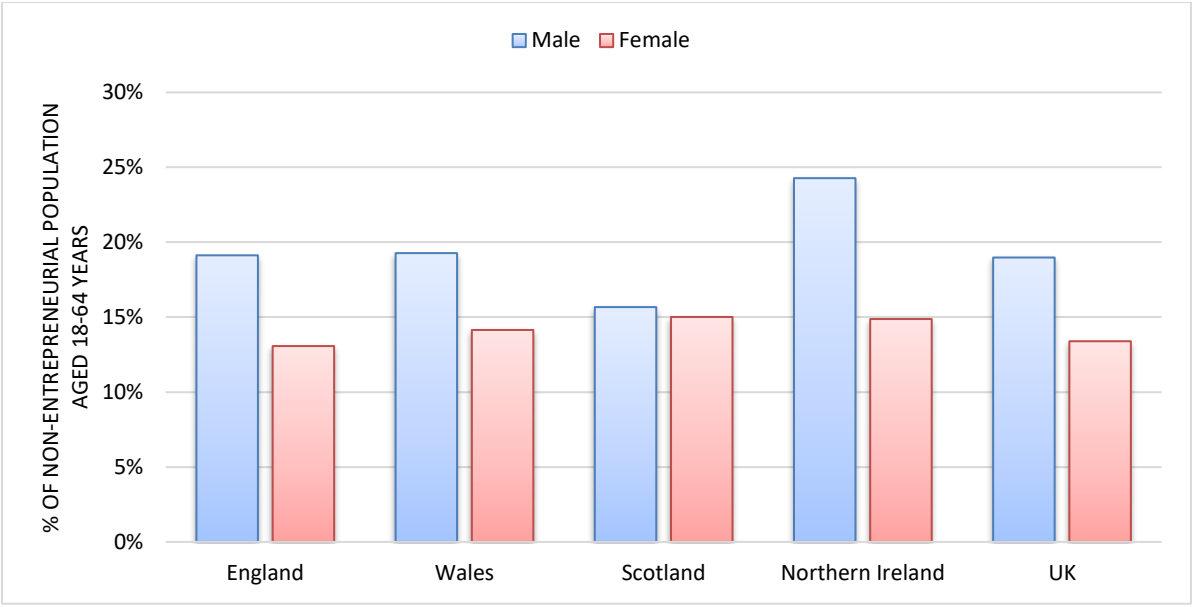
Looking to the future, the proportion of non-entrepreneurial working age adults in Northern Ireland in 2020 who expect to start a business within the next three years is 19.5% (Figure 5.5). This is a remarkable increase from 8.3% in 2019, and even significantly higher than the UK estimate of 16.2%. However, taking into account the fact that start-up intention rates tends to increase during a recession but decline subsequently as the economy recovers (the trend which can also be detected in Figure 5.5), this result may reflect a reaction to the potential job losses anticipated to result from the pandemic which have subsequently not materialised.



**Figure 5.5: Future Start-up Expectations (within 3 years) in Northern Ireland and the UK, 2002-2020** (Source: GEM APS)

In 2020 males in the UK, England, Wales and Northern Ireland are significantly more likely than females to report that they intend to start a business in the next three years. Scotland is the only area to show no significant difference in the intention rates between males and females (Figure 5.6).

In fact, the biggest gap between two genders can be seen in Northern Ireland, where the rates for males and females are 24.3% and 14.9%, respectively. Translated into a female to male ratio this equates to 61% compared to a UK average of 71%. 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 5.6: Future Start-up Expectations (within 3 years) in the UK Home Nations by Gender, 2020 (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>9</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.

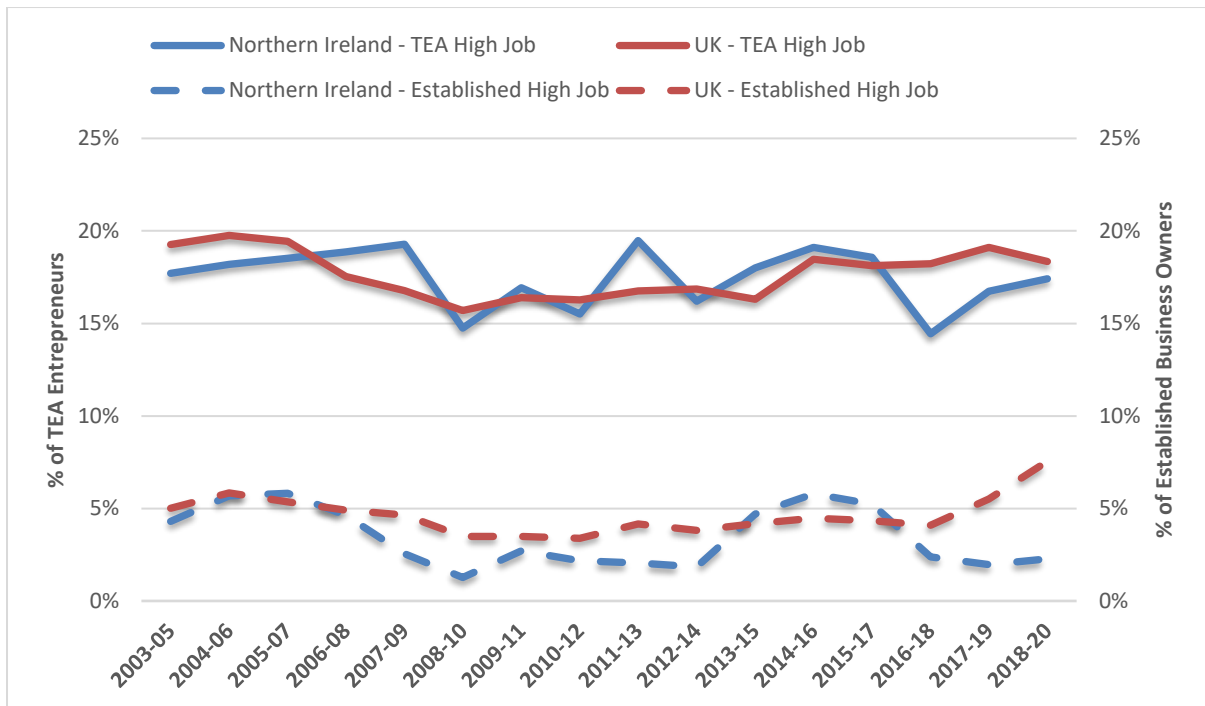
To identify such individuals GEM generates a variable which measures the percentage of all early-stage entrepreneurs (and separately established business owners) who expect to create more than ten jobs with a growth in employment of more than 50% in the next five years. Figure 6.1 displays the trend 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 17.4%. 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 recent years.

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 2018-20 has stayed at around 2%, a clear divergence emerging with the UK rate which continues to increase to 7.5% in the same period.

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<sup>9</sup> Hart, M. and Anyadike-Danes, M. (2014) "Moving on from the vital 6%"; Enterprise Research Centre Insight Report, February



**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 2018-2020 (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 1.2% of Northern Ireland early-stage entrepreneurs have a business with potential national impact compared to a UK share of 1.1%. The percentages of established business owner-managers whose businesses have potential national impact are, however, slightly higher in Northern Ireland at 1.5% compared to 1.2% for the whole UK. In terms of international impact, the shares are even smaller, although consistent between Northern Ireland and the UK, in that, early-stage business have marginally less international scope than established businesses.

	Early-Stage Businesses		Established Businesses	
	NI	UK	NI	UK
At least <b>national scope</b> for market and at least national scope for new product or new process	1.2%	1.1%	1.5%	1.2%
At least <b>international scope</b> for market and at least international scope for new product or new process	0.4%	0.3%	1.0%	0.5%

**Table 6.1: Measures of entrepreneurial potential impact rates in Northern Ireland and the UK, 2020 (Source: GEM UK APS 2020)**

## 7. Funding

Obtaining funding is a key issue for many start-up businesses. Combining data for 5 years from 2016 to 2020, 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 quarter the share in Northern Ireland, 1.4%, expect that they will not need any funding, and even less than that expect that they personally will fund none of the start-up costs.

Of those expecting funding from elsewhere, banks and government programmes are most favoured in Northern Ireland followed by funding from close family and private investors. In the UK funding by close family ranks highest followed by bank funding. Even though raising funds from online crowdfunding has become more prevalent in recent years, it has slightly decreased to only 5.4% in 2016-2020 period in Northern Ireland.

Type of Funding Expected	Northern Ireland %	UK %
No funding needed	1.4	5.5
All funded by entrepreneur	52.2	46.1
None funded by entrepreneur	0.3	1.7
<b>Sources of Funding</b>		
Close family member (spouse, parent, sibling)	15.4	21.8
Other relatives, kin or blood relations	9.9	7.1
Employer or work colleagues	3.0	6.0
Private investor or venture capital	13.4	14.8
Friends or neighbours	4.1	7.0
Banks or other financial institutions	28.5	20.9
Government programmes, donations or grants	27.9	18.1
Online crowdfunding	5.4	7.6
Any other source	5.5	7.6

**Table 7.1: Percentage of nascent entrepreneurs expecting funding from different sources 2016-20** (Source: GEM UK APS 2016-20)

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 2016-2020 period stood at 3.5% in Northern Ireland, just under the UK rate of 4%. Investment into companies owned by close family was

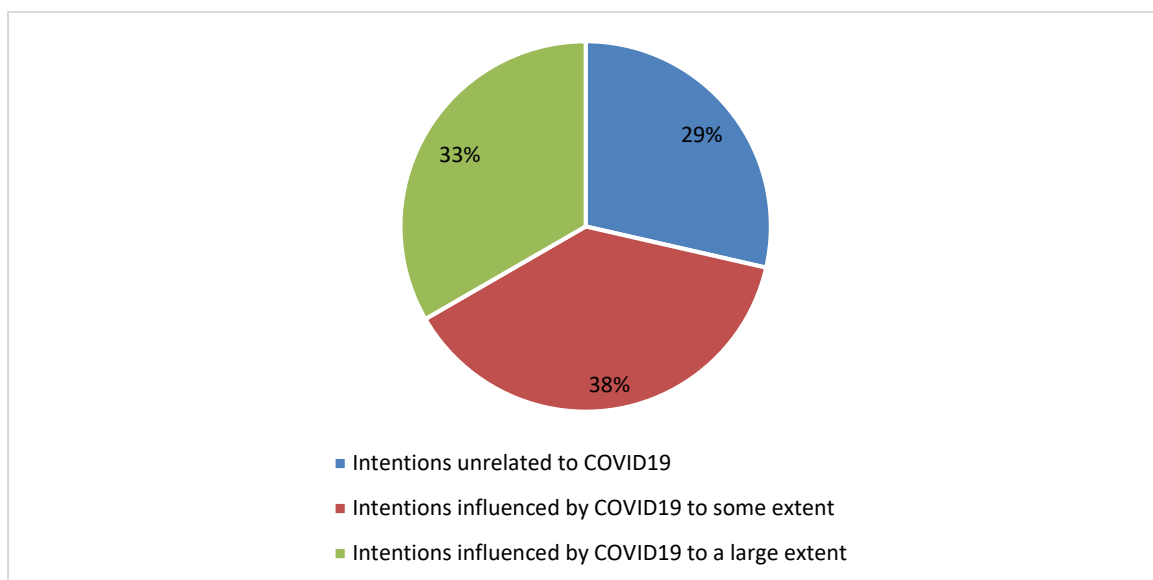
the most common investment choice in Northern Ireland and, at just over 50%, was more than 15 percentage points higher than the UK share. Consequently, Northern Ireland had lower shares investing in friends, neighbours or strangers' businesses.

<b>Informal investment rate</b>	<b>Northern Ireland %</b>	<b>UK %</b>
<b>% aged 18-64 who have invested in someone else's new business in the last 3 years</b>	3.5	4.0
<b>Relationship of latest investee (% of latest investments)</b>		
<b>Close family member (spouse, parent, sibling)</b>	51.8	36.7
<b>Other relative, kin or blood relations</b>	8.9	5.1
<b>Work colleague</b>	11.7	10.0
<b>Friend or neighbour</b>	15.6	30.2
<b>A stranger with a good business idea</b>	11.4	15.1
<b>Other</b>	0.6	2.9

**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, 2016-2020** (Source: GEM APS 2016-20)

## 8. Impact of Covid-19 on entrepreneurial activity

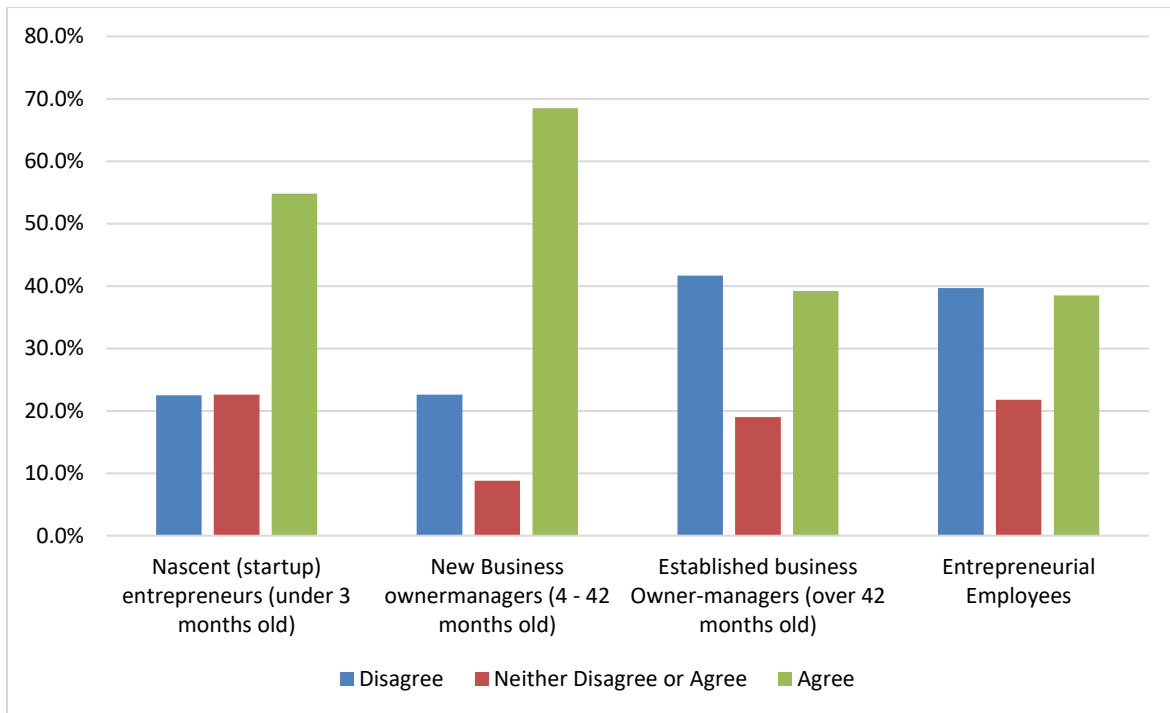
The GEM 2020 study also sought to understand how the Covid-19 pandemic influenced entrepreneurial activity itself. In Northern Ireland, among the 19.5% of working age adults who indicated that they expected to start a business or become self-employed within three years (Figure 5.4 above), more than two thirds (71%) indicated that their expectations were influenced by the pandemic with 29% maintaining that these were unrelated to the pandemic (Figure 8.1).



**Figure 8.1: Impact of Covid-19 on entrepreneurial intentions, 2020** (Source: GEM UK APS 2020)

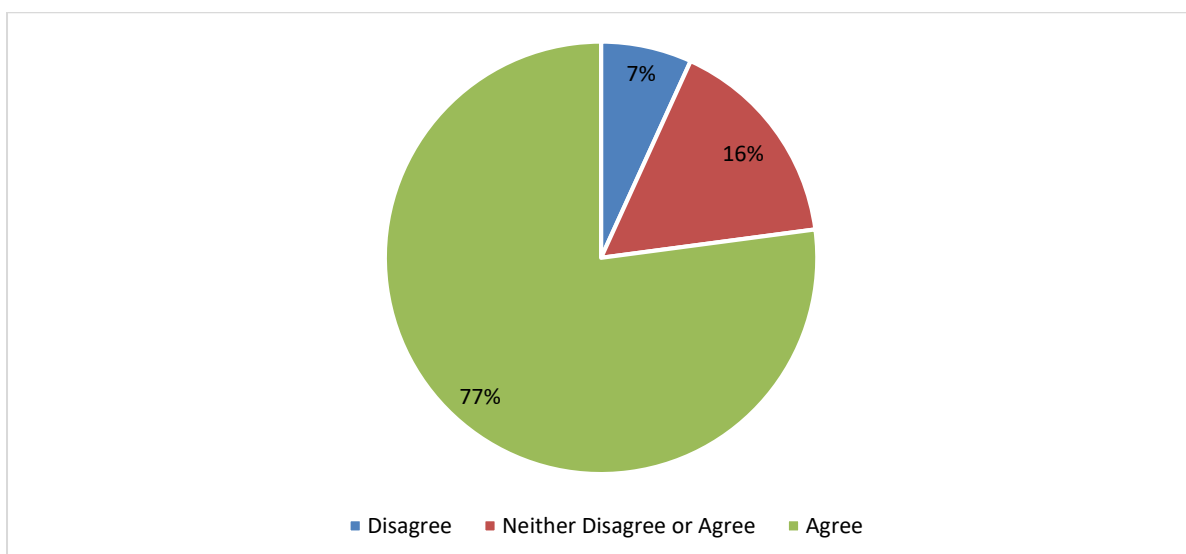
Within working-age adults already engaged in entrepreneurial activity, the GEM 2020 study further explored the extent to which the coronavirus pandemic was seen to have provided opportunities that their business could pursue. As Figure 8.2 shows, over half of nascent (start-up) entrepreneurs and new business owner-managers agreed with the idea that the pandemic had provided new plausible opportunities, while around 40% of both established business-owners and entrepreneurial employees had similar sentiments. This suggests that early-stage entrepreneurs and new business owner-managers were potentially more agile to perceive new opportunities afforded by the crisis than established business-owners. It can be attributable to the fact that established business-owners might be more concerned about upholding their established venture in the face of the pandemic than seeking out new opportunities they could shift their attention to.





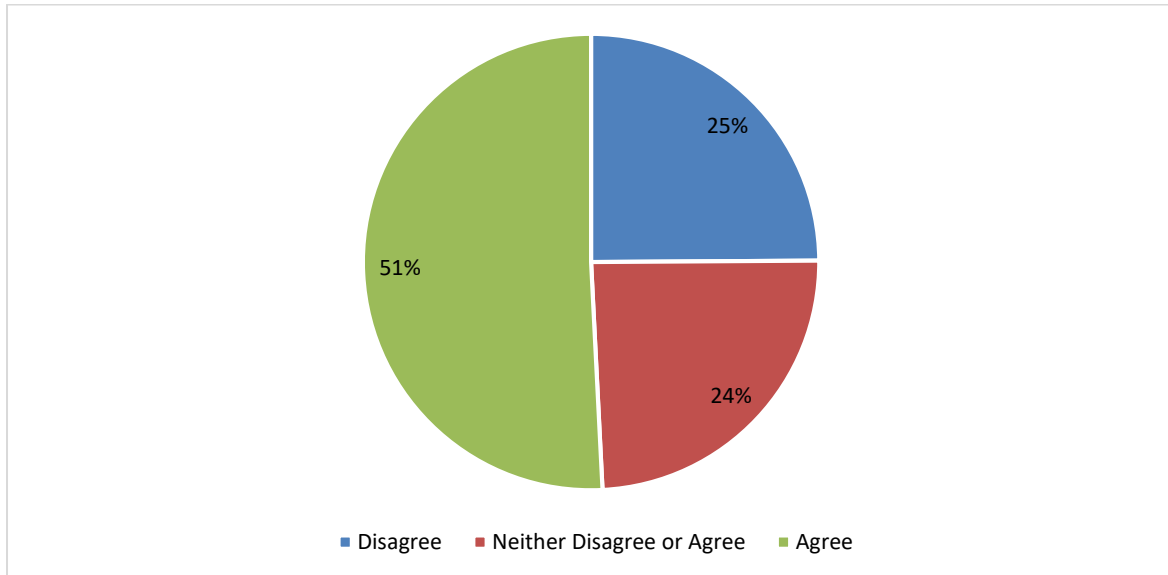
**Figure 8.2: Incidence of perception of plausible new opportunities due to the Covid-19 pandemic** (Source: GEM UK APS 2020)

Nevertheless, among entrepreneurs that were actively trying to set up a business in 2020, 77% indicated that they had had to delay getting business operational because of the Covid-19 pandemic (Figure 8.3).

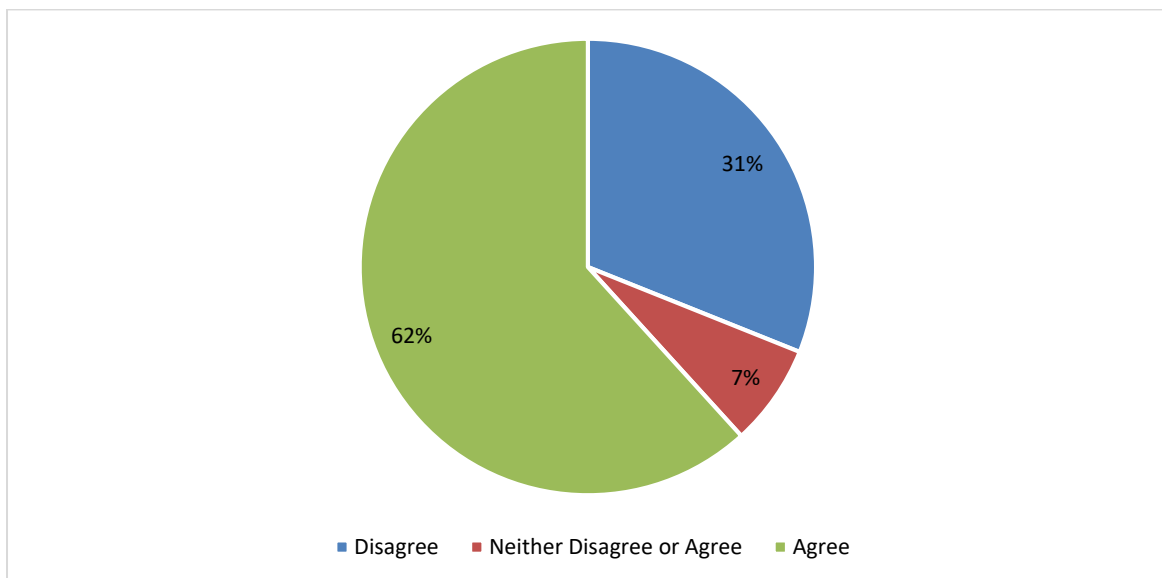


**Figure 8.3: Incidence of delays in getting new start-ups operational due to the Covid-19 pandemic** (Source: GEM UK APS 2020)

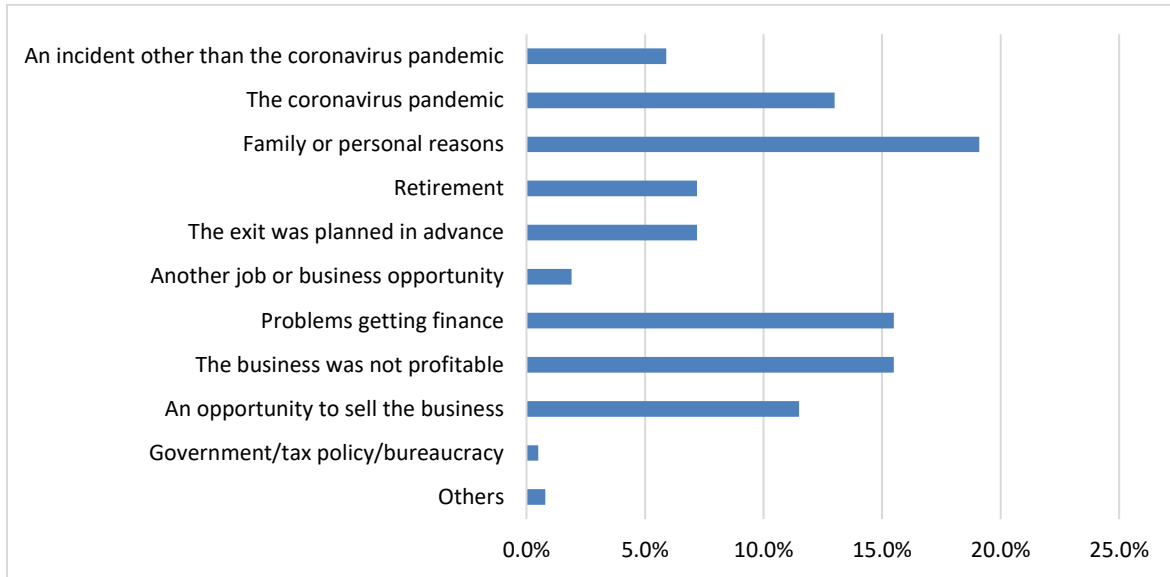
Furthermore, 51% of all owner-managers (Figure 8.4) and 62% of all entrepreneurial employees (Figure 8.5) agreed with the statement that the Covid-19 pandemic had caused their business to stop some of its core activities. Also, besides the 13% of entrepreneurs who highlighted the pandemic as the most important reason for quitting their business, other relevant reasons such as “Problems getting finance” or “The business was not profitable” were also reported by more than 15% of Northern Ireland entrepreneurs (Figure 8.6).



**Figure 8.4: Incidence of stoppage of core activities due to the Covid-19 pandemic as reported by owner-managers (Source: GEM UK APS 2020)**



**Figure 8.5: Incidence of stoppage of core activities due to the Covid-19 pandemic as reported by entrepreneurial employees (Source: GEM UK APS 2020)**



**Figure 8.6: Most important reason for quitting the business – Entrepreneurs’ responses**  
 (Source: GEM UK APS 2020)

## 9. Concluding Observations

As a result of the COVID-19 pandemic and the obvious disruptive impact on the lives of all of us and the huge impact on the economy it was decided that the GEM UK survey, in line with all GEM Global participating countries, should be pushed back until Q4 of 2020 rather than June through August. The UK team felt that this was preferable to not undertaking the survey at all as the pandemic raised many important questions about the ability of entrepreneurs, and indeed the wider population, to navigate their way through the crisis as the economy was effectively closed down and household incomes were under great stress for the majority of the population.

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 2020 there was a slight decrease in the overall entrepreneurial activity rate of Northern Ireland whilst the combined Northern Ireland rate for 2018-20 remained lower than the UK even though the gap seemed to narrow due to the effect of the pandemic.

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. The share perceiving good opportunities for start-up in Northern Ireland has continued to decrease slightly in 2020.

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. Nevertheless, fear of failure in Northern Ireland has also increased markedly to 61.4% in 2020, although it is not significantly different from the figure of 53% for the whole UK.

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 the most recent years. 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 recent “10X Economy Vision for a Decade of Innovation” from the Department for the Economy of Northern Ireland has stressed that: “Our ambition is to become an economy known for its enterprising culture and we want to drive up the rate of new business starts ups and create an environment that actively fosters and supports entrepreneurs to turn their ideas into reality”<sup>10</sup>. Further efforts to stimulate the number of start-ups and those with the potential to provide jobs will now be crucial also for economic recovery.

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<sup>10</sup> [DfE - 10X Economy: Northern Ireland's Decade of Innovation](#)

## 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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