



Global
Entrepreneurship
Monitor

In partnership with



Global Entrepreneurship Monitor

UK Report 2021/22

Authors Mark Hart, Karen Bonner, Neha Prashar, Anastasia Ri, Samuel Mwaura, Sreevas Sahasranamam and Jonathan Levie
Foreword by Andrew Harrison, NatWest Managing Director of Business Banking



Acknowledgements

We are pleased to have NatWest sponsor the 2021 Global Entrepreneurship Monitor UK Report. As the UK's biggest supporter of small businesses, they understand the important role that start-ups, scale-ups and high-growth businesses play in a strong and prosperous UK economy.

Participation in the GEM Global project in 2021 by the UK consortium was made possible by funding from the Department for Business, Energy and Industrial Strategy (BEIS) Business Innovation Directorate, Hunter Centre for Entrepreneurship at the University of Strathclyde, the Welsh Government, Department for the Economy (NI) and NatWest.

The vendor for the Adult Population Survey (APS) was BMG Research Ltd and we would like to thank Dawn Hands, Roger Sant and Julie Hollingsworth for their role in the timely execution of the survey and the creation of the UK dataset. In particular, we would like to thank Roger Sant for his invaluable contribution to the weighting that was undertaken this year due to the dual method used to obtain responses to the GEM survey – that is, CATI and Online.

Disclaimer

This report is based on data collected by the GEM consortium and the GEM UK team; responsibility for analysis and interpretation of the data is the sole responsibility of the authors.

For further information on the GEM UK project, contact:

Professor Mark Hart
Enterprise Research Centre
Aston Centre for Growth
Aston Business School
Aston University
Aston Triangle
Birmingham B4 7ET
Email: mark.hart@aston.ac.uk

GEM Report 2020-21

Foreword by Andrew Harrison, NatWest Managing Director of Business Banking

The Global Entrepreneurship Monitor (GEM) is the most influential global research into entrepreneurial activity and trends, so it's a privilege for NatWest to sponsor this report along with, for the first time, a unique reports for Northern Ireland, Scotland and Wales.

The findings of this report, against a challenging backdrop of the pandemic and the cost-of-living crisis, once again confirm that the UK is a nation of entrepreneurs, with around 1 in 3 adults now either running a business or looking at starting one. The number of individuals in the early stages of setting up a new business is at the highest level since the report was first published in 1999 and is a clear indicator of the entrepreneurial resilience of the UK.

The research also shows that many entrepreneurs revived start-up plans that had been shelved in 2020 when many aspects of society were shut down for long periods. The resilience of small businesses over recent years is both inspiring and important.

That remarkable resilience has partly been driven by women, with more female-led businesses than ever before launched in 2021. It is no longer the case that 'women are half as likely as men to start their own business' as shown in the previous GEM report.

As the economy faces significant turbulence in the year ahead, it is critical that the UK has a thriving ecosystem to support this boom in entrepreneurship, which is central to economic stability and growth.

However, as the cost-of-living crisis grows and continues to affect UK business we need to continue to ensure that the small businesses forming the backbone of the UK economy receive the support they need to handle these unprecedented challenges.

At NatWest our purpose is to champion the potential of people, families and businesses. As the UK's biggest bank for business, we are determined to play our part in helping those businesses to continue to start, scale and thrive.

Main Findings

Background

- The Global Entrepreneurship Monitor (GEM) research consortium measured rates of entrepreneurship across multiple phases in 47 economies in 2021, making it the world's most authoritative comparative study of entrepreneurial activity in the general adult population. In the UK in 2020, 10,044 adults aged 18 to 80 participated in the GEM survey.
- This monitoring report for the UK compares GEM measures of entrepreneurial attitudes, activity and aspirations in the UK, France, Germany and the United States. It also compares the results across the four home nations of the UK.
- The results from the GEM UK Adult Population Survey (APS) and National Expert Survey (NES) for 2021 provide a unique opportunity to lift the lid on a range of issues which lie at the heart of the entrepreneurial process in the midst of the crisis. As it turned out Q2 in the UK witnessed further spikes in the COVID-19 virus, but the UK removed all restrictions on 19th July 2021 in the middle of our fieldwork period. The specific COVID-19 questions in the surveys need to be understood against that context.
- Overall, there appears to be a positive perception that the pandemic has brought in new opportunities across all entrepreneurial activity stages, and positive trend in digital adoption by start-ups. Over 50% of early-stage entrepreneurs agreed that in response to the pandemic they either have adopted new technologies or enhanced plans to improve or invest in new digital technologies.

Entrepreneurial Activity

- Total early-stage Entrepreneurial Activity or TEA (the sum of the nascent entrepreneurship rate and the new business owner-manager rate - without double counting) in the UK in 2021 was 11.5%.
- The 2021 UK TEA rate of 11.5% was statistically significantly higher than the rate in 2020 (7.5%) which may be associated with the postponement of start-up decisions we identified in the 2020 survey and also the recovery of the economy as COVID lockdown restrictions were eased completely on 'freedom day' on 19th July 2021.
- The TEA rate of 11.5% in the UK is statistically significantly higher than that of Germany (6.9%), France (7.7%) and lower than that of the US (16.5%).
- The UK nascent entrepreneurship rate had recovered in 2021 (7.2%) to its pre-pandemic level - 2019 (6.5%), while the new business owner-manager rate in 2021 (4.5%) was not statistically significantly different to the rate in 2020 (3.5%).
- TEA rates in 2021 were not significantly different across the home nations: England (11.8%), Wales (10.3%), Scotland (9.5%) and Northern Ireland (9.1%). Scotland had held steady amid the pandemic in 2020 but other home nations appear to have built back stronger and achieved significant growth in 2021.
- Employees can also be engaged in entrepreneurial activity on behalf of their employers; this is measured through the Entrepreneurial Employee Activity (EEA) Rate. Considering both TEA and EEA together provides a more comprehensive picture of entrepreneurial activity in a nation. In 2021, the UK's rate was 2.6%, which was slightly lower than 2020 rate (3.2%) and also significantly lower than in 2019 (5.6%). The implication here is that, perhaps not surprisingly, the pandemic has suppressed the degree of entrepreneurial activity being undertaken by employees.

Entrepreneurial Activity Types

- In the UK in 2021, just under 29% of working age individuals were either engaged in entrepreneurial activity or intended to start a business within the next three years which was an increase compared to 2020. This has been steadily increasing since 2018.
 - 18.3% of working age adults expected to start a business within the next 3 years in the UK, which is higher than in Germany (8.6%) but broadly similar to France (16.9%) and the US (20.5%).
 - 7.2% of the working age adult population in the UK were actively trying to start a business (**nascent entrepreneurs**), compared with 4.3% in Germany, 5.8% and 10.7% in the US. This sharp increase in nascent entrepreneurship in the UK is the main driver of a higher TEA rate in 2021.
 - 4.5% of the working age adult population were owner-managers of a business that was 4 to 42 months old (**new business owner-managers**). This is lower than the US rate of 6.0% and higher than the rates in Germany (2.7%) and France (2.0%).
 - 6.9% of the UK working age adult population owned and managed a business older than

- 42 months (**established business owner-managers**). This was broadly similar to the year before (7.6%) and lay between the rates for France (3.6%) Germany (4.9%) and US (8.8%).
- 3.1% of working age people in the UK discontinued a business (either through closure or sale) in the past 12 months – a slight decrease since 2020. Discontinuation rates of businesses were similar in the US (4.3%) but higher than in France (1.6%) and Germany (2.1%).
- Among all entrepreneurial activity measures in the UK, only new business owner-manager and established business owner-managers rates remained significantly unchanged from 2020.

Demographics

- In 2021 the male TEA rate was 13.2% and the female rate 9.7% which were both significantly higher than in 2020.
- The UK female to male TEA ratio of 73% in 2021 is higher than in previous years and can be attributed to the significant rise in female early-stage entrepreneurial activity underlining the resilience of female early-stage entrepreneurial activity in the midst of the most severe economic crisis in 300 years.
- The ratio of female to male early-stage entrepreneurship varies across the UK regions so care needs to be taken using the often repeated statement that ‘women are half as likely as men to be starting their own business in the UK.’ For example, in Wales the ratio is 92%, while in England it is 73%, Scotland 68% and in Northern Ireland 65%.
- Those aged 25-34 in 2021 in the UK were more likely to be involved in early-stage entrepreneurial activity than all other age groups, but this was not significantly different to those aged 18-24 and 35-34. There was an increase in the proportion of 55-64 year olds in the UK involved in early-stage entrepreneurial activity – 7.4% compared to 3.2% in 2020. This may be explained by the ‘Great Resignation’ what is now being associated with the COVID effects on the labour market as older individuals re-evaluate their future economic activity and their position in the labour market.
- Similar to previous years, immigrant TEA levels were significantly above that of UK born life-long residents in 2021: the TEA rate for immigrants was 17.1% compared to 10.3% for life-long residents.
- Those ethnic-minority communities that have borne the brunt of the pandemic in terms of infection, hospitalisation and sadly deaths demonstrated their resilience by maintaining their previous levels of

early-stage entrepreneurial activity (TEA rate) which were significantly higher than for the non-ethnic minority population. Following previous trends, the TEA rate of the white ethnic population in the UK in 2021 was significantly lower than that of the non-white population, at 10.1% compared to 20.4% respectively.

Attitudes and Aspirations

- The share of those who felt they had the skills, knowledge and experience to start a business (39%) was statistically significantly lower than the share in 2020 (44.3%). In contrast, the start-up opportunity perception was also statistically higher (47.7%) than in 2020 (32%) reflecting the economy beginning to recover after the COVID crisis. The proportion of those who felt that fear of failure would prevent them starting the business, on the contrary, was slightly higher (57.6%) than in 2020 (53%) which is significantly higher than before the pandemic in 2019 (46%).
- Four-fifths (81%) of the non-entrepreneurial population believe that those successful at starting a business have a high status in society, however, there is a 7-percentage point gap between that share and those that believe starting a business is a good career choice. This is a narrowing of the gap since 2019 as significantly more of the non-entrepreneurial population report that starting a new business is a good career choice.
- Around 1 in 7 UK early-stage entrepreneurs have high job expectations in 2021, a statistically significant decrease from 2019 where 1 in 4 had high job expectations. This rate is lower than that of the US (23.1%) and France (19.1%) but higher than in Germany (11.4%). The rate of established business owners with high job expectations in the UK (11%) is higher than in the US (3.9%), France (4%) and Germany (2.5%).
- Just over two-fifths of early-stage entrepreneurs and established business owners are not engaged in any high value activities in the UK in 2021. This is an improvement on the situation in 2020.
- The results in 2021, unlike in previous years, show a departure from the hypothesis that the owners of new, young firms are more ambitious and innovative than their incumbent counterparts. The fact that more established business owners in 2021 are undertaking high value activities is a positive sign for the economy given the sometimes precarious position of new ventures.

Entrepreneurial Framework Conditions

- In 2021, as in 2020, the entrepreneurial environment has been influenced by coronavirus pandemic and governments' responses to alleviate its impact and to minimise a decline in start-ups and established business ventures, but also by an increasing call to a more sustainable and responsible business practices. In 2020, it became clear that the coronavirus pandemic created not only hardships but also opportunities. Digital transformation is often considered as one of the enablers to innovation helping new and established businesses seize new opportunities arising in the digital era. To take into account these factors, in 2021, the NES introduced additional questions.
- Typically, the UK framework conditions mirror relatively closely the US EFCs, except for statistically significantly lower scores for cultural and social norms in terms of support of new and growing firms. Entrepreneurial finance, physical and professional infrastructure, as well as internal market dynamics also scored lower in the UK than in the USA in 2021 although the difference is not statistically significant.
- One dimension for which the UK shows consistently higher scores than the US is ease of market entry for new and growing firms and internal market burdens and regulations, and this is again the case in 2021 – the UK ranked 7th for this framework condition among 50 countries which participated in NES in 2021.
- In total, the National Entrepreneurship Context Index (NECI), which combines in one figure weighted averages of the twelve EFCs, was 4.9 (out of 10) in the UK in 2021 – pre-pandemic it was 4.83 (2019).
- UK, with a total score of 4.9, ranked 18th among 50 countries. A score below 5 out of 10 (neutral point) indicates that experts regard the conditions for entrepreneurship to have room for improvement.
- In 2021, the UK overall index of entrepreneurship context is slightly lower than in France and Germany (5.1) and in the USA (5.3), and much lower than NECI scores of top-ranked countries, including, in Europe, the Netherlands with the second highest score at 6.3.
- Entrepreneurial framework conditions in Northern Ireland and Scotland in 2021 followed the same pattern as in the UK although there were some differences. Thus, government support policies, easiness to get funding, R&D transfer and government entrepreneurship programmes scored higher in both nations compared to the UK overall. However, only the difference in government entrepreneurship programmes was statistically significant.
- In 2021, experts were again asked to evaluate entrepreneurs' and Government response to the COVID-19 crisis. Overall, UK measures to avoid a decline in new and growing businesses were judged as sufficient with the score of 5.24. It was in line with the effectiveness of the measures by US and German governments. However, the support was judged as significantly less effective compared to some other countries, including France and Netherlands.
- Experts agree that support to women entrepreneurs is insufficient in the UK as it is also the case in France and USA. Germany and Netherlands scored above 5 with Netherlands having statistically significantly higher score than in the UK.

1. Introduction

1.1 Scope of report

This report documents Global Entrepreneurship Monitor (GEM) measures of entrepreneurial attitudes, activity and aspiration in the United Kingdom (UK) and compares the rates to those in Germany and the United States (US). It also summarizes entrepreneurial attitudes, activity and aspiration across the four nations of the UK and reports on business start-up funding expectations.

1.2 GEM: History, purpose and measures

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 2021 the study conducted surveys in 47 sovereign nations and represents the world's most authoritative comparative study of entrepreneurial activity in the general adult population.

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 2021 GEM global study was based on an analysis of adult population survey (APS) results from 47 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, their *aspirations* for their business.

The global GEM Executive 2021/22 Report was published in February¹ and can be downloaded from www.gemconsortium.org.

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 (FUT). Finally, we ask individuals if they have sold, shut down, discontinued or quit a business, in the past year (BC). 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 and the new business owner-manager stage, are combined into one index of Total early-stage Entrepreneurial Activity, or TEA², which is represented in Figure 1.1 below.

As much of this entrepreneurial activity is pre-start-up or includes very small new businesses that do not have to register for VAT, TEA rates will not necessarily match with published official statistics on business ownership and, indeed, should not be interpreted as such.

¹ Hill, S., Ionescu-Somers, A.; Coduras, A.; Guerrero, M.; Roomi, M.; Bosma, N., Sahasranamam, S. and Shay, J. (2022) Global Entrepreneurship Monitor 2020/21 Global Report. London: Global Entrepreneurship Research Association.

² 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.

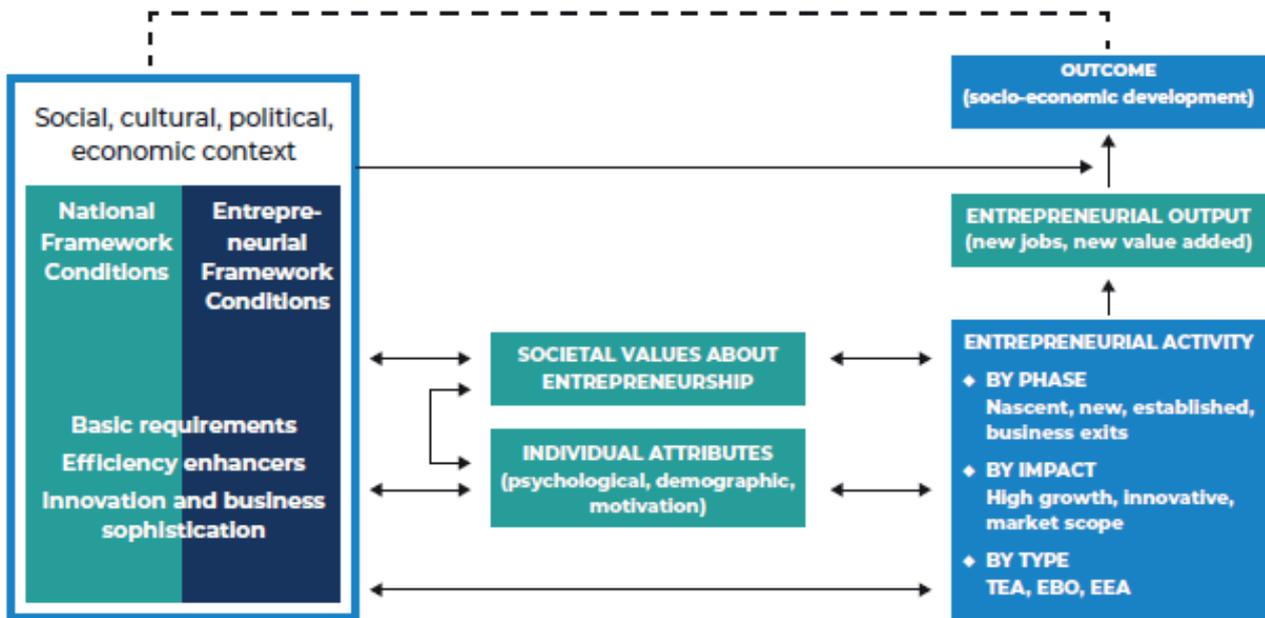


Figure 1.1: The Entrepreneurial Process and GEM Operational Definitions

(Source: Hill, S., Ionescu-Somers, A.; Coduras, A.; Guerrero, M.; Roomi, M; Bosma, N., Sahasranamam, S. and Shay, J. (2022), pg.23)

Rather, GEM enables the measurement of the *propensity* of individuals in particular countries to be entrepreneurial *given* the current social, cultural and economic framework conditions that exist there.

The methodology, sample sizes and weighting systems used for the GEM UK 2021 Adult Population Survey (APS) are explained in more detail in Appendix 1. In a major departure in 2020 the UK team decided to continue an online mode for respondents to complete the APS and this sat alongside the traditional mode of CATI surveys. We did this for one overriding reason and that was the vastly increased costs of undertaking CATI surveys and the need to maintain the UK sample at around 10,000 respondents to ensure we can continue to provide data for the home nations as well as other important sub-groups of the population such as immigrants, ethnic minorities and women. The first 2,000 APS interviews were conducted via CATI as usual and the results were reported in the GEM Global report published in February 2022. Accordingly, the results contained in this report may differ slightly from those already published for the UK in the GEM Global report. The detailed weighting and adjustments we made to the UK APS dataset as a result of this new mixed mode

survey methodology are set out in Appendix 1.

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 2020³ 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). See Appendix 1 for further details.

³ This is last year for which data is available from www.statistia.com

2 Entrepreneurial attitudes

2.1 Entrepreneurial attitudes in the UK and benchmark countries in 2021

At least some of the difference in entrepreneurial activity rates between countries may be explained by differences in attitudes of the population towards entrepreneurship. As individuals who are already entrepreneurs may feel compelled to provide positive answers in the survey Table 2.1 compares attitudes for that portion of the working age (18-64) population who are *not* already nascent entrepreneurs or business owner/managers in the UK, Germany and the US.

	I know someone who has started a business in the last 2 years	There are good start-up opportunities where I live in the next 6 months	I have the skills, knowledge and experience to start a business	Fear of failure would prevent me starting a business (for those who agree there are good start-up opportunities)
UK	43.1	47.7	39.0	57.6
France	46.3	52.1	48.6	49.7
Germany	39.9	48.2	37.1	45.5
US	58.8	63.2	64.5	48.4

Table 2.1: Attitudes towards entrepreneurship in the UK, Germany and US in 2021 - percentage of working age population who are neither nascent entrepreneurs nor existing business owner/managers, who expressed an opinion and agreed with the statement at the top of the column (Source: GEM Global and UK APS 2021)

Points of note include the following:

- Over 40% of the non-entrepreneurial population of the UK know of a recent start-up entrepreneur which is higher than Germany but slightly lower than France. The equivalent figure for the US was just under three-fifths of the population.
- Just under two-thirds of the non-entrepreneurial working age population in the US perceive that there are good start-up opportunities in their area in the next 6 months. The rates in the European comparator countries are substantially lower. In the UK the respective share is just under half, similar to that of Germany and marginally lower than France.

- In the UK over two-fifths of the non-entrepreneurial population perceive that they have the skills, knowledge and experience to start a business; the rates in Germany are slightly lower while in France and the US the respective share is much higher - 49% and 65% respectively.
- Fear of failure among those who perceive start-up opportunities is much higher in the UK, at just under three-fifths, than in the other three comparator countries.

2.2 Entrepreneurial attitudes in the UK: 2019-2021

Estimates of attitudes towards entrepreneurship by gender are shown in Table 2.2. In 2019, GEM changed most attitude questions from yes/no questions to a five-point Likert scale. These have been converted to agree/other responses to harmonise with prior years. There was a substantial change in the way the item asking respondents if they know someone who has started a business in the last 2 years was measured in 2019, where for the first time the number of people known was asked. Those stating they had the skills to start a business significantly decreased from 47.0% in 2020 to 43.1% in 2021, while good opportunities perception increased from 32.0% in 2020 to 47.8% in 2021. There was also a significant decrease in perception of skills from 44.3% in 2019 to 39.0% in 2021. Fear of failure saw an increase from 2020, however, this was not statistically different.

These trends were also the same and significant when looking at male and female attitudes. In particular, male attitudes towards good opportunities increased from 37.2% in 2020 to 51.7% in 2021, while for females, this increased from 27.1% in 2020 to 44.1% in 2021. This shows a clear attitude change in the expectation of start-up good opportunities from 2020, which in part would be fuelled by the complete relaxation of restrictions in place due to the pandemic.

Similar to this increase, there was a significant rise in percentage of those who stated they saw stories on successful start-ups in the media from 74.6% in 2020 to 80.0% in 2021. This was also significant for females with 80.2% stating good start-up stories in the media in 2021 compared with 73.5% in 2020. This was also higher than males in 2021, at 78.9%.

	2019	2020	2021	2019	2019	2020	2020	2021	2021
	All	All	All	Male	Female	Male	Female	Male	Female
I personally know someone who has started a business in the last two years	46.1	47.0	43.1	47.2	45.2	47.1	47.0	42.9	43.3
There will be good start-up opportunities where I live in the next six months	39.1	32.0	47.7	40.8	37.5	37.2	27.1	51.7	44.1
I have the skills, knowledge and experience to start a business	47.5	44.3	39.0	56.6	39.6	51.0	38.4	46.3	32.7
Fear of failure would prevent me from starting a business (for those who agree there are good start-up opportunities)	46.0	53.0	57.6	43.3	48.8	49.9	57.0	54.7	60.7
Most people consider that starting a business is a good career choice	57.6	73.5	72.3	58.8	56.6	72.2	74.6	68.8	75.4
Those successful at starting a business have a high level of status and respect in society	76.6	80.8	80.9	77.5	75.9	81.8	79.8	80.4	81.3
You will often see stories about people starting successful new businesses in the media	72.5	74.6	79.5	72.6	72.5	75.8	73.5	78.9	80.2

Table 2.2: Entrepreneurial attitudes in the UK in 2019, 2020 and 2021 (% non-entrepreneurially active respondents aged 18-64 expressing an opinion and agreeing with the statement) (Source: GEM UK APS 2019, 2020, 2021)

The trend in attitudes towards entrepreneurship is shown in Figure 2.1. Attitudes across nearly all measures have generally become more optimistic since 2002. There has been a clear upward trend in fear of failure and those who state positive start-up new stories in the media since 2018. Interestingly, those who stated they have the skills and know someone who has started a business has decreased since 2019, which is slightly counterintuitive considering the increase of media presence of successful start-ups. This could be explained where media stories are showing more successful start-ups post-pandemic, but fear of failure and lack of skills are still big barriers voiced by many. The significant increase in opportunity perception in the next 6 months could be lagged and thus may be more apparent when we conduct the 2022 survey when we will see if opportunity perception impacts other attitudes such as fear of failure and skills.

Figure 2.2 shows the trend in perceptions of good start-up opportunities in the local area in the next 6 months; males and female perceptions have followed the same trend, albeit with a consistent gap between the two. In 2021, there was an increase in both start-up opportunities and fear of failure for males and females. This was a significant increase in opportunities for both male and females from the 2020 figure. Fear of failure also increased in 2021, however, this was not significant when compared with the previous year. In both cases, there has been an upward trend in fear of failure since the Global Financial Crisis (GFC) recession

but with the recovery after the first two waves of the pandemic in early 2021, opportunity perception has seen a marked increase, well above levels seen pre-GFC.

In 2021, there was a significant 7-percentage point gap between male and females when looking at the perception of opportunities. Fear of failure for males remains higher than opportunity perception, however this gap is much smaller than in 2020.

2.3 Attitudes towards entrepreneurship in the UK home nations

The self-reported attitudes of the non-entrepreneurially active working age population in the four UK home nations are presented in Table 2.3. The key findings for 2021 are as follows:

- The proportion of non-entrepreneurially active individuals who personally know someone who has started a business in the last two years may reflect the prevalence of new business start-up in a nation as well as the amount of networking by individuals. In 2021 this was just over two-fifths of the non-entrepreneurial population; Northern Ireland had significantly higher proportion than England. England also had significantly lower proportion of

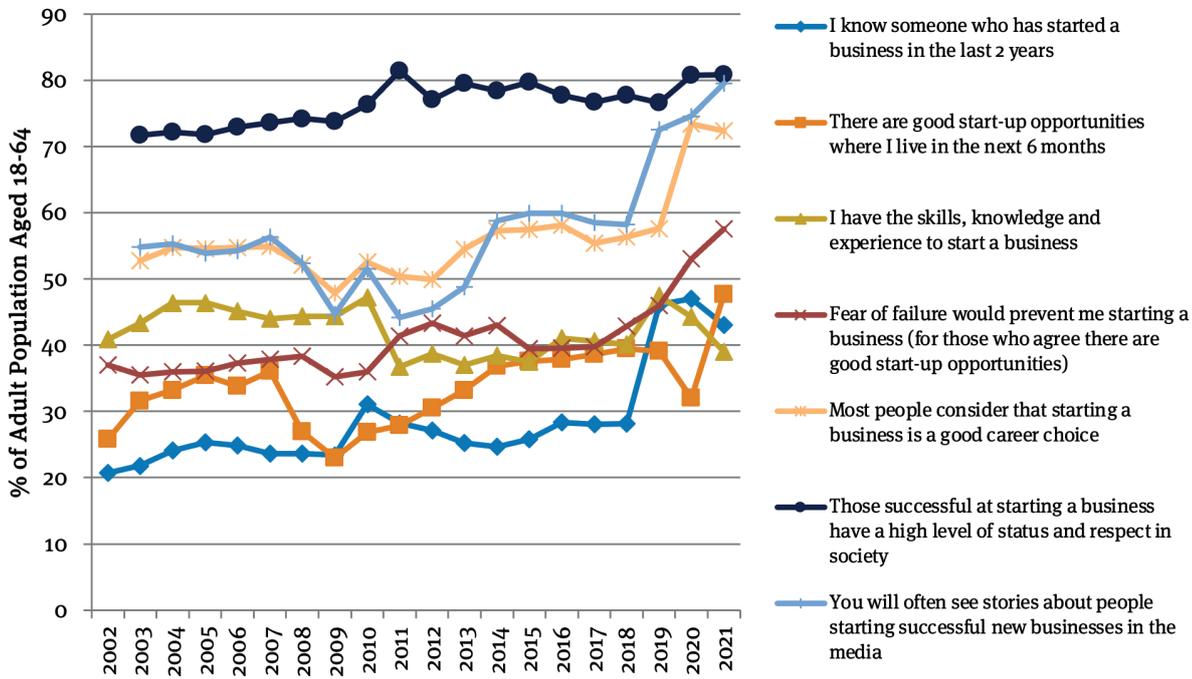


Figure 2.1: Entrepreneurial attitudes in the UK, 2002-2021: (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statement) (Source: GEM UK APS 2002-2021).

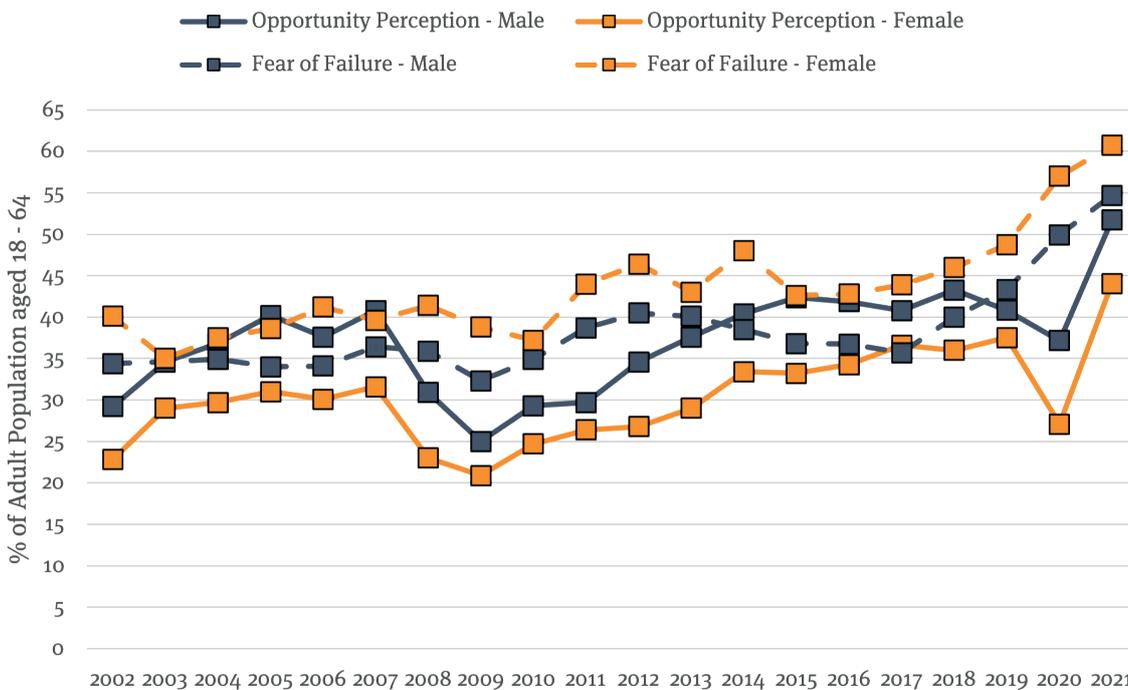


Figure 2.2: Male and female attitudes towards Good Opportunities and Fear of Failure (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statements “There are good start-up opportunities where I live in the next 6 months”; “Fear of failure would prevent me from starting a business”) (Source: GEM UK APS 2002-2021) See footnote for change in wording of fear of failure item in 2019.

- 42.7% in 2021 when compared with 2020, where the proportion was 47.2%.
- All home nations had significantly higher proportion of respondents who agreed that there were good start-up opportunities in their local area in the next 6 months in 2021 when compared with 2020. England has significantly higher proportion of 48.3% than Wales at 40.1%.
 - The proportion of non-entrepreneurially active respondents who thought they had the skills to start a business were similar across the home nations: 38%-43%. England had a significantly lower proportion of 38.9% in 2021 than in 2020, where the proportion was 44.8%. There were no differences seen between home nations.
 - The proportion who feared failure in the UK (57.6%) in 2021 was slightly higher to the rate in 2020 (53.0%), however this was not a significant difference. There were no significant differences seen between home nations between 2020 and 2021 and between home nations in 2021.
 - Most non-entrepreneurs had similar attitudes towards those starting a business in 2021 to 2020; around three-quarters of non-entrepreneurial individuals in the home nations agreed with the statement that “most people consider that starting a business is a good career choice”.
 - A higher share, more than four-fifths of non-entrepreneurial individuals, agreed that “those successful at starting a business have a high level of status and respect in society”. This was consistent across the home nations with Northern Ireland recording the highest share at 83.5%.
 - Four-fifths (79.5%) of non-entrepreneurs agreed that “you will often see stories about people starting successful new businesses in the media”. Again, this was a consistent finding across the UK home nations. 79.8% of respondents in 2021 agreed with this statement in England, a significant increase from 2020, where 74.4% agreed.

	England	Wales	Scotland	Northern Ireland	United Kingdom
I know someone who has started a business in the last 2 years	42.7	45.2	43.9	48.8	43.1
There are good start-up opportunities where I live in the next 6 months	48.3	40.8	46.4	46.7	47.7
I have the skills, knowledge and experience to start a business	38.9	43.0	37.0	41.5	39.0
Fear of failure would prevent me from starting a business (for those who agree there are good start-up opportunities)	58.1	55.5	54.4	56.5	57.6
Most people consider that starting a business is a good career choice	72.5	73.7	70.7	70.0	72.3
Those successful at starting a business have a high level of status and respect in society	80.9	80.1	80.6	83.5	80.9
You will often see stories about people starting successful new businesses in the media	79.8	77.7	77.7	80.8	79.5

Table 2.3: Perceptions of entrepreneurship among non-entrepreneurially active individuals in the UK Home Nations (%), 2021 (Source: GEM UK APS 2021)

3 Entrepreneurial activity

3.1 Entrepreneurial activity in the UK and benchmark countries

The lack of systematic, representative descriptions of the firm creation process has hindered the development of effective, efficient approaches to facilitate business creation. GEM views entrepreneurship as a process in which individuals become increasingly engaged in entrepreneurial activity. Figure 3.1 illustrates the proportion of respondents by stage of entrepreneurial activity in the UK over the period 2002 to 2021. In this figure, individuals who engaged in more than one stage of the process at a time are included **in their most established stage** (see Figure 3.1b in Appendix 2 for gross rates for each stage).

In the UK in 2021, just under 29% of working age individuals were either engaged in entrepreneurial activity or intended to start a business within the next three years which was an increase compared to 2020. This has been increasing since 2018. Participation in the stages of entrepreneurship in 2021 revealed that 6.8% were engaged in established business ownership, 4.4% in new business ownership, 6.6% in nascent entrepreneurship and 10.6% intending to start a business within the next 3 years. The major changes, therefore, in 2021 were that nascent entrepreneurship returned to 2019 levels of around 6%, though still an unusually high rate when compared with historic trends. Further, the number of individuals stating that they intended to start a business in the next three years remained above 10% continuing the high levels seen in 2020, clearly reflecting an on-going reassessment for many of their labour market position.

Figure 3.2 shows a breakdown of entrepreneurial activity by a more refined business 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 employer⁴. The majority of active entrepreneurs fell into the “Independent early-stage entrepreneur only” category, at over 6% of the population and was 2 percentage points higher than in 2020. “Sponsored early-stage entrepreneur only” had the second highest proportion at 4.3%, which was an increase from 2020 where the proportion was 2.7%.

“Independent established business owner-manager only” accounted for 2.9%, a decrease from 2020 when it was 3.7%. However, the overall percentage that stated no activity decreased from 82.4% to 80.1%.

Total early-stage Entrepreneurial Activity (TEA) is the sum of the nascent entrepreneurship rate and the new business owner/manager rate. The trends in TEA rates between 2002 and 2021 for the UK, France, Germany, and the US are shown in Figure 3.3. For all countries, higher average TEA rates were observed after 2010. There was a drop in TEA in 2020 but this picked up in Germany, US, and the UK. TEA in the UK in 2021 was significantly higher than the rate observed in 2020 which may be associated with the postponement of start-up decisions we identified in 2020 and also the recovery of the economy as lockdown restrictions were eased completely on ‘freedom day’ on 19th July 2021.

TEA rates by age group for the UK, France, Germany and the US are shown in Figure 3.4. The UK, Germany and France have the 25-34 age group as most prevalent with 15%, 10.0% and 11.0%, respectively. In the US, the 35-44 age group has the highest TEA rate of 20.5%. In all countries, the 55-64 age group has the lowest TEA rates. TEA rates across all age bands except for the 55-64 age group in the US are much higher than the UK and Germany, with rates of 15% or more for all ages up to 45-54 years old.

TEA rates in all age bands are higher than both Germany and France. The gap in TEA rates between the UK and the US is, however, larger for the older age groups. In the US, 20.5% of the 35-44 age group and 18.3% of the 45-54 age group are involved in early-stage entrepreneurial activity compared to 13.1% and 9.1% respectively in the UK.

⁴ Note that those intending to start a business are included in the “no activity” category to focus on those actively engaging in starting a business.

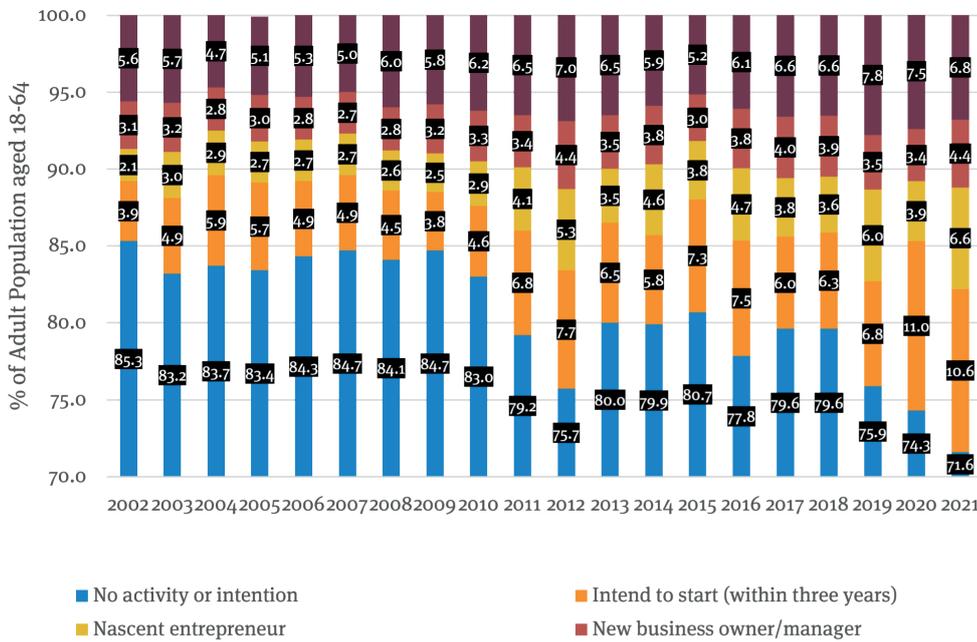


Figure 3.1: Participation in Entrepreneurship in the UK by most established stage of entrepreneurial activity (not including intrapreneurs), 2002 to 2021 (Source: GEM UK APS 2002 to 2021)

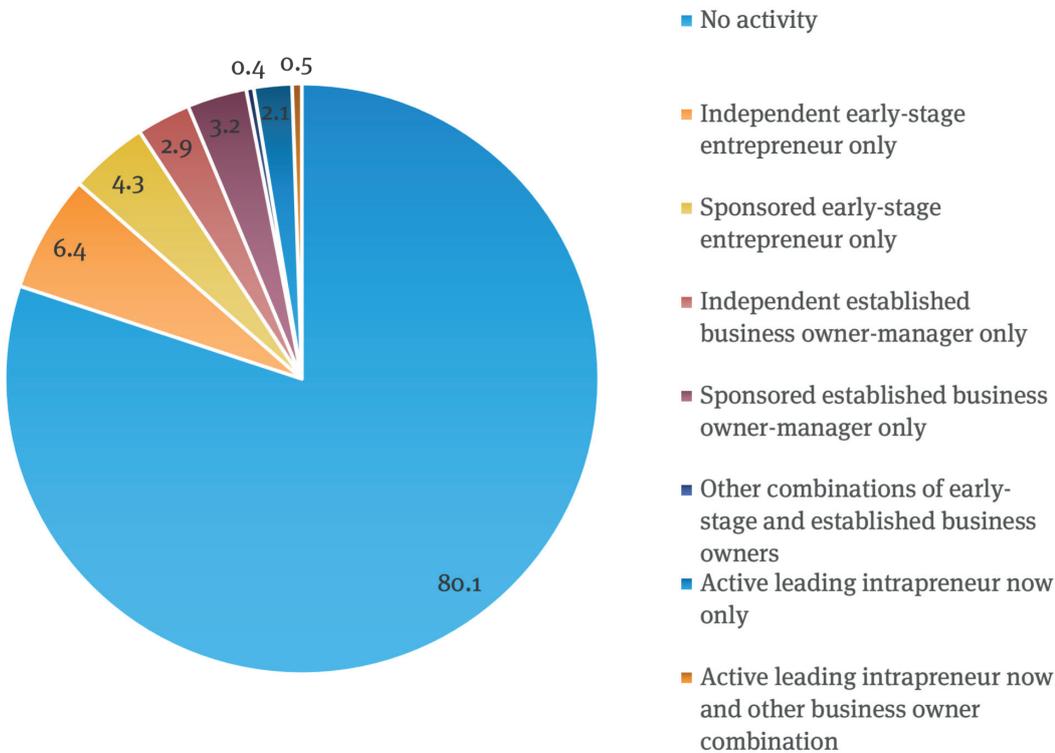


Figure 3.2: Distribution of modes of entrepreneurial activity in early-stage and established businesses (Source: GEM UK APS 2021)

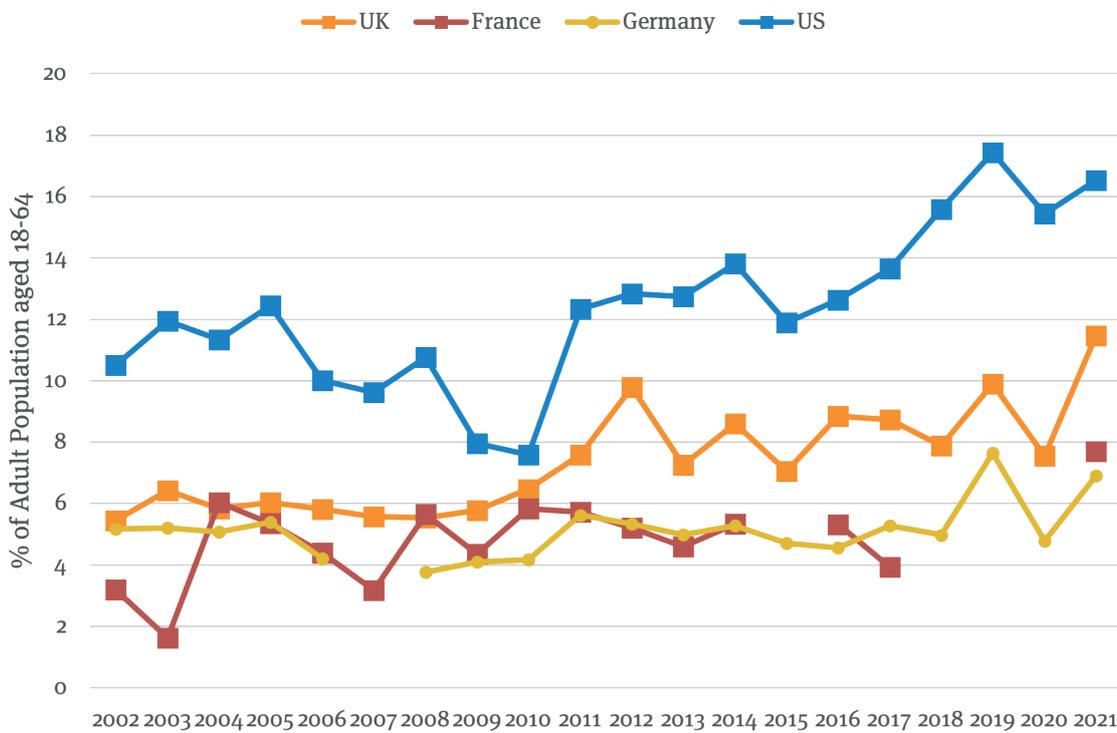


Figure 3.3: Total early-stage Entrepreneurial Activity (TEA) in UK, Germany and US (2002-2021)
 (Source: GEM Global APS 2002-2021)

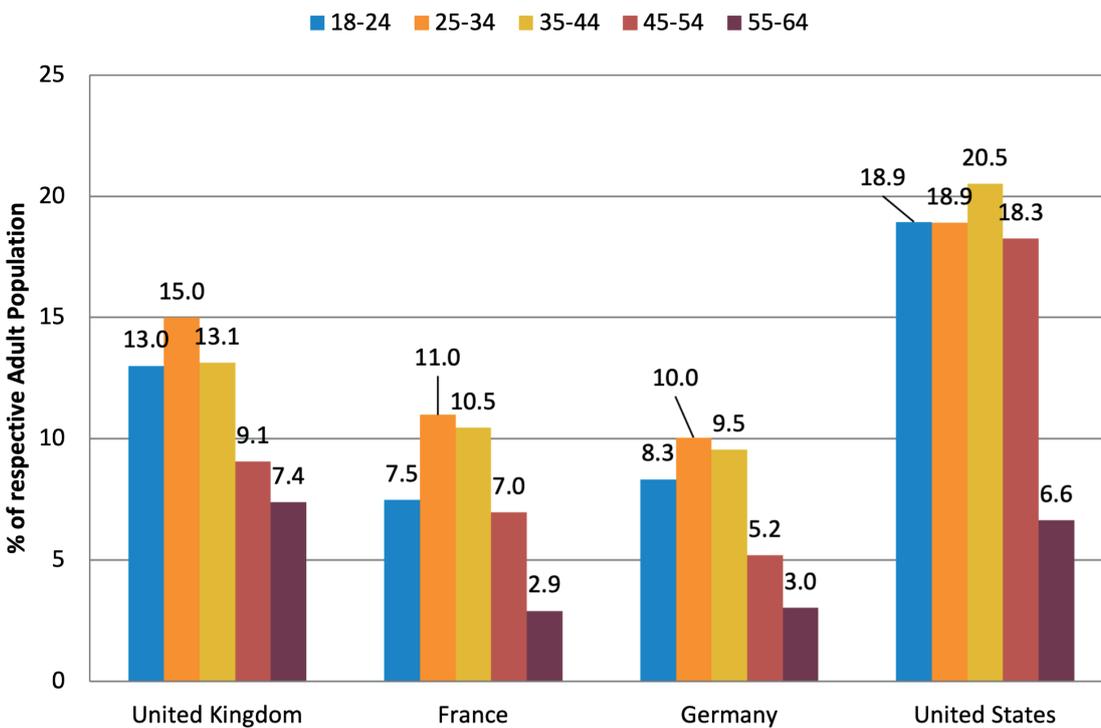


Figure 3.4: Total early-stage Entrepreneurial Activity (TEA) in the UK, Germany and the US by Age Group 2021 (Source: GEM APS 2021)

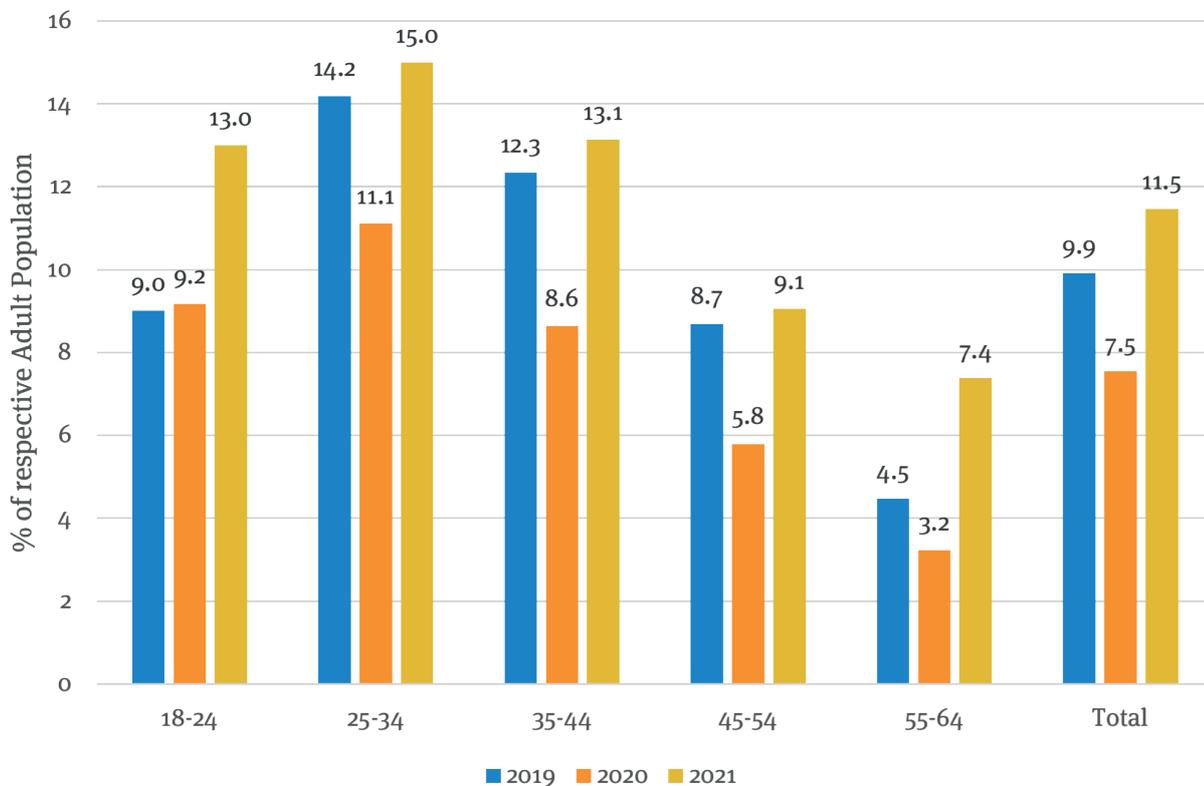


Figure 3.5: Total early-stage Entrepreneurial Activity (TEA) in the UK by Age Group (2019 to 2021)
(Source: GEM APS 2019-2021)

The trend in UK TEA rates by age group for the most recent three years is shown in Figure 3.5. The TEA rate for 18-24 year-olds is the only one to increase over all three consecutive years: from 9.0% in 2019 to 13.0% in 2021. All other age groups experienced an increase in entrepreneurial activity between 2020 and 2021, where 25+ year old respondents saw a significant increase, where all groups went up by at least 4 percentage points from 2020.

In addition to TEA, and its components of nascent and new business owners, GEM also measures the proportion of established business owner-managers (EBO) in the working age population. Established business owner-managers are defined as those who have owned or managed a business for more than 42 months. GEM also measures the proportion of individuals of working age who, in the last 12 months, closed down a business which did not continue under a different form of ownership.

The ratio of established business ownership to early-stage entrepreneurship gives a proxy measure of transition, or survival beyond the fragile earliest years

of a venture. The ratio of closure to business ownership (new plus established) gives a proxy of entrepreneurial dynamism or “churn”. The 2021 data for these metrics for the UK, Germany and the US are given in Table 3.1.

The business churn rate is the same for all countries at 0.3%. The proxy early-stage survival rate for the UK is 0.6%, slightly higher than France and the US but slightly lower than Germany. There was a significant increase in those that expect to start a business in the UK from 16.2% in 2020 to 18.2% in 2021. There were also significant increases in nascent entrepreneurial activity rates, new business owner/manager rates and TEA rates in 2021.

In general, the UK measures of entrepreneurial activity typically lie between those observed in its European counterparts and the US. The US generally leads in all measures of activity when looking at intention to start a business in the next three years and TEA rates. In 2021 the UK intention rate was catching the US rate, similar to what was seen in 2020, but the gap between TEA rates remained.

	I expect to start a business in the next 3 years (FUT)	Nascent Entrepreneurial Activity rate (paying wages for 3 months or less) (NEA)	New Business Owner-manager rate (4-42 months) (NBO)	Nascent + New business owner-manager rate (TEA)	Established Business Owners (>42 months) (EBO)	Business closure rate (Business closed in the last 12 months that has not continued) (BC)	Proxy early-stage business survival rate (EBO/TEA)	Proxy business churn rate BC/(NBO+EBO)
	(FUT)	(NEA)	(NBO)	(TEA)	(EBO)	(BC)	(EBO/TEA)	BC/(NBO+EBO)
UK	18.2	7.2	4.5	11.5	6.9	3.1	0.6	0.3
France	16.9	5.8	2.0	7.7	3.6	1.6	0.5	0.3
Germany	8.6	4.3	2.7	6.9	4.9	2.1	0.7	0.3
US	20.5	10.7	6.0	16.5	8.8	4.3	0.5	0.3

Table 3.1: Measures of entrepreneurial intention and activity in the UK, France, Germany and the US, 2021
(Source: GEM Global APS 2021)

3.2 Male and female entrepreneurial activity compared

In the UK the female TEA rate in 2021 was 9.7% while the male rate was significantly higher at 13.2%. Both the male and female TEA rates were significantly higher than in 2020 (9.0% for males and 6.1% for females). TEA rates by gender for the UK, Germany and the US are shown in Figure 3.6. In most high income countries, females are around two-thirds as likely to be early-stage entrepreneurs as males, and this was the case for the UK in 2021. Therefore, in 2021 it is no longer valid to state the long-held mantra that women are only half as likely as men to be early-stage entrepreneurs. Both the Germany and US TEA rates for females increased in 2021 when compared with 2020, however, the gap between male and female TEA rates for Germany increased.

Comparing rates by gender across countries, the UK male and female early-stage entrepreneurial activity rates are both higher than that of Germany (5.1% and 4.4%, respectively) and France (8.4% and 7.1% respectively). However, both male and female UK rates are well below those in the US, and the gap between male and female TEA rates is larger.

Figure 3.7 presents the established business ownership rates by gender. Comparing this with Figure 3.6 shows a wider gap in participation rates between male and female established business owners (EBO) than was the case for early-stage entrepreneurs (TEA). In the UK and Germany, there were roughly half as many female

established business owners as there were males in 2021. This follows a similar trend seen in 2020. In the US the gap is lower with females accounting for 76% of the male rate. Between 2020 and 2021, the rate of female to male established business ownership decreased from 48% to 43% in the UK and from 51% to 44% in Germany while the US saw an increase from 58% to 76% in the US.

The trend in female TEA rates in the selected countries over 20 years is shown in Figure 3.8. The TEA rate increased in the UK, the US and Germany between 2020 and 2021. France also saw an increase from its previous measure in 2018. Previously, levels of female entrepreneurial activity in these four countries had peaked in 2019, until there was a dip in 2020 with the pandemic underway. Recovery in 2021 can explain the increases seen in every country, particularly in the UK where female entrepreneurial activity is at its highest since 2002.

3.3 Entrepreneurial activity in the UK home nations

Table 3.2 displays different measures of entrepreneurial activity in the four home nations of the UK for 2021. Together, these measures allow us to assess the degree of entrepreneurial dynamism and stability across the UK's constituent political jurisdictions.

Nascent entrepreneurial activity rates and TEA showed the largest and most statistically significant difference compared to 2020. When looking at nascent entrepreneurial activity, England, Wales and Northern

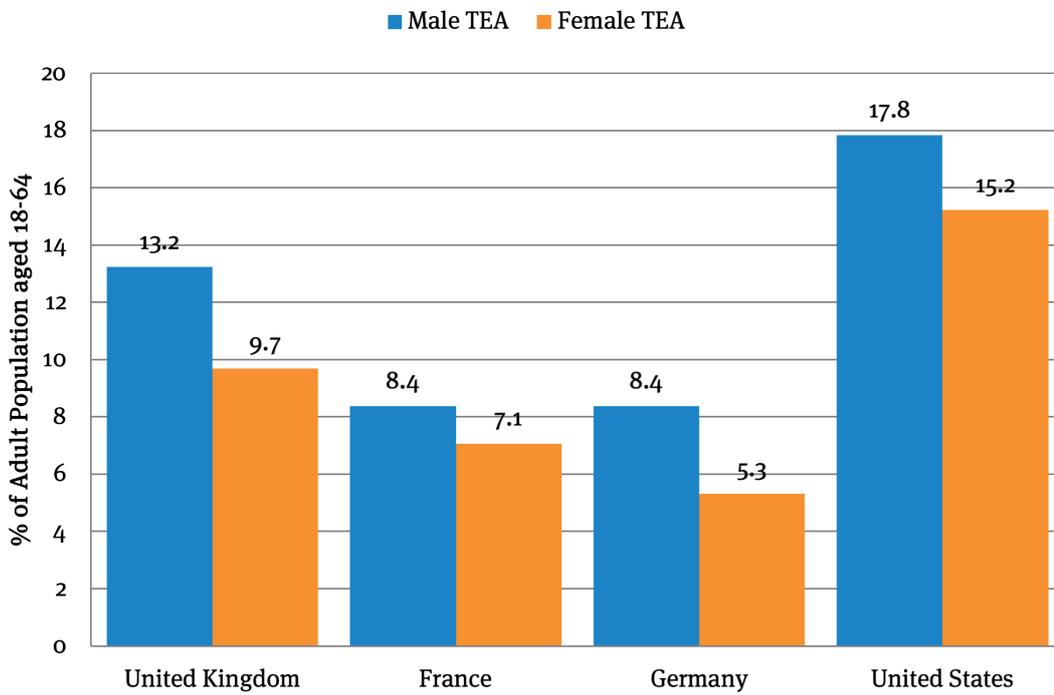


Figure 3.6: Total early-stage entrepreneurial activity by gender in the UK, France Germany and the US in 2021 (Source: GEM Global APS 2021)

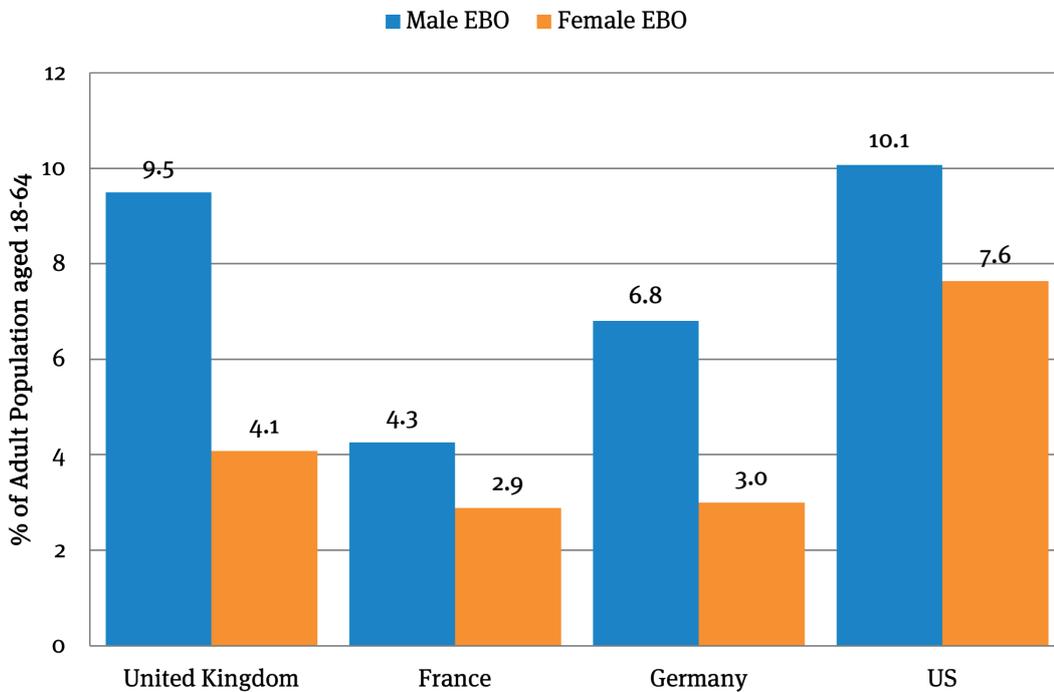


Figure 3.7: Established business ownership by gender in the UK, France, Germany and the US, 2021 (Source: GEM APS 2021)

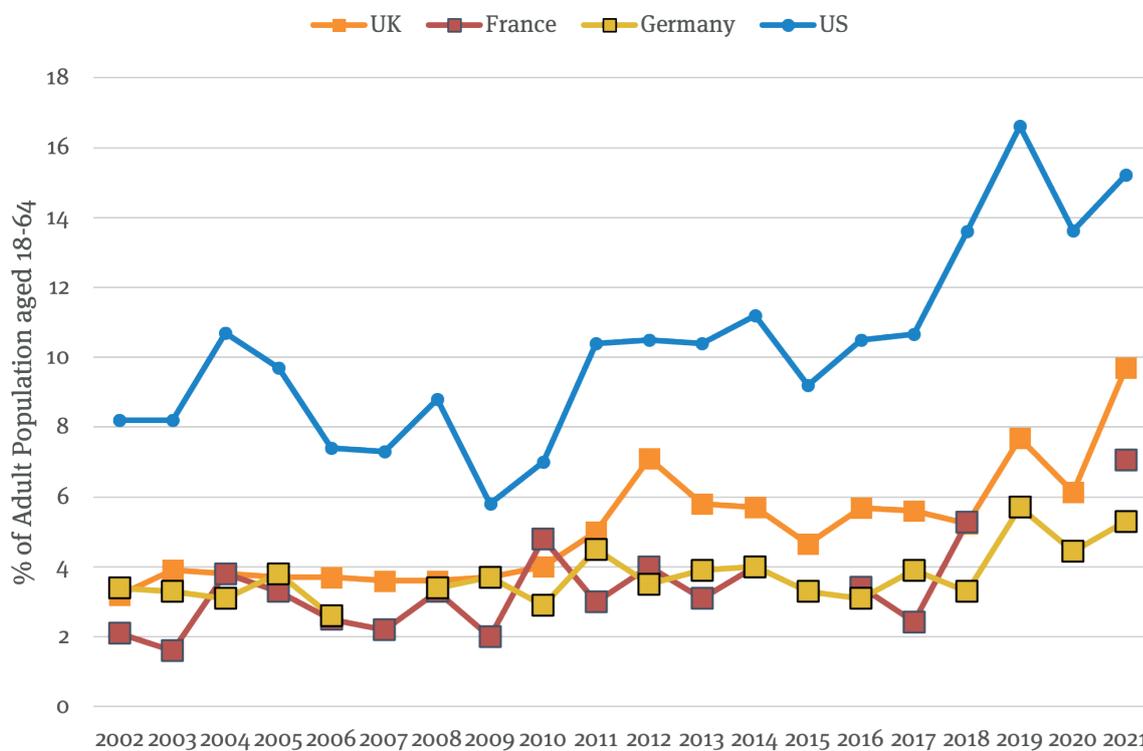


Figure 3.8: Female early-stage Entrepreneurial Activity in the UK, Germany and the US, 2002-2021
(Source: GEM APS 2002-2021)

	I expect to start a business in the next 3 years (FUT)	Nascent Entrepreneurial Activity rate (paying wages for 3 months or less) (NEA)	New Business Owner-manager rate (4-42 months) (NBO)	Nascent + New business owner-manager rate (TEA)	Established Business Owners (>42 months) (EBO)	Business closure rate (Business closed in the last 12 months that has not continued) (BC)	Proxy early-stage business survival rate (EBO/TEA)	Proxy business churn rate (BC/(NBO + EBO))
England	18.3	7.3	4.8	11.8	7.2	3.1	0.6	0.3
Wales	18.8	7.4	3.0	10.3	6.0	4.0	0.6	0.4
Scotland	16.4	6.3	3.3	9.5	4.9	3.0	0.5	0.4
Northern Ireland	20.1	6.5	2.8	9.1	6.8	2.6	0.7	0.3
UK	18.2	7.2	4.5	11.5	6.9	3.1	0.6	0.3

Table 3.2: Measures of Entrepreneurial Intention and Activity in the UK Home Nations, 2021
(Source: GEM APS 2021)

Ireland all had a significant increase in rates by 2-3 percentage points when compared with 2020. Similarly, TEA also was significantly higher in the same home nations. In the UK, there was a significant increase in intention to start a business from 16.2% in 2020 to 18.2% in 2021.

Across the home nations significant differences in rates were found in new business ownership, whereby the rates in Wales and Northern Ireland (3% and 2.8%, respectively) was significantly lower than in England

(4.8%). Established business ownership in Scotland was significantly lower (4.9%) than in England (7.2%).

Figure 3.9 displays the trend in TEA rates in the home nations since 2002. The rates were relatively stable during the mid to late 2000s with a break in the long-run trend observed from 2011 after which the rates became relatively more volatile. In 2021 the rates, all went above previously observed rates and much higher than pre-GFC levels of 5.8% between 2002-2008.

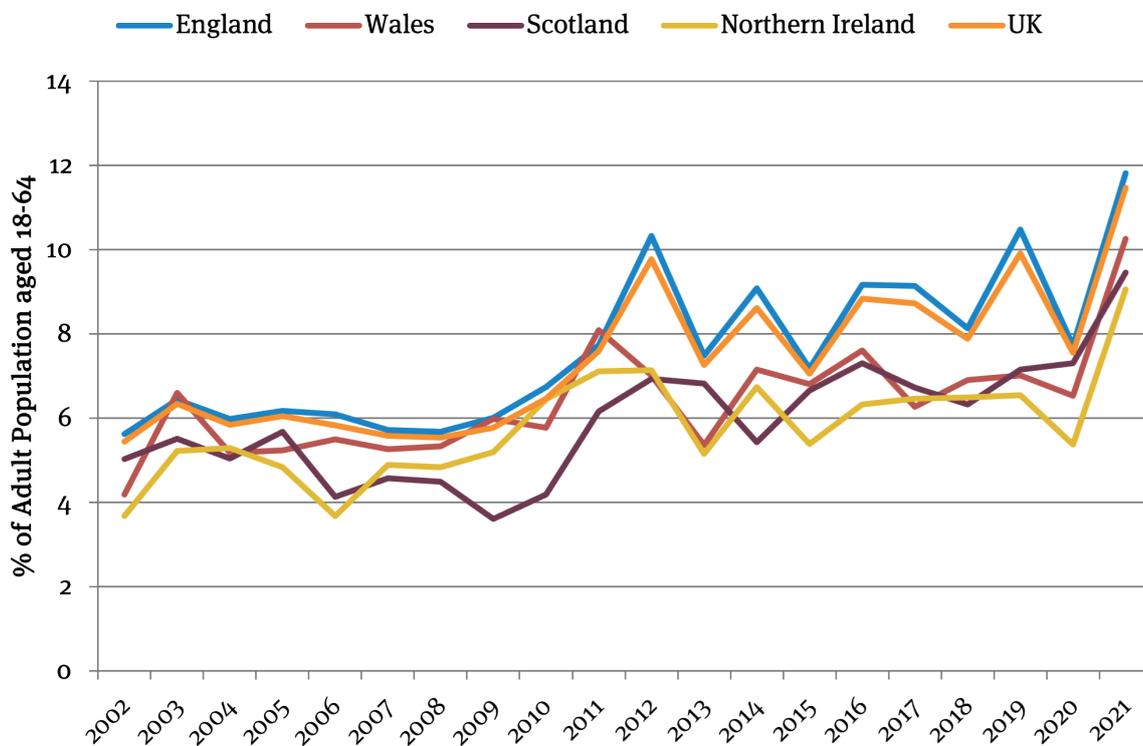


Figure 3.9: Total early-stage Entrepreneurial Activity in the UK Home Nations, 2002-2021
(Source: GEM UK APS 2002-2021).

TEA rates may be expected to vary based on the extent of deprivation in an area and the differing start-up opportunities available⁵. Figure 3.10 displays TEA rates by Index of Multiple Deprivation quintiles, where the first quintile refers to the most deprived area, and the fifth quintile the least deprived for 2021. The highest TEA rate was observed in the 5th quintile in Wales at 17.4%. In England, Wales and Northern Ireland,

the 5th quintile experienced the highest TEA levels relative to the other quintiles suggesting that the least deprived areas have the highest TEA levels suggesting an association between deprivation and necessity entrepreneurship. In Northern Ireland, the 2nd quintile had the second highest TEA level, however, there were no significant differences between home nations.

⁵ See Sahasranamam, S., Murzacheva, E. & Levie, J. (2019) Doubly Disadvantaged: Gender, Spatially Concentrated Deprivation and Nascent Entrepreneurial Activity. *European Management Review* Published online December, doi.org/10.1111/emre.12370

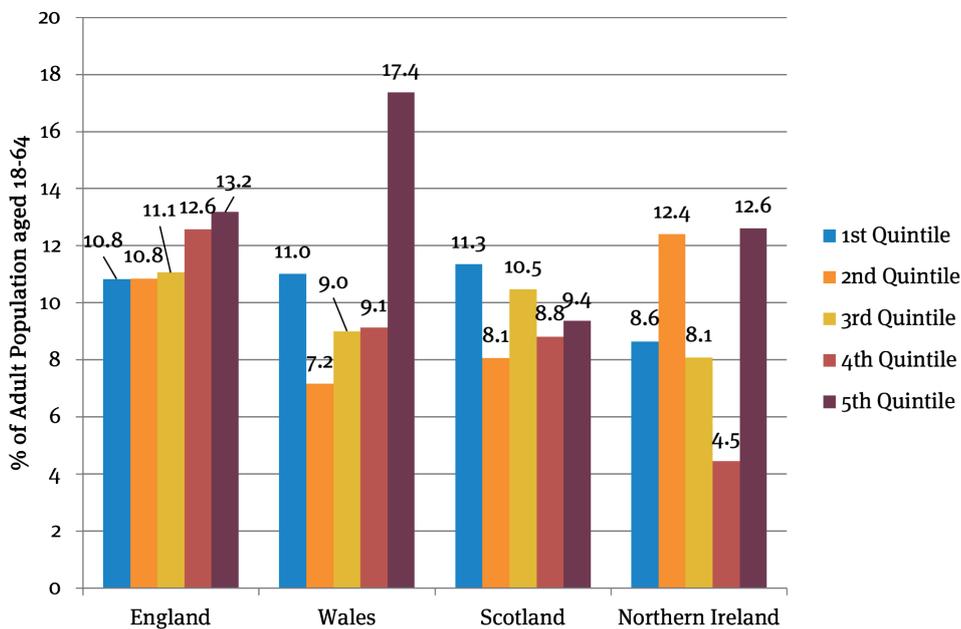


Figure 3.10: Total Entrepreneurial Activity in the UK Home Nations by Index of Multiple Deprivation 2021
(Source: GEM UK APS 2021)

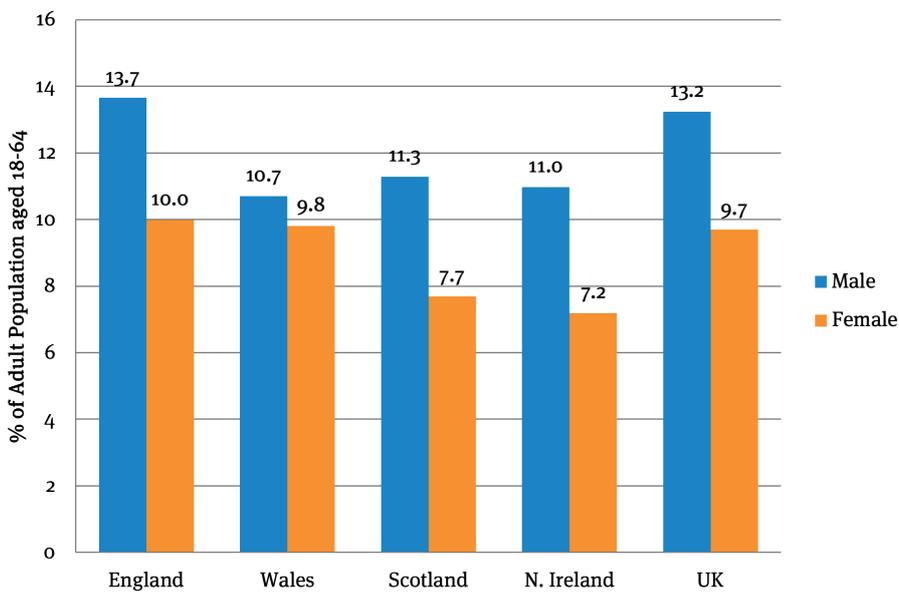


Figure 3.11: Male and Female Total early-stage Entrepreneurial Activity in the UK Home Nations, 2021
(Source: GEM UK APS 2021).

The female early-stage entrepreneurial activity rate in the UK in 2021 was 9.7% compared to 13.2% for males. The female rate was significantly lower than the male rate in the UK; this was also the case for England, as Figure 3.11 shows⁶. There were no significant differences in the male TEA rates across the home nations in 2021, nor in the female rates.

The UK female to male TEA ratio of 73% in 2021 was higher than in 2020, where the ratio was 69%. The ratio in Wales was unusually high at 92% due to the narrower gap between male and female TEA rates. All ratios increased in all home nations in 2021 except Northern Ireland, where the ratio fell from 73% in 2020 to 65% in 2021.

⁶ Expressing the female TEA rates as a proportion of the economically active population rather than the working age population, as shown here, does not alter the results. In the UK the respective rates expressed as a share of the economically active population are 8.2% for females and 11% for males.

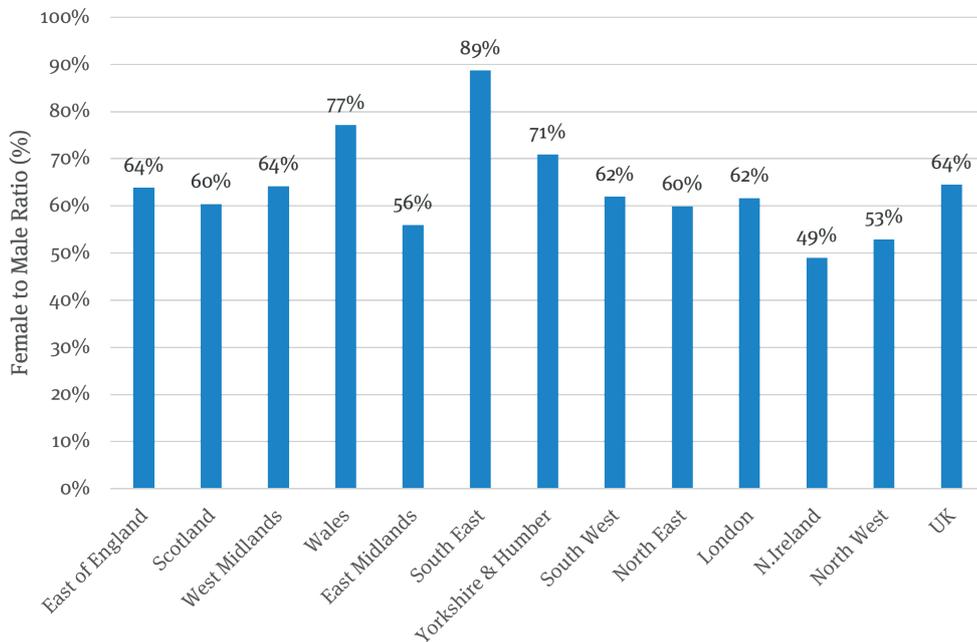


Figure 3.12: Female to Male Entrepreneurship Ratio in the UK regions (combined over 2018-21)
 (Source: GEM UK APS 2018-2021)

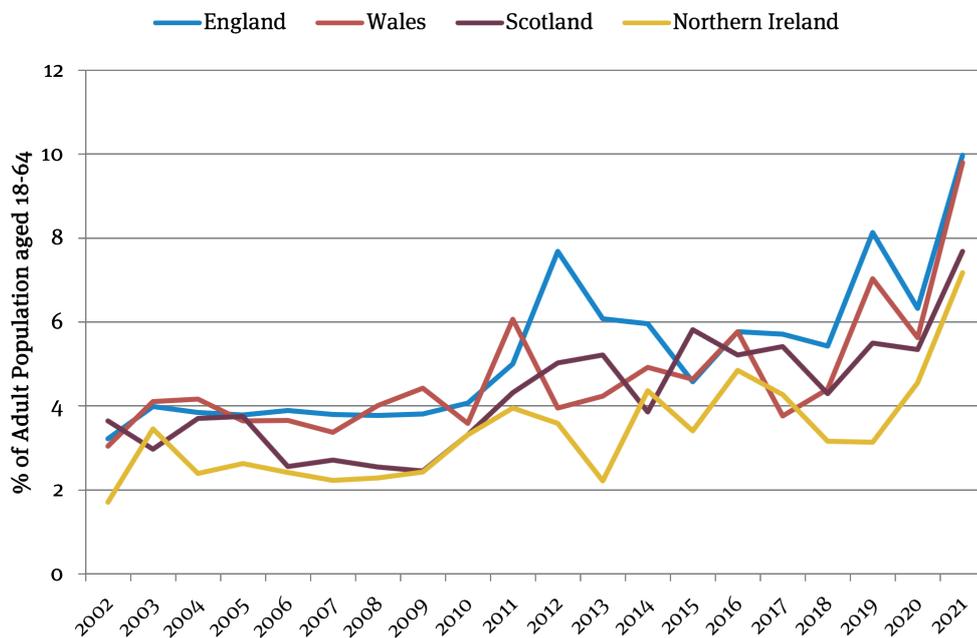


Figure 3.13: Female Total early-stage Entrepreneurial Activity in the UK Home Nations, 2002 to 2021
 (Source: GEM UK APS 2002-2021)

Combining data from the 2018-21 GEM UK annual surveys to analyse the female to male TEA rates in all the UK NUTS1 regions⁷ reveals considerable variation in the ratios (Figure 3.12). The South East has the highest ratio with 89 female entrepreneurs per 100 male entrepreneurs which is driven primarily by a lower

than average male rate. In contrast, the high ratio in the Wales is driven by both lower than average male and female TEA rates, where the gap between the two is not very large. Northern Ireland has the lowest ratio with just 49 female entrepreneurs per 100 male entrepreneurs driven by a very low female TEA rate of 4.6%.

⁷ Combining data over several years provides more robust samples for disaggregation by gender at the regional level than the annual level data provides.

Since 2002, there has been a general upward trend in female entrepreneurship activity in the UK home nations (Figure 3.13). Despite the volatility observed since 2011, the rates have remained at around half of the male rate. However, there was a sharp increase in female TEA between 2020 and 2021, where rates have peaked to 10% for England, 9.8% in Wales, 7.7% in Scotland and 7.2% in Northern Ireland. This was significantly higher for England in 2021 when compared with 2020.

The early-stage entrepreneurial activity rates of different age groups across the home nations are shown in Figure 3.14. The 35-44 age group was significantly lower in Wales when compared with England at 7.3% and 14%, respectively. There were no other statistical differences between each age group in each home nation. In England and Wales, the 18-24 age group had a significantly higher rate than the 55-64 age group.

Figure 3.15 shows the trend in TEA rates for 18-29 year olds, via rolling averages, over 2002-04 to 2019-21. The chart shows the clear increase in entrepreneurial activity amongst this age group, with rates increasing for all home nations in 2019-21 to peak levels of 9.7% in England, 10.2% in Wales, 9.3% in Scotland and 7.7% in Northern Ireland. This is also the first time Wales has overtaken the TEA rate in England for this age group.

Start-up Motivation

Since the 2019 survey, a new and improved method of looking at founders' motives for starting their business was introduced. Previously the question asked was too constrained, allowing for only one choice between necessity and opportunity. These were replaced with new questions which allowed for a combination of motives to show a more realistic set of drivers for start-up.

The four motives were “to make a difference in the world”, “to build great wealth or very high income”, “to continue a family tradition” and “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 or necessity. The final motive can be thought of as more necessity driven. However, the fundamental point is that these options are now not mutually exclusive, and entrepreneurs can report more than one motivation and the degree to which they identify with them. Note that these motivations do not include autonomy or independence; this is because pre-tests showed that this was a universal motivation for entrepreneurs and does not distinguish between types of entrepreneurs.

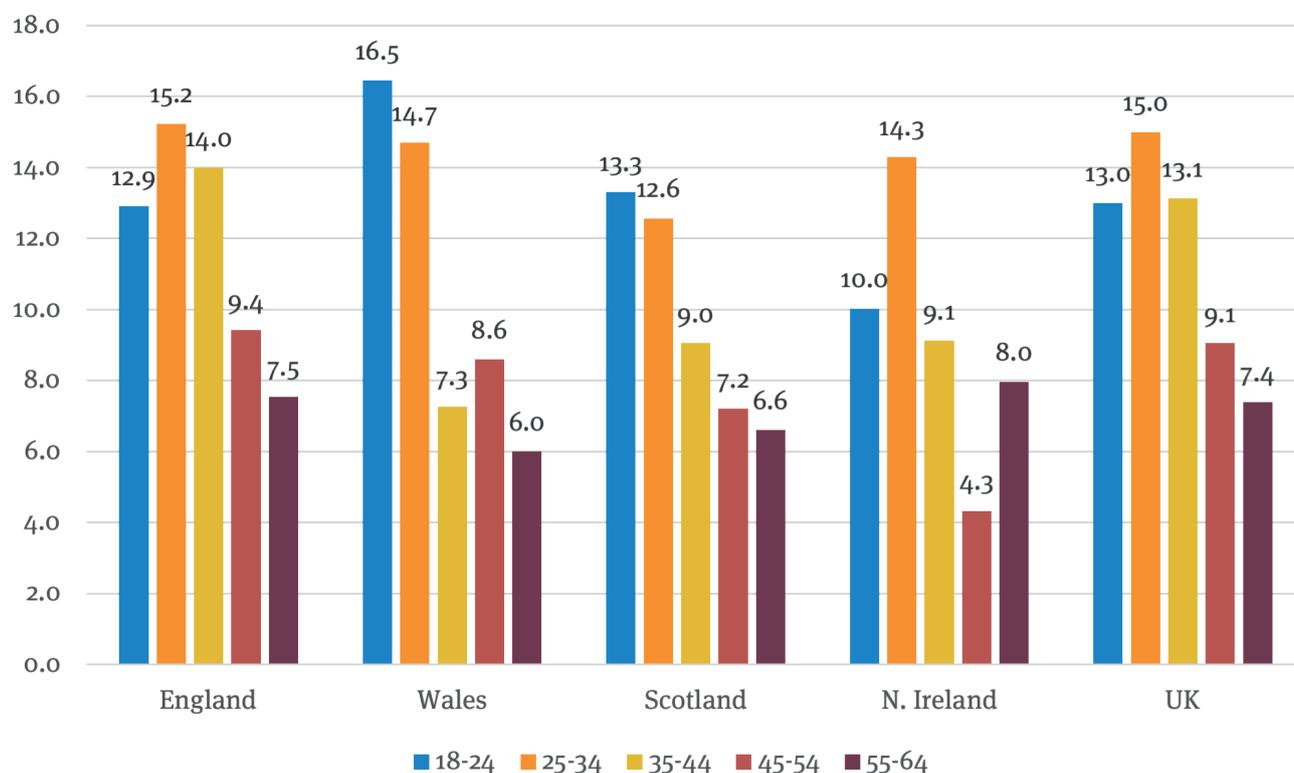


Figure 3.14: Total early-stage Entrepreneurial Activity in the UK Home Nations by Age Group, 2021
(Source: GEM UK APS 2021)

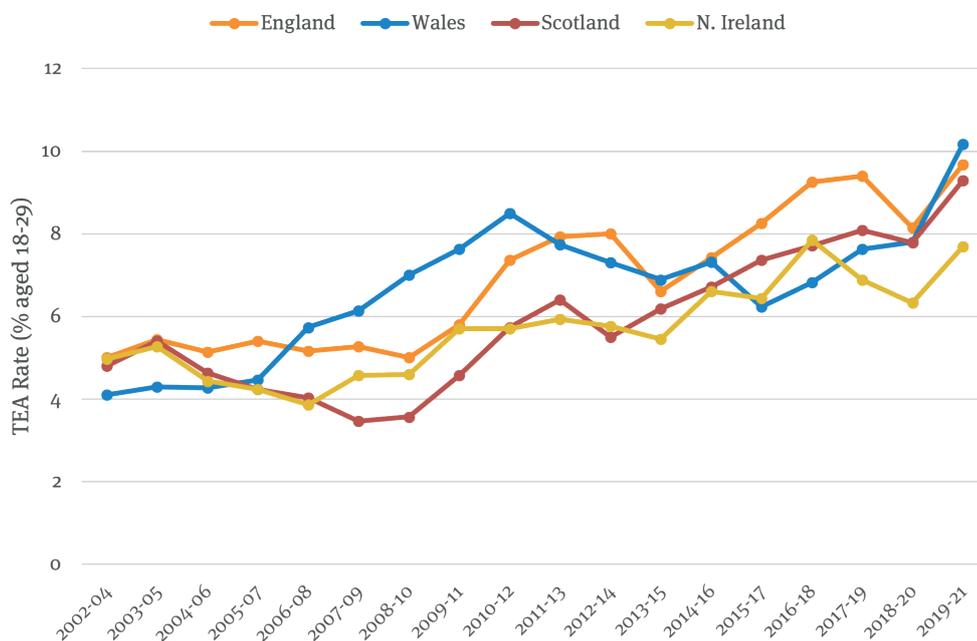


Figure 3.15: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18 to 29 year olds 3-year rolling averages 2002-04 to 2019-21 (Source: GEM UK APS 2002-2021)

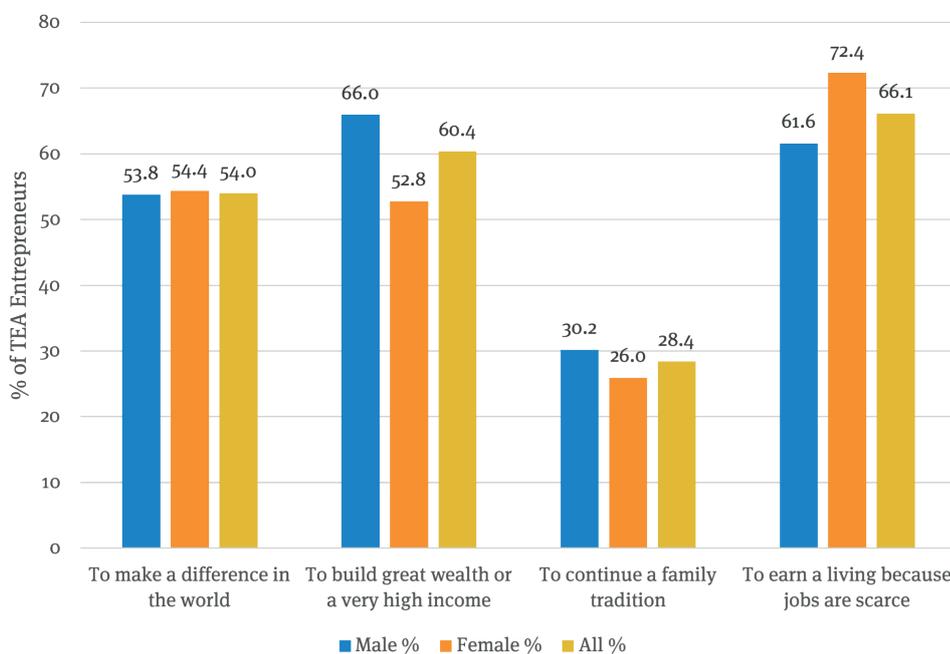


Figure 3.16: Motivations for starting a business in the UK by gender 2021 (percentage of TEA entrepreneurs agreeing somewhat or strongly with the motive) (Source: GEM UK APS 2021)

Figure 3.16 shows a breakdown of these motives by gender as a percentage of early-stage entrepreneurs. There were no significant differences found between males and females when looking at “to make a difference in the world” and “to continue a family tradition”. However, for “to build great wealth or a very

high income”, males had a higher rate of 66% when compared with females at 52.8%. In contrast, those who stated, “to earn a living because jobs are scarce”, females had a significantly higher rate of 72.4% compared with 61.6% of males.

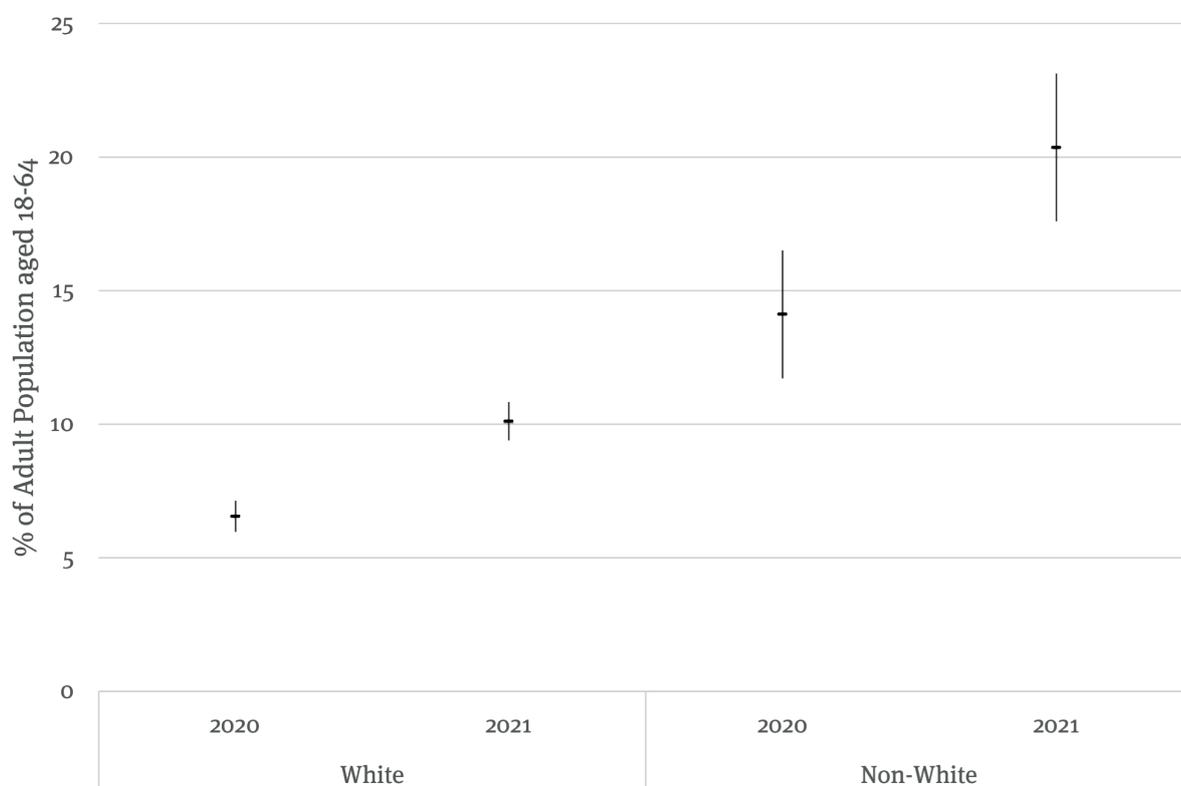


Figure 3.17: Total early-stage Entrepreneurial Activity Rate by White and Non-White Ethnic Status 2020-2021 (Source: GEM UK APS 2020, 2021)

3.4 Entrepreneurial activity by ethnicity and resident status

Following previous trends, the TEA rate of the white ethnic population in the UK in 2021 was significantly lower than that of the non-white population, at 10.1% compared to 20.4% respectively (Figure 3.17). The TEA rate for both the white and non-white ethnic group was significantly lower than the rate in 2020 and the gap between both ethnic groups is larger in 2021.

Entrepreneurial activity by migrant status is shown Figure 3.18. In 2021 immigrant TEA (17.1%) is significantly higher than the rate for life-long UK residents (10.3%) and UK regional migrants (11.8%). When comparing with 2020, both the life-long UK residents and UK regional migrants saw a significant increase in TEA, while there was an increase in immigrant TEA, this was not statistically significant.

3.5 Entrepreneurial employee activity

The TEA rate measures the extent to which the general population is engaged in the entrepreneurial process, however it says nothing about the activities of employees on behalf of their employers. Instead this is measured by the entrepreneurial employee activity (EEA) rate which is defined as proportion of employees aged 18-64 who play a leading role in the creation and development of new business activities for the organization in which they work, specifically those involved in developing or launching new goods or services or setting up a new business unit, a new establishment or subsidiary. Autonomy is a strong driver for all entrepreneurs to start their business and if this is increasingly provided in the workplace as the employee environment improves then higher levels of EEA should ensue⁸.

A study⁹ from the World Economic Forum (WEF) and GEM Global found that many European economies do

⁸ See Stephan, U et al., (2015) "Understanding Motivations for Entrepreneurship", BIS Research Paper No. 212, March 2015. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/408432/bis-15-132-understanding-motivations-for-entrepreneurship.pdf

⁹ World Economic Forum (WEF) and GEM Global (2016) "Europe's Hidden Entrepreneurs: Entrepreneurial Employee Activity and Competitiveness in Europe". http://www3.weforum.org/docs/WEF_Entrepreneurship_in_Europe.pdf

not lack entrepreneurial activity at all. The findings go against the widely-held belief about the dismal state of entrepreneurship in Europe. Indeed, the report finds, what Europe lacks in early-stage entrepreneurship, it makes up for in intrapreneurship. Due to the risk- and opportunity-profiles that European economies offer, entrepreneurial individuals in Europe frequently choose to start new ventures or projects for their employers as employees rather than for themselves. Where this occurs, we observe a shift into intrapreneurship, also known as entrepreneurial employee activity (EEA).

The findings are important for future potential growth in Europe, as those who innovate within organizations tend to create more jobs than those who start their own business. A correlation also exists between intrapreneurship rates and economic competitiveness: every 2.5% increase in a country's intrapreneurship rate correlates to a 1-point increase in competitiveness as measured by the World Economic Forum's global competitiveness data.

The EEA rate in the UK in 2021 was 2.6%, which was the same rate as Germany, slightly higher than France (2.3%) and lower than the US (3.8%). The EEA rates in the UK and Germany also fell from 2020 levels, however this was not a significant decrease in the UK, while the US saw an increase from 3.3%.

When taken together, the EEA and TEA rates provide a fuller picture of the extent of entrepreneurial activity being undertaken in a nation as it covers the actions of entrepreneurial individuals as well as entrepreneurial employees within a business; the latter, as noted above are found to be positively correlated with economic competitiveness. Figure 3.20 shows the TEA and EEA rates for the UK in 2020 and 2021. In both years the TEA rate is significantly higher than the EEA rate. The EEA rate was not significantly lower than the rate in 2019, while the TEA rate was significantly higher.

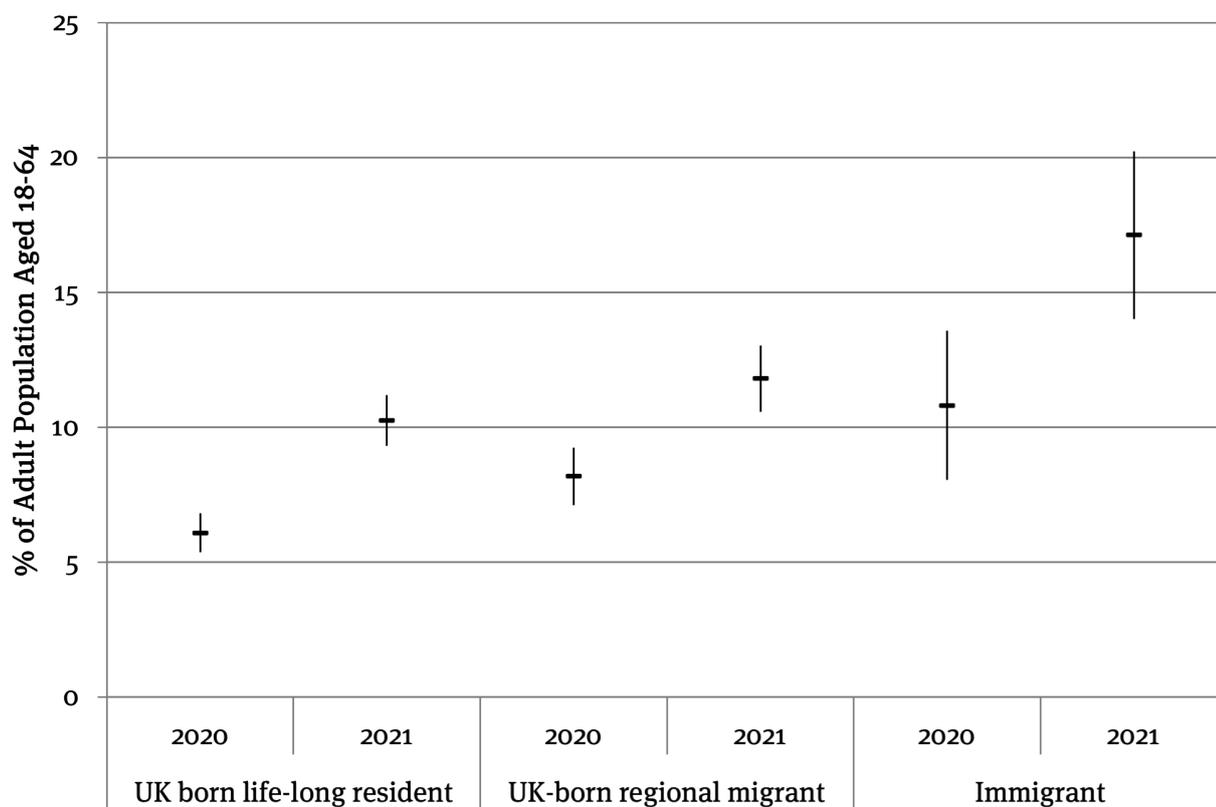


Figure 3.18: Total early-stage Entrepreneurial Activity Rate by Migrant Status 2020-21
(Source: GEM UK APS 2020-21)

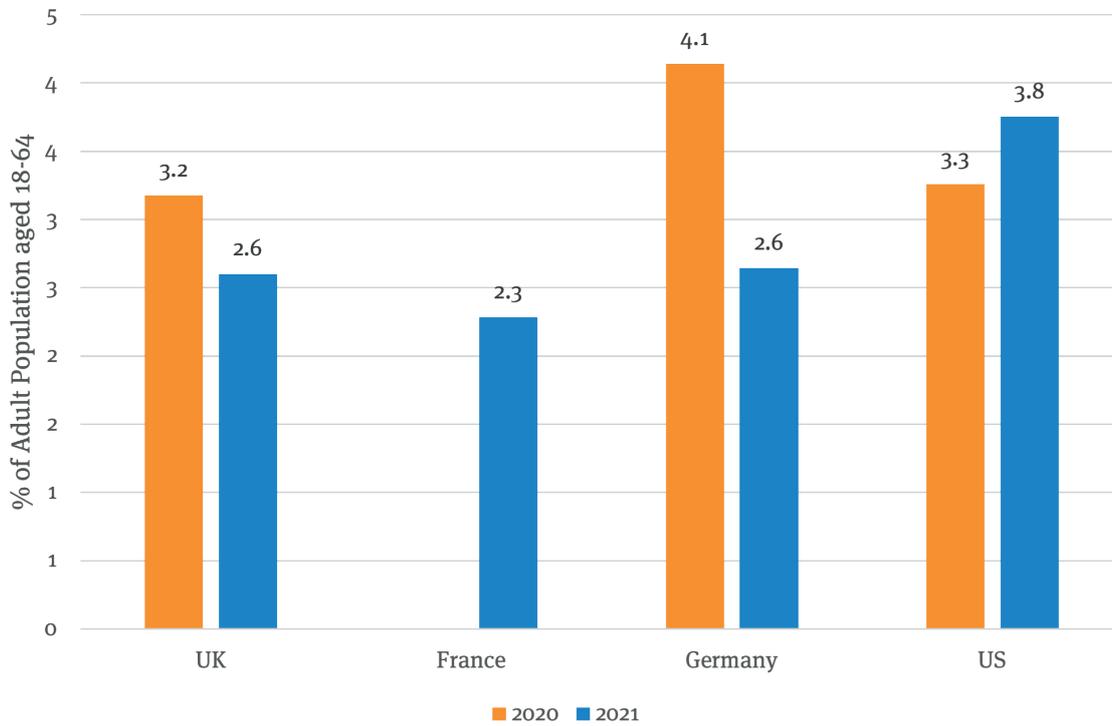


Figure 3.19: Entrepreneurial Employee Activity (EEA) in the UK, France, Germany and the US 2020-2021
 (Source: GEM APS 2020, 2021)

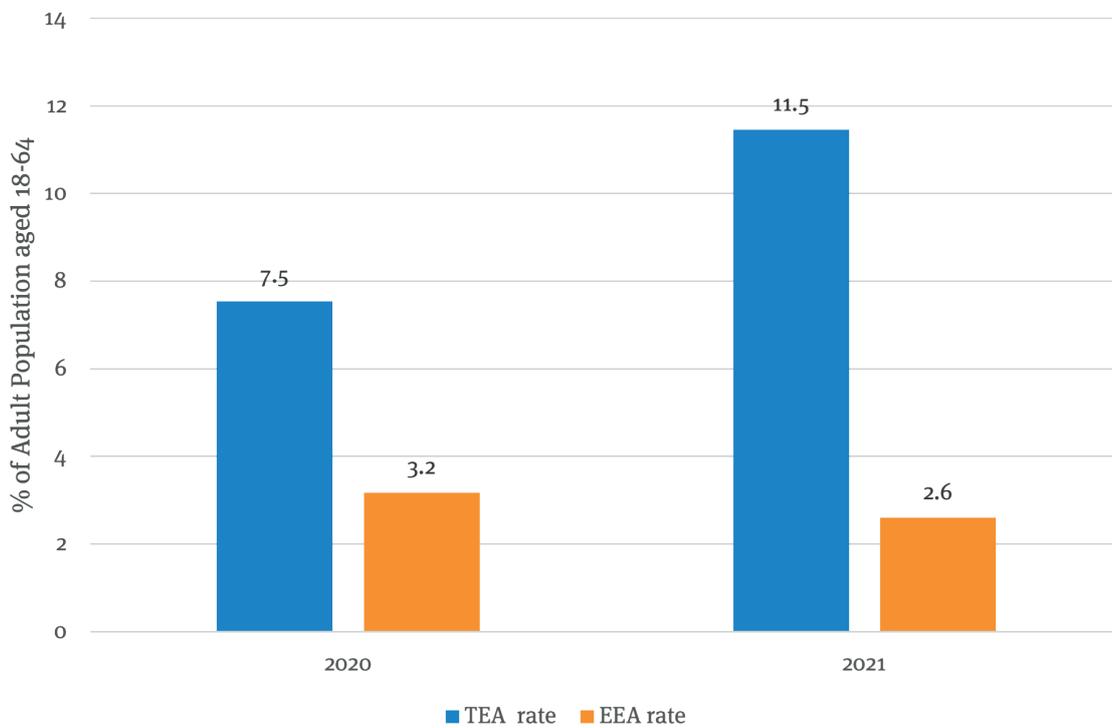


Figure 3.20: Total early-stage Entrepreneurial Activity (TEA) and Entrepreneurial Employee Activity (EEA) in the UK 2020-2021
 (Source: GEM APS 2020, 2021)

4 Entrepreneurial aspiration

(% of TEA or EBO entrepreneurs)	High Job Expectation: More than ten jobs and growth more than 50%		High or Medium tech sectors		Exporting: More than 25% of customers outside the country	
	TEA	EBO	TEA	EBO	TEA	EBO
UK	16.4	11.0	8.7	14.8	23.3	27.2
France	19.1	4.0	7.8	7.6	13.5	8.4
Germany	11.4	2.5	5.8	9.8	19.0	13.6
US	23.1	3.9	6.0	5.6	5.9	2.3

Table 4.1: Measures of entrepreneurial aspiration in the UK, Germany and the US, 2021

(Source: GEM Global APS 2021)

The potential of entrepreneurial activity to promote regeneration and growth will reflect the types of business being established. If an entrepreneur expects to create a large number of jobs, or if the product market is new, then his or her potential contribution to growth and regeneration through entrepreneurship may be greater. The complex nature of the contribution of firms of different age and size to job creation in the UK has been highlighted in recent research¹⁰.

To identify individuals who expect to create a relatively high number of jobs, GEM created a variable which measures the percentage of all early-stage entrepreneurs who expect to create more than ten jobs and have 50% or more growth in jobs in the next five years¹¹. The results are illustrated in Table 4.1 for early-stage entrepreneurs (i.e. nascent and new business owners - TEA) and established business owner-managers (EBO). The table also shows the proportion of early-stage entrepreneurs and established business owner-managers who state they operate in “high” or “medium” technology sectors (according to OECD definitions) and sell more than 25% of their revenue outside the country.

The results show considerable variation in the entrepreneurial aspiration metrics across the selected countries, and between early-stage and established business owners. Just 16.4% of UK early-stage entrepreneurs had high job expectations which was

lower than in the US and France but higher than Germany. In each country the high expectation rates of established business owners are lower than for early-stage entrepreneurs, with the UK experiencing the highest growth expectation at 11.0%. Both the US and Germany saw a drop in this rate from 8.6% and 5.2% in 2020 to 3.9% and 2.5% in 2021, respectively.

The UK has the highest percentage of TEA and established firms in the high or medium tech sectors at 8.7% and 14.8%, respectively, when compared with the other countries. The US has the lowest in TEA and established businesses at 6.0% and 5.6%, respectively. The UK also had the highest rate of exporters for TEA and established firms at 23.3% and 27.2% respectively, while the US had the lowest at 5.9% and 2.3%.

Table 4.2 shows new potential impact variables that were added to the 2019 survey to replace previous “new product to market” variables¹². The first set of results show the propensity of early-stage entrepreneurs and established business owner-managers with potential national impact. Just over 1% of UK, French and German early-stage entrepreneurs and nearly 3% of the US comprised TEA entrepreneurs with national impact in 2021. The percentages of established business owner-managers whose businesses had potential national impact were also similar in the UK and the US at just over 1% and slightly higher than in France and Germany (around 0.5%). When looking at international

¹⁰ See, for example, Hart, M. and Anyadike-Danes, M. (2017) “High performing firms and job creation: a longitudinal analysis (1998-2013) ERC Insight Paper”; Enterprise Research Centre Insight Report, February.

¹¹ The OECD defines HGFs as: ‘enterprises with average annualised growth in employees or turnover greater than 20 % per annum, over a three year period, and with more than 10 employees in the beginning of the observation period’. By contrast, the GEM measure is a measure of expected, not realised, growth and of 50% over five years.

¹² The first measure identifies individuals whose businesses are at least national in market scope (i.e. larger than local) and either the product or service is nationally or internationally novel or the process underlying it is nationally or internationally novel. The second measure takes the scope and novelty to an international level.

	National impact		International Impact	
	At least national scope for market and at least national scope for new product or new process		At least international scope for market and at least international scope for new product or new process	
	TEA (%)	EB (%)	TEA (%)	EB (%)
UK	1.1	1.3	0.3	0.5
France	1.4	0.4	0.4	0.1
Germany	1.2	0.6	0.4	0.3
US	2.7	1.1	1.3	0.4

Table 4.2: Measures of entrepreneurial potential impact rates in the UK, Germany and US, 2021
(Source: GEM Global APS 2021)

High Value Activities (high job expectation; new product markets; exporting)	(% of TEA or EBO entrepreneurs)			
	TEA		EBO	
	2020	2021	2020	2021
None of these activities	48.6	43.5	59.3	46.4
1 of these activities	34.8	36.8	23.6	32.3
2 of these activities	13.1	17.6	15.4	17.4
3 of these activities	3.4	2.2	1.7	3.9
Total	100.0	100.0	100.0	100.0

Table 4.3: Percentage of TEA and EBO entrepreneurs in the UK engaged in high value activities (high job expectation, new product markets, exporting), three-year average 2018-2021 (Source: GEM APS 2018-2021)

impact, there was very little variation between countries for established business owner-managers (around 0.5%) with the exception of France at 0.1%. In the US, 1.3% of early-stage entrepreneurs stated potential international impact compared with 0.3/0.4% of entrepreneurs in the UK, France and Germany. Overall, early-stage entrepreneurs in all countries had the highest potential impact nationally and all the rates had fallen since 2019.

The trend in the relative frequency of high job expectation TEA entrepreneurs for the UK, Germany and the US, is shown in Figure 4.1¹³. It uses a three-year rolling average presentation that smooths out fluctuations from year to year due to small sample sizes. It demonstrates that the relative frequency of high job expectation among early-stage entrepreneurs in the UK settled at around 16% between the GFC and 2018 and increased to just over 20% in the 2019-21 period. The US rate also dropped from its 2017-19 peak, in contrast, the German rate moved increased to 22%

in 2019-21. The gap between the UK and US rates has narrowed further in the last 3 years and is now only 4 percentage points.

The trend in relative frequency of high job expectation among established business owner-managers is shown in Figure 4.2 using the same method as Figure 4.1. Note that the relative frequency of high job expectation for established business owners is typically around one third of that of early-stage entrepreneurs.

Across all countries there was a general downward trend in this measure until the GFC, with a gradual increase thereafter amongst established business owners in the UK, US and Germany. In contrast to early-stage entrepreneurs all countries experienced an increase in established business high expectation rates in 2019-21. All three countries appear to be converging around 8% in 2019-2, which represents a significant increase since the GFC.

¹³ France is excluded from this chart as they did not participate in the GEM Global project in 2019 and 2020.

Focusing specifically on ‘high value activities’ Table 4.3 reports the share of early-stage and established businesses owners in the UK that are engaged in various combinations of high job expectation, new product markets and exporting activities (using a three-year average). Just over two-fifths of early-stage entrepreneurs and established business owners are not engaged in any high value activities in the UK in 2021. This is an improvement on the situation in 2020.

Just over one-third of early-stage entrepreneurs undertake one of these activities which is similar to established business owners. Just under one-fifth of

both TEA entrepreneurs and established business owners are engaged in two or more activities. Since 2020 there has been just over an 18 percentage point increase in the share engaged in two or more of these activities by both groups of entrepreneurs. The results in 2021, unlike in previous years, show a departure from the hypothesis that the owners of new, young firms are more ambitious and innovative than their incumbent counterparts. The fact that more established business owners in 2021 are undertaking high value activities is a positive sign for the economy given the sometimes precarious position of new ventures.

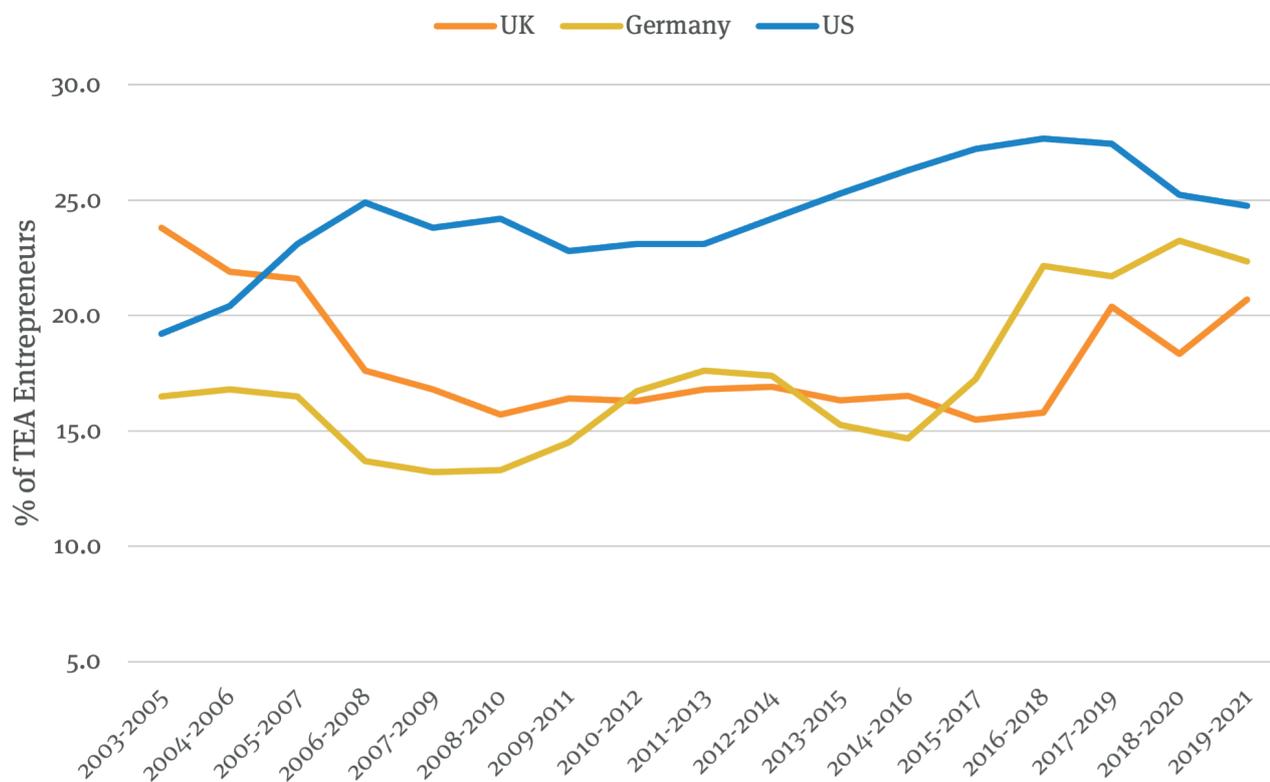


Figure 4.1: Relative frequency of high job expectation early-stage entrepreneurs in the UK, Germany and the US, three year rolling averages, 2003-2005 to 2019-2021 (Source: GEM Global APS 2003-2021)

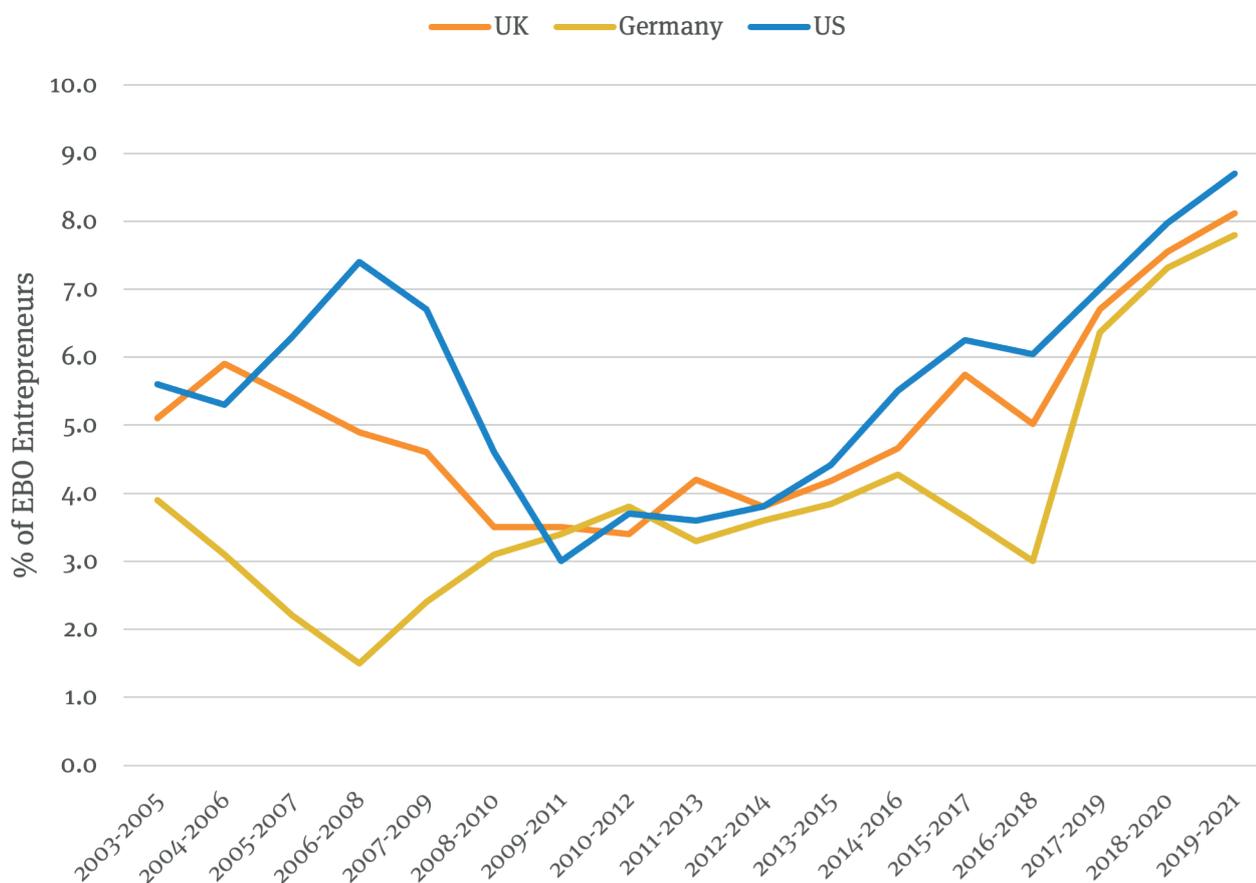


Figure 4.2: Relative frequency of high job expectation among established business owner-managers in the UK, Germany and the US, three year rolling averages, 2003-2005 to 2019-2021
 (Source: GEM APS 2003-2021)

5. Entrepreneurial framework conditions in the UK

A1. Entrepreneurial Finance

Are there sufficient funds for new startups?

A2. Ease of Access to Entrepreneurial Finance

And are those funds easy to access?

B1. Government Policy: Support and Relevance

Do they promote and support startups?

B2. Government Policy: Taxes and Bureaucracy

Or are new businesses burdened?

C. Government Entrepreneurial Programs

Are quality support programs available?

D1. Entrepreneurial Education at School

Do schools introduce entrepreneurship ideas?

D2. Entrepreneurial Education Post-School

Do colleges offer courses in starting a business?

E. Research and Development Transfers

Can research be translated into new businesses?

F. Commercial and Professional Infrastructure

Are these sufficient and affordable?

G1. Ease of Entry: Market Dynamics

Are markets free, open and growing?

G2. Ease of Entry: Burdens and Regulation

Do regulations encourage or restrict entry?

H. Physical Infrastructure

Is this sufficient and affordable?

I. Social and Cultural Norms

Does culture encourage and celebrate entrepreneurship?

Table 5.1: Entrepreneurship Framework Conditions (EFCs)

(Source: GEM (Global Entrepreneurship Monitor) (2022), p. 86)

So far, this report has been focusing on the personal motivations and decisions to start a business. That decision is not made in a vacuum but rather taken in a specific context, or entrepreneurial environment, which encompasses a wide range of economic, political, institutional, financial and social conditions. That context may be supportive - and encourage the decision to become an entrepreneur and facilitate the progression from a start-up towards established business – or, on the contrary, may be discouraging and burdensome. The context for entrepreneurship also evolves over time and may be dramatically impacted by national and global events and societal challenges as illustrated recently.

To assess the context in which entrepreneurial activity takes place, GEM created a specific tool which assesses an economy's entrepreneurial ecosystem against nine *Entrepreneurship Framework Conditions* (EFCs) based on twenty years of research and experience¹⁴. Each condition is multidimensional and is not directly observed, that is, a latent variable. To create

a quantifiable measure of EFCs, GEM uses scales development methodology and seeks out expert views on the state of entrepreneurial eco-system by carrying out GEM *National Expert Survey* (NES). At least 36 experts in each country, carefully selected according to their knowledge and experience, participate in the NES each year. These experts, of whom no more than a quarter participated in the survey the previous year (to reduce bias and ensure objectivity), answer a series of questions. Each of the nine framework conditions is derived from the responses of the experts to 5-8 questions. Three of the EFCs (Government policy, Entrepreneurship education and Ease of entry) were further split into two subsets in order to satisfy the reliability condition¹⁵. In 2021, the NES introduced a new dimension related to the ease of accessing funds for entrepreneurship along with traditional entrepreneurial finance dimension focusing on sufficiency of funds. This brings the overall number of constructs describing national entrepreneurship context to thirteen. (Table 5.1).

¹⁴ GEM (Global Entrepreneurship Monitor) (2022). Global Entrepreneurship Monitor 2021/2022 Global Report: Opportunity Amid Disruption. London: GEM.

¹⁵ To measure the internal consistency or reliability of blocks of items for underlying EFC, GEM uses the Cronbach's Alpha. The coefficients for each of the twelve blocks are significantly higher than the cut value of 0.5.

In 2021, as in 2020, the entrepreneurial environment has been influenced by coronavirus pandemic and governments' responses to alleviate its impact and to minimise a decline in start-ups and established business ventures, but also by an increasing call to a more sustainable and responsible business practices. In 2020, it became clear that the coronavirus pandemic created not only hardships but also opportunities. Digital transformation is often considered as one of the enablers to innovation helping new and established businesses seize new opportunities arising in the digital era. To take into account these factors, in 2021, the NES introduced additional questions. These were used to assess effectiveness of government measures to avoid a significant decline in the number of new and growing firms and progress and support for digitalisation and teleworking during the pandemic. Two other constructs captured the rise of gig-economy as a start-up driver and business model due to the pandemic and the prioritisation of environmental protection by businesses and governments' impulse of the green agenda. Moreover, the NES 2021 introduced a new construct to assess support for women entrepreneurs (Table 5.2).

CV1. Progress and support of digitalization and teleworking
Can firms afford the cost of digitalisation? Are firms promoting teleworking? Are there sufficient support for digitalisation?
CV2. Rise of gig economy as a start-up driver and business model
Is gig economy an important start-up driver? Are firms adopting gig-based models?
CV3. Prioritisation of environmental protection
Are firms prioritising environmental protection? Are governments accelerating green agenda?
CV4. Government mitigation of decline of new firms
Were government measures effective?
P. Support for women entrepreneurs
Are there sufficient support services for women entrepreneurs available? Does culture encourage women entrepreneurs? Are regulations favourable? Is access to financing equally granted?

Table 5.2: Special topics (Source: GEM (Global Entrepreneurship Monitor) (2022))

In 2021, along with NES UK, NES Northern Ireland and NES Scotland were carried out. In this chapter, the focus is on the overall UK EFCs. 'GEM UK: Northern Ireland 2021 report' and 'GEM UK: Scotland 2021 report' provide additional insights into the state of entrepreneurial framework conditions in Northern Ireland and Scotland contexts.

5.1. National entrepreneurship context index (NECI)

In order to provide an overall view of how favourable an environment is for entrepreneurial activity across countries, GEM introduced the National Entrepreneurship Context Index (NECI)¹⁶ in 2018. It is a composite index which represents the arithmetic average of EFCs as set out in Table 5.1.

EFCs and NECI are based on experts' perceptions of the entrepreneurial conditions within a particular economy and in a particular moment of time. Any cross-country analysis should be performed with caution. Entrepreneurial activity, deeply rooted in cultural traditions and norms, can persist despite difficult conditions and, on the contrary, can be lagging despite a relatively favourable setting. However, these metrics provide a useful benchmarking tool to capture the strengths and the weaknesses of the national entrepreneurial context by comparing it with other countries. This exercise may provide guidance on the possible directions of improvement to better support and stimulate thriving entrepreneurial activity.

In 2021, the UK with a total score of 4.9 ranked 18th among 50 countries (Figure 5.1). A score below 5 out of 10 (neutral point) indicates that experts regard the conditions for entrepreneurship to have room for improvement. In 2021, the UK overall index of entrepreneurship context is slightly lower than in France and Germany (5.1) and in the USA (5.3), and much lower than NESI scores of top-ranked countries, including, in Europe, the Netherlands with the second highest score at 6.3.

Figure 5.2 reports the values and 95% confidence intervals for each of the thirteen pillars describing the entrepreneurial context. Among these pillars, two have values statistically significantly higher than 5 (out of 10) meaning that, according to the national experts surveyed, physical infrastructure (6.53) and commercial and professional infrastructure (5.84) are in sufficient state to support entrepreneurial activity. On the contrary, four conditions – and government

¹⁶ See, Bosma et al. (2020) for details.

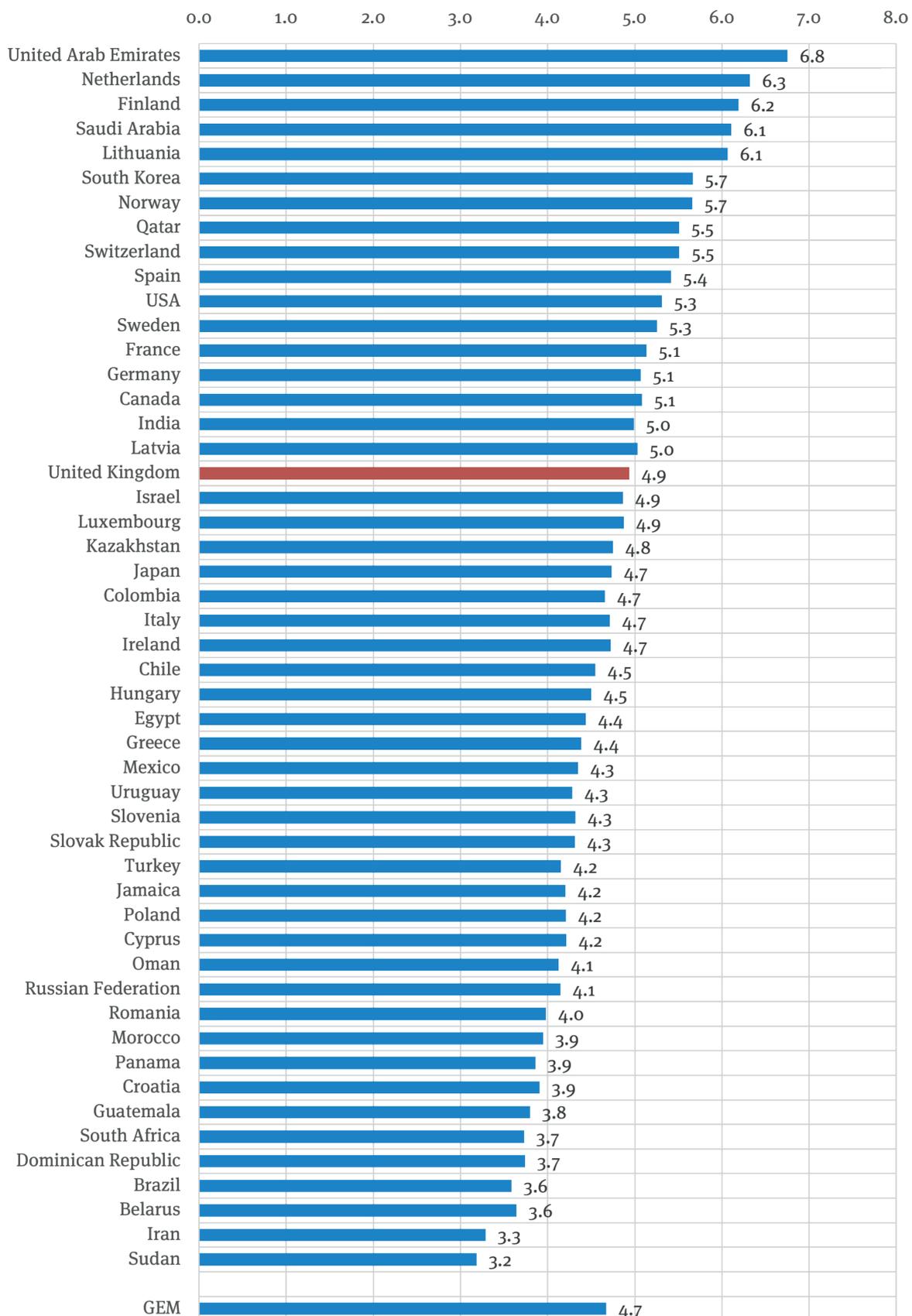


Figure 5.1: National Entrepreneurship Context Index (NECI) in 2021, (Source: GEM Global NES 2021)

entrepreneurship programmes (4.32), government policies regarding business support (4.23), R&D transfer (4.21) and entrepreneurial education at school age (3.2) – may be considered insufficient with 95% of confidence meaning that these are areas that need significant improvement.

Although the EFCs scores are based on rigorous methodology, the sample size does not allow to reduce the margin of error to compare EFCs taking values close to 5 with sufficient confidence. Yet other four pillars – government policies in relation to taxes and bureaucracy (5.59), internal market burdens (5.51), cultural and social norms (5.34), and entrepreneurial finance (5.15) - scored above five followed closely by entrepreneurial education at post-school age (4.96), internal market dynamics (4.94), and easiness to get financing (4.36).

5.2. Dynamics of NECI and EFCs in the UK in 2019-2021

Compared to 2020, there was a slight decrease in perception of the overall state of the entrepreneurial context in 2021: NECI decreased from 5.0 to 4.9. Table

6.2 shows the dynamic of each EFC and NECI in the period from 2018 to 2021. Green cells indicate sufficient state of EFC (value above 5) and red cells otherwise.

There was only one major improvement in EFCs scores in 2021 compared to 2020 with government policies related to taxes and bureaucracy increasing by more than 0.5. Some minor improvements in scores also concerned in physical and commercial and legal infrastructure, entrepreneurial education at post-school age, and internal market burdens. This last one shows a considerable positive dynamic over the last years by increasing from 4.93 in 2018 to 5.51 in 2021. Not surprisingly, internal market dynamics has been the most fluctuating EFC over the last four years falling again under the bar of 5 in 2021.

Overall, over the last four-year period EFCs and NECI in the UK remained relatively stable subject only to small variations (Table 5.3). On the positive side this means that entrepreneurial eco-system proved to be resilient to disruptions imposed by the coronavirus pandemic and Brexit. On the other side, it is obvious that there is no clear positive trend to improvement of the UK entrepreneurial context either.

	2018	2019	2020	2021
A /A1 Sufficiency of financing for entrepreneurs	5.53	5.33	5.59	5.15
A2 Easiness to get financing for entrepreneurs				4.36
B1 Government policies: support and relevance	3.77	4.02	4.50	4.23
B2 Government policies: taxes and bureaucracy	5.43	5.08	5.01	5.59
C Government entrepreneurship programmes	4.46	4.32	4.70	4.32
D1 Entrepreneurial education at school age	3.27	3.37	3.35	3.20
D2 Entrepreneurial education at post-school age	4.84	4.65	4.51	4.96
E R&D transfer	4.64	3.77	4.49	4.21
F Commercial and legal infrastructure	5.74	5.12	5.59	5.84
G1 Internal market dynamics	5.46	4.85	5.33	4.94
G2 Internal market burdens or entry regulations	4.93	5.22	5.20	5.51
H Physical infrastructure	6.22	6.54	6.31	6.53
I Cultural and social norms	5.36	5.72	5.67	5.34
NECI National Entrepreneurial Context Index	4.94	4.83	5.00	4.94

Table 5.3: Entrepreneurial Framework Conditions and NECI¹⁷ in the UK in 2018 to 2021:

(Source: GEM UK National Expert Survey (NES) 2018, 2019, 2020, 2021)

17 There was a change in the methodology of calculation of NECI in 2020: in 2018 and 2019 EFC scores were weighted by importance of each EFC to the current state of the entrepreneurship environment according to experts. For example, experts were asked to assign a weight of 10 to entrepreneurial finance component, if they think that the availability of financing for entrepreneurs is currently the biggest factor contributing to the (good or bad) state of the entrepreneurial framework.

In 2020 and 2021, NECI was calculated as an arithmetic average of EFCs without applying importance weights, in part because the process of compacting the various questions to the 12 (in 2020) and 13 (in 2021) pillars itself applies weighting principles in the analysis. Indeed, these methodological differences do not affect NECI scores much.

5.3. EFCs in the UK and benchmark countries in 2021

Typically, the UK framework conditions mirror relatively closely the US EFCs, except for statistically significantly lower scores for cultural and social norms in terms of support of new and growing firms as shown in Figure 5.3a. Entrepreneurial finance, physical and professional infrastructure, as well as internal market dynamics also scored lower in the UK than in the USA in 2021 although the difference is not statistically significant. For two pillars which are traditionally evaluated by the US experts higher than by their UK peers – entrepreneurial education at school and post-school age – the gap almost disappeared in 2021. One dimension for which the UK shows consistently higher

scores than the US is ease of market entry for new and growing firms and internal market burdens and regulations, and this is again the case in 2021 – the UK ranked 7th for this framework condition among 50 countries which participated in NES in 2021.

Compared to France (Figure 5.3b) and Germany (Figure 5.3c), the UK framework conditions as evaluated by experts in 2021 were less favourable in terms of government entrepreneurship programmes (4.32 in the UK vs 5.89 in France and 6.35 in Germany). The UK government support policies also received a statistically significantly lower score compared to France. In contrast, the EFCs scores indicate more favourable conditions in the UK than in France when it comes to internal market dynamics.

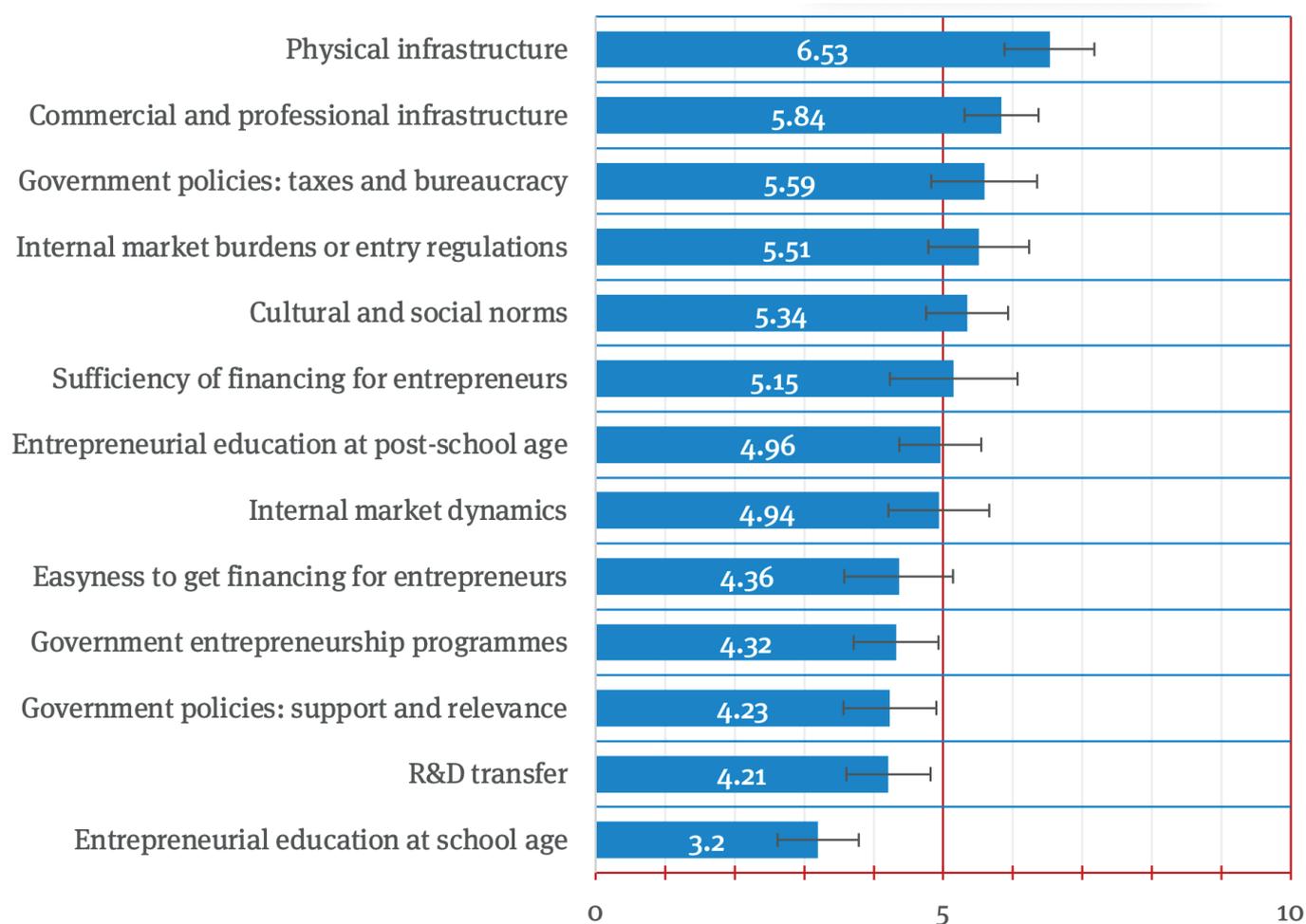


Figure 5.2: Entrepreneurial Framework Conditions in the UK in 2020 (Source: GEM UK National Expert Survey (NES) 2021)

Note: black bars represent the 95% confidence intervals

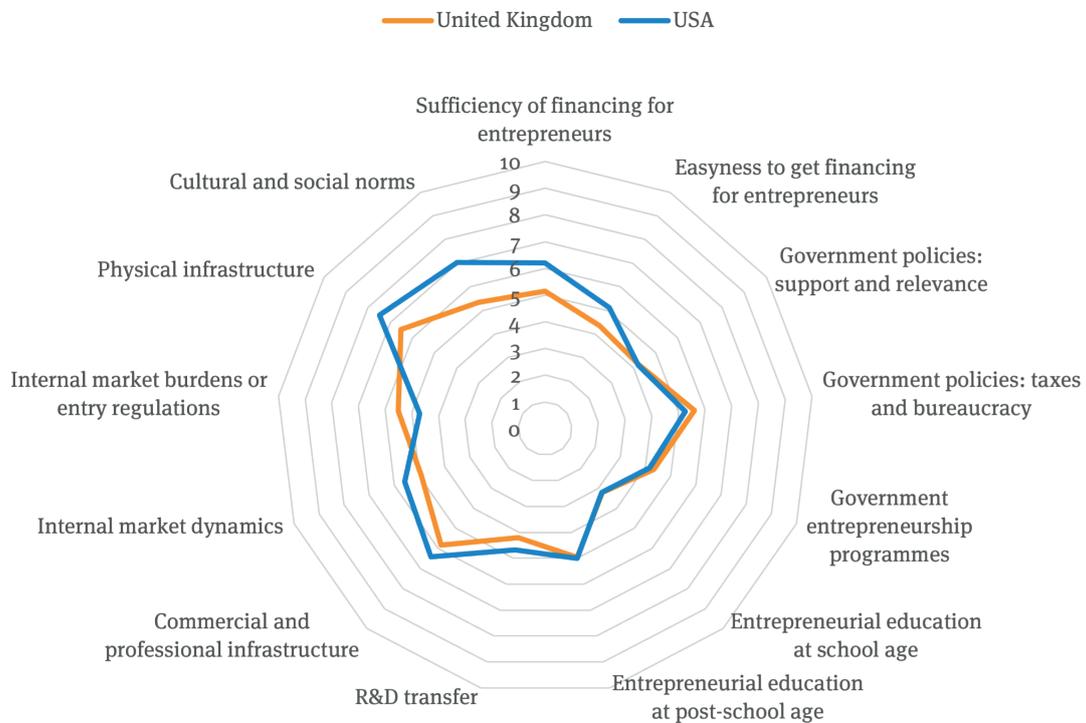


Figure 5.3a: EFCs in the UK and benchmark countries in 2021
 (Source: GEM UK NES 2021, GEM Global NES 2021)

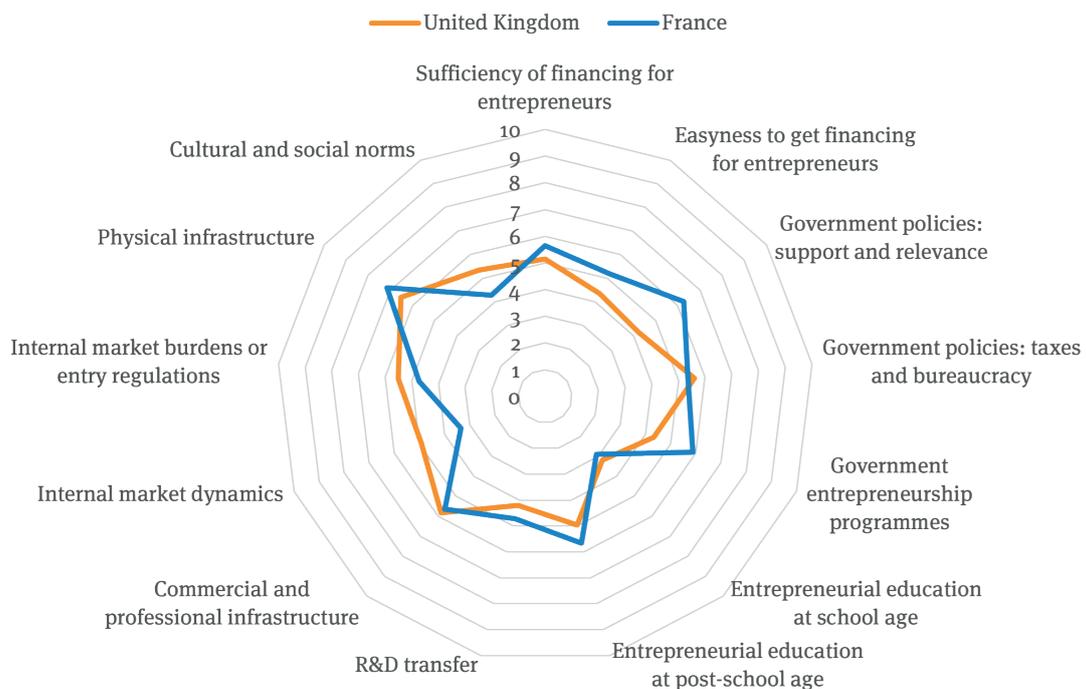


Figure 5.3b: EFCs in the UK and benchmark countries in 2021
 (Source: GEM UK NES 2021, GEM Global NES 2021)

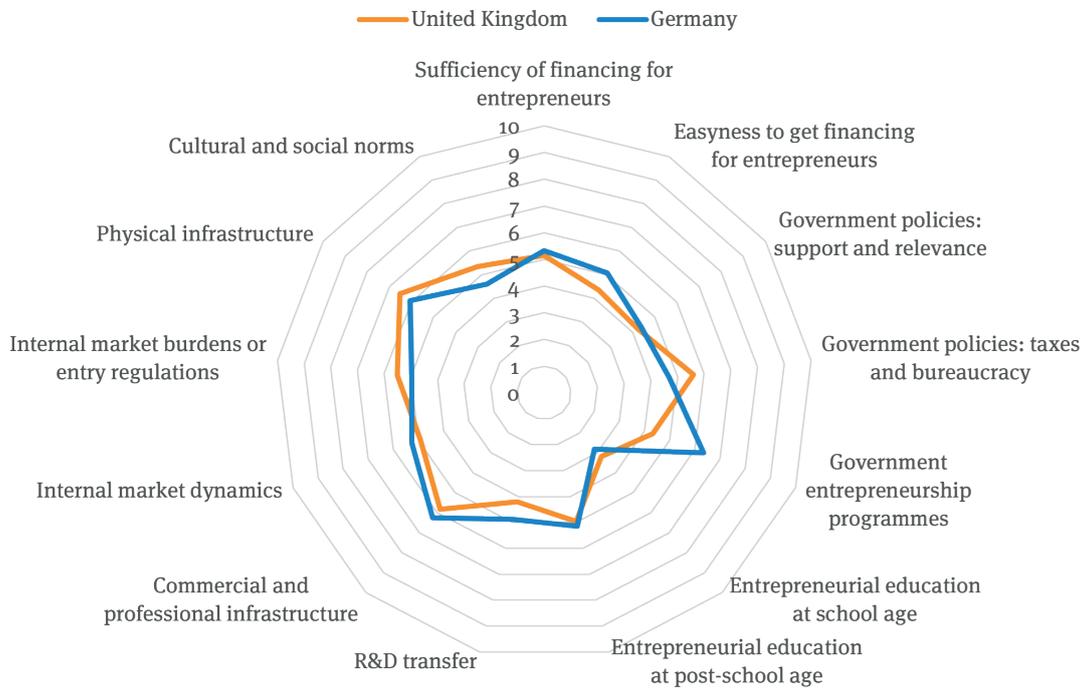


Figure 5.3c: EFCs in the UK and benchmark countries in 2021
 (Source: GEM UK NES 2021, GEM Global NES 2021)

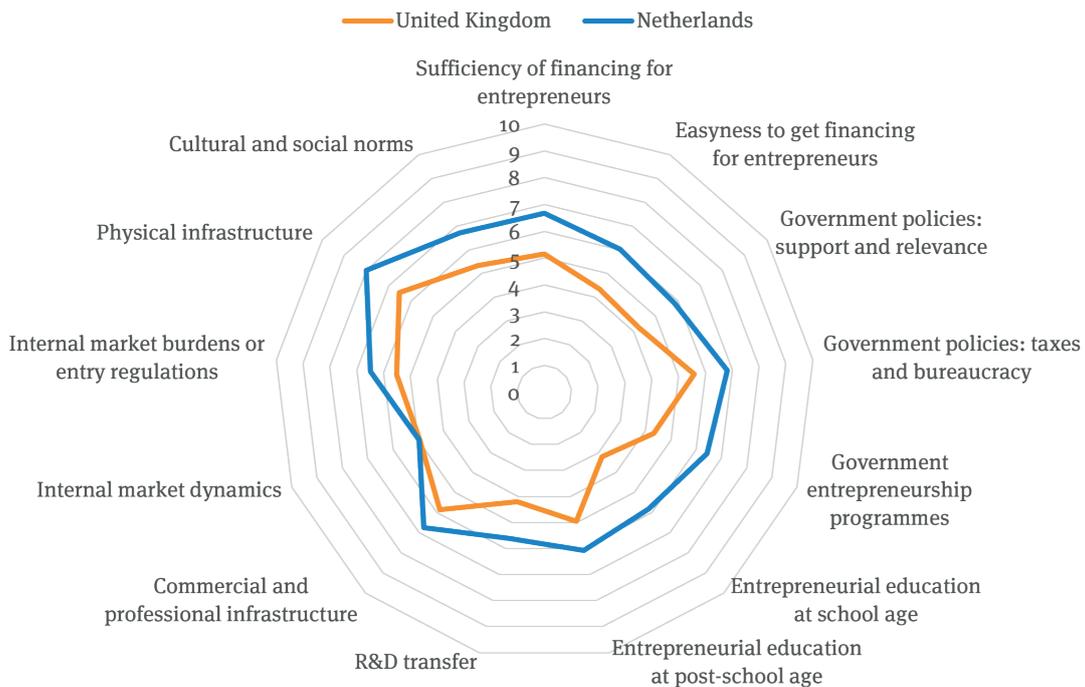


Figure 5.3d: EFCs in the UK and benchmark countries in 2021
 (Source: GEM UK NES 2021, GEM Global NES 2021)

Compared to the Netherlands (Figure 5.3d), the country with the second highest NECI in the world in 2019, 2020 and 2021, and the highest NECI among European countries, the UK had a similar score for internal market dynamics (4.94 vs 4.97). For all other entrepreneurial framework conditions, the Netherlands reported much higher scores. The gap is particularly notable for government entrepreneurship programmes (4.32 vs 6.43) and entrepreneurial education at school age (3.2 vs 5.81). The differences in sufficiency and easiness to obtain entrepreneurial finance, in government support policies, in R&D transfer, physical infrastructure, and social norms are also statistically significant.

5.3. EFCs in Northern Ireland and Scotland in 2021

For the first time we conducted the NES in both Northern Ireland and Scotland to sit alongside the overall UK analysis. In 2021, the NECI was 4.98 in Scotland and 4.96 in Northern Ireland compared to 4.94 in the UK. Entrepreneurial framework conditions in Northern Ireland and Scotland in 2021 followed

the same pattern as in the UK although there were some differences. Thus, government support policies, easiness to get funding, R&D transfer and government entrepreneurship programmes scored higher in both nations compared to the UK overall. However, only the difference in government entrepreneurship programmes was statistically significant.

In contrast, the EFCs scores indicate less favourable conditions in Northern Ireland and Scotland than in the UK overall when it comes to sufficiency of entrepreneurial finance, cultural and social norms, physical infrastructure and internal market burdens.

5.4. Responses to the pandemic and support to women entrepreneurs

Governments across the globe intervened to support business ventures during the pandemic. In 2021, along with traditional questions experts were asked if the support measures introduced by governments in the first twelve months of the pandemic had been successful in mitigating the decline in the number of

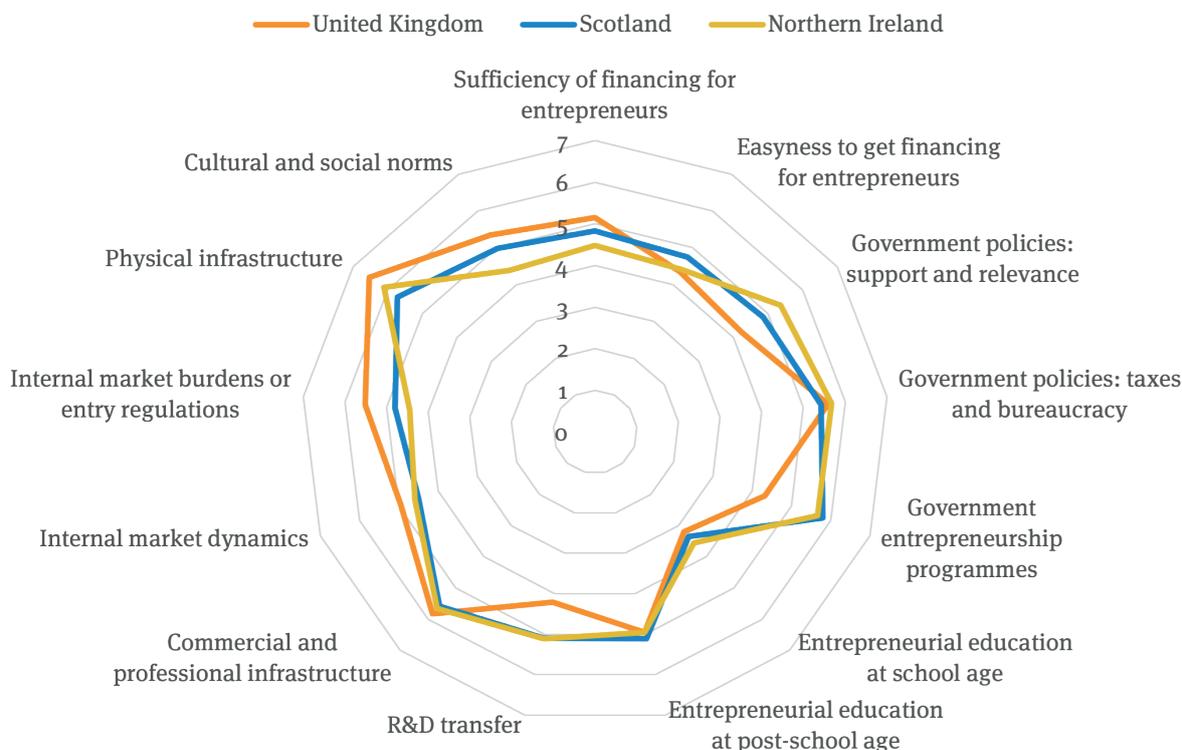


Figure 5.4: EFCs in Scotland and Northern Ireland compared to the UK in 2021
 (Source: GEM Scotland NES 2021, GEM NI NES 2021, GEM UK NES 2021)

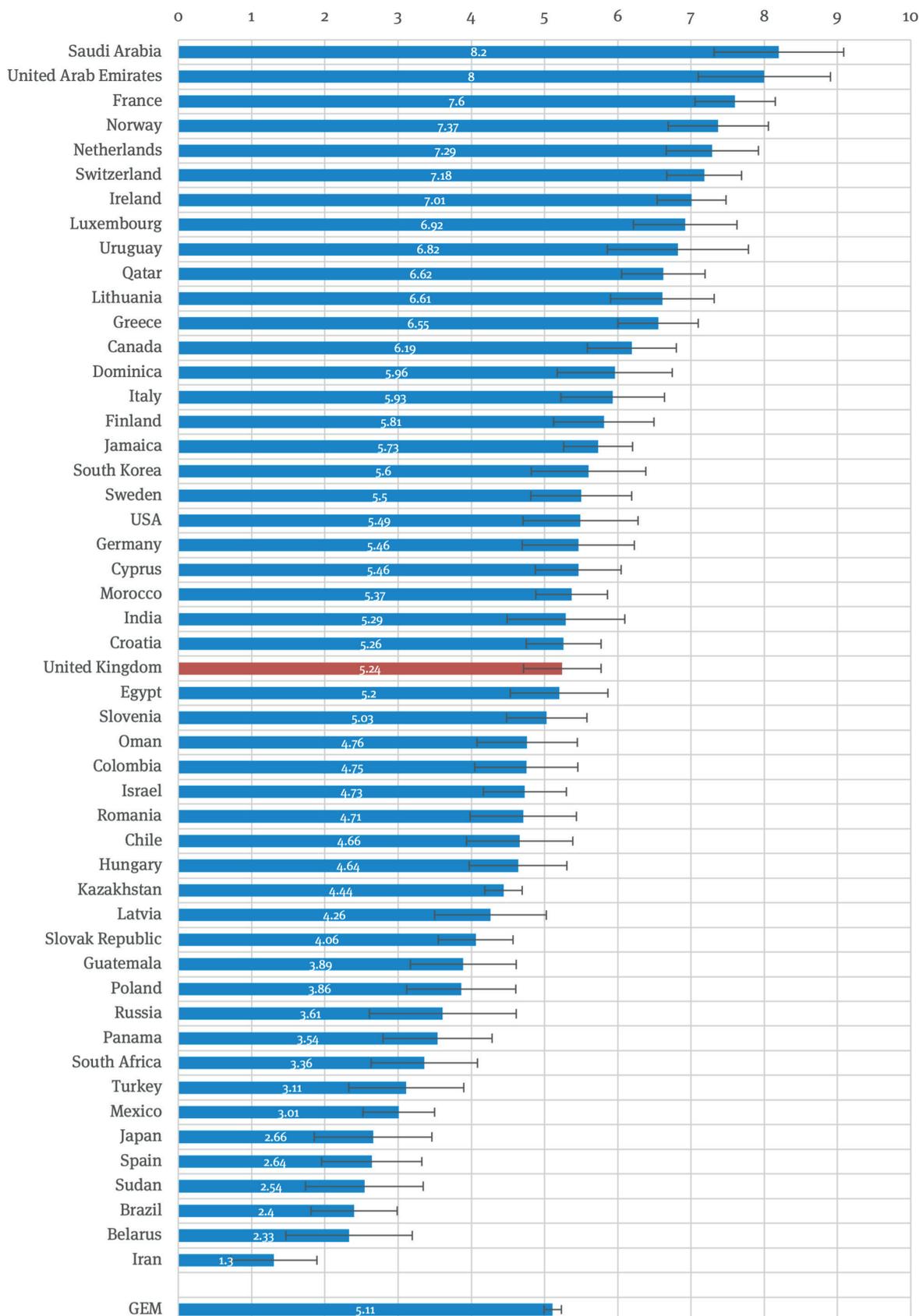


Figure 5.5: Government mitigation of decline in 2021 (Source: GEM UK NES 2021, GEM GEM Global NES 2021)
 Note: black bars represent the 95% confidence intervals

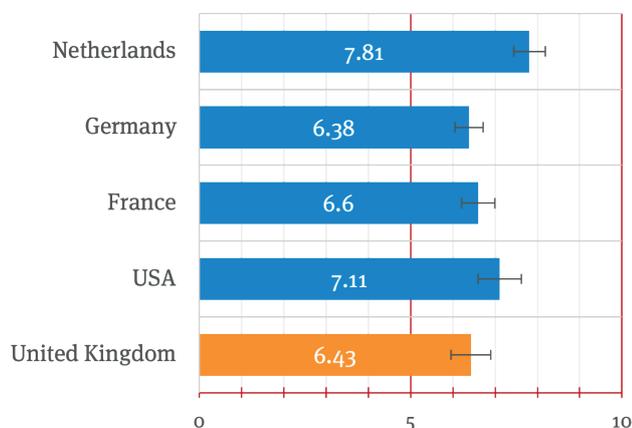


Figure 5.6: Progress and support to digitalization and teleworking in 2021
 (Source: GEM UK NES 2021, GEM Global NES 2021)
 Note: black bars represent the 95% confidence intervals

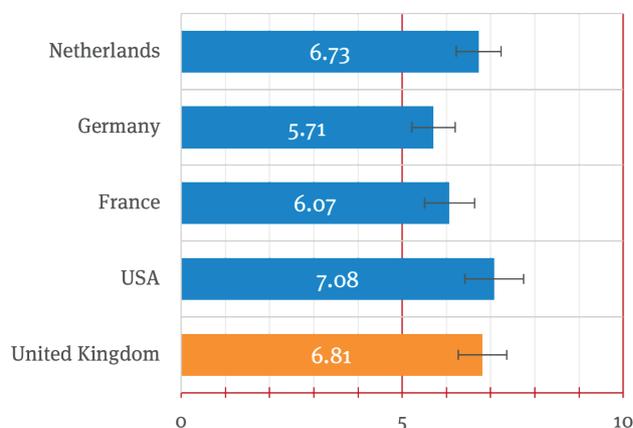


Figure 5.7: Rise of gig economy as a start-up driver and business model in 2021
 (Source: GEM UK NES 2021, GEM Global NES 2021)
 Note: black bars represent the 95% confidence intervals

new and growing firms and associated jobs. Figure 5.5 shows the results by contrasting how experts evaluated the efficiency of the UK Government measures with the evaluation provided by experts in other countries. Overall, UK measures to avoid a decline in new and growing businesses were judged as sufficient with the score of 5.24. It was in line with the effectiveness of the measures by US and German governments. However, the support was judged as significantly less effective compared to some other countries, including France and Netherlands¹⁸.

Digitalisation and teleworking accelerated due to the pandemic. The progress of this process and government support to adoption of digital technologies in from of specific subsidies, tax benefits or training were judged as sufficient by UK experts and in line with the evolution in other benchmark countries except for Netherlands where the score is significantly higher (Figure 5.6).

Furthermore, there was strong expert agreement that due to the pandemic gig economy became an important driver for starting up new business, with many new but also existing growing businesses adopting gig-based business models (Figure 5.7).

In contrast, the experts were divided when it comes to the increase in prioritisation of environmental protection by businesses and acceleration of ‘green agenda’ by the UK Government due to the pandemic. It

was also the case for the benchmark countries with the scores below or just above 5 (Figure 5.8).

Additionally, a new pillar describing the state of support to women entrepreneurs (it covers such topics as national culture, gender equality in market and public procurement and in access to financing, the effectiveness of support services and regulations) shed an interesting light to entrepreneurial gender gap observed in the UK. Experts agree that support to women entrepreneurs is insufficient in the UK as it is also the case in France and USA. Germany and Netherlands scored above 5 with Netherlands having statistically significantly higher score than in the UK (Figure 5.9).

5.5. Experts recommendations

When asked about factors fostering entrepreneurship in 2021 experts mention a range of factors pointing out how the pandemic crisis created new opportunities. The realisation of these opportunities was enabled by increased digitalisation and technology adoption. Climate crisis and sustainability issues are also coming out as fostering factors opening up new opportunities for venture creation. There is also a strong focus on the importance of new and ‘good and practical’ entrepreneurial support programmes in general. Increasing entrepreneurial diversity – women, ethnic and immigrant entrepreneurship – is also seen as a crucial element of the UK entrepreneurial context with

¹⁸ These results should be taken with a pinch of salt: experts do not compare effectiveness of measures across countries rather evaluate the outcomes of government support measures in their own country. Therefore, other factors including cultural differences may influence these judgements.

some experts arguing for targeted support measures to underserved entrepreneurs.

In 2021 experts were also asked to state three government actions that have negatively affected entrepreneurship and three actions that have positively affected entrepreneurship in the UK since the start of the pandemic. The majority of cited negative actions are related to government policies and Covid decision-making. Experts cite the lack of clarity, slow decision-making, U-turns and general inconsistency related to lockdown and reopening policies. There is also a profound feeling of injustice and unequal treatment regarding the ‘forgotten’ entrepreneurs and self-employed. In the nutshell, uncertainty related to the pandemic and Brexit comes as the most important negative factor. The positive actions largely relate to financial support provided to businesses via furlough, grant and loan schemes and generally accommodative fiscal policy. Some experts notice a positive shift towards innovation support and new support schemes targeting SMEs. Effective vaccination roll-out and some specific commitments were also mentioned as positive actions.

Similar to 2020, the main recommendations of experts consulted in 2021 concerned:

- improved financial support for entrepreneurship with particular focus to patient and inclusive funding with a fair distribution to different groups of entrepreneurs, micro-funding and improved and more accessible grant funding, including better information about the latest, improved incentives to increase angel investment;
- joined-up approach to support programmes through different stages of the business lifecycle with a call for a single body of support and a clear entrepreneurship-centred government policy;
- improved entrepreneurial education, especially at school age; improved technical education and improved links between educational system, industry and Local Enterprise Partnerships (LEPs);
- greater regional devolution and improved entrepreneurial eco-system in regions.

In 2021 experts also call for improving support to innovation and internationalisation, clarity around environmental and net zero aspirations and celebrating business diversity.

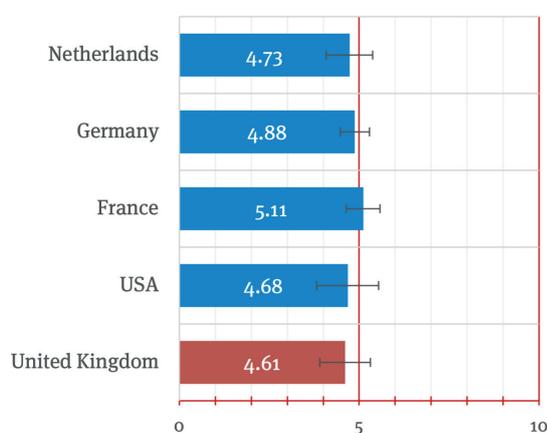


Figure 5.8: Prioritization of environmental protection and governments’ impulse of the green agenda in 2021

(Source: GEM UK NES 2021, GEM Global NES 2021)

Note: black bars represent the 95% confidence intervals

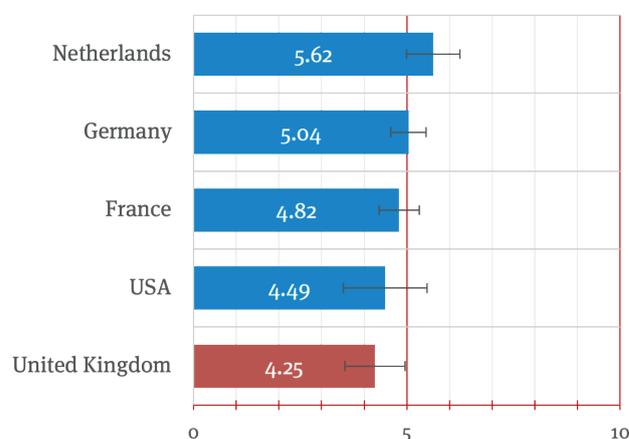


Figure 5.9: Support to women entrepreneurs in 2021
(Source: GEM UK NES 2021, GEM Global NES 2021)

Note: black bars represent the 95% confidence intervals

6. Impact of Covid-19 on entrepreneurial activity and household income

Following on from last year’s report, the GEM 2021 survey continued to study the impact of the Coronavirus pandemic on entrepreneurial activity. Figure 6.1 below shows the percentage of start-ups, new business owner-managers, established businesses, TEA and EEA that disagree or agree with the statement that “the coronavirus pandemic has provided new opportunities that you want to pursue with this business.” For start-ups, new businesses, TEA and EEA, over half answered that they agree there are new opportunities while just under half of established businesses agreed. Established businesses had the highest percentage (35.5%) that disagreed with the statement.

Focusing on start-ups, Figure 6.2 shows the percentage of start-ups that responded to the statement “In response to the coronavirus pandemic, has your business made any changes in its use of digital

technologies for selling your product or service?” Over 50% agreed that they either have adopted new technologies or enhanced plans to improve or invest in new digital technologies. Only 12% stated they did not need any digital tech, while under 25% stated that they had already invested in digital tech prior to the pandemic.

Figure 6.3 focuses on the question “Has the coronavirus pandemic led your household income to strongly decrease, to somewhat decrease, to show no substantial change, to somewhat increase or to strongly increase?” Over 55% of respondents that include both the entrepreneurial and non-entrepreneurial population, stated that their household income neither decreased or increased as a result of the pandemic. Just over 30% stated that their household income decreased while the smallest proportion of 12% stated an increase.

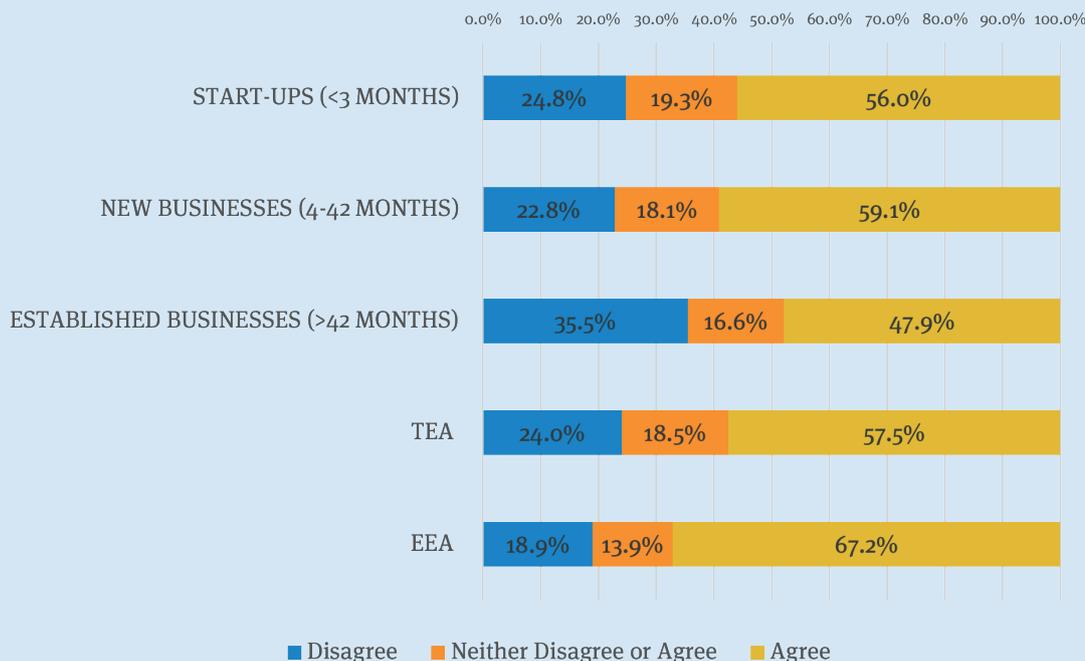


Figure 6.1: Incidence of perception of plausible new opportunities due to the coronavirus pandemic
(Source: GEM UK APS 2021)

Overall, there appears to be a positive perception that the pandemic has brought in new opportunities across all entrepreneurial activity stages, and positive trend in digital adoption by start-ups. Changes in household

income levels for the majority of respondents state that income has not changed, however, a third do state a decrease as a result of the pandemic.

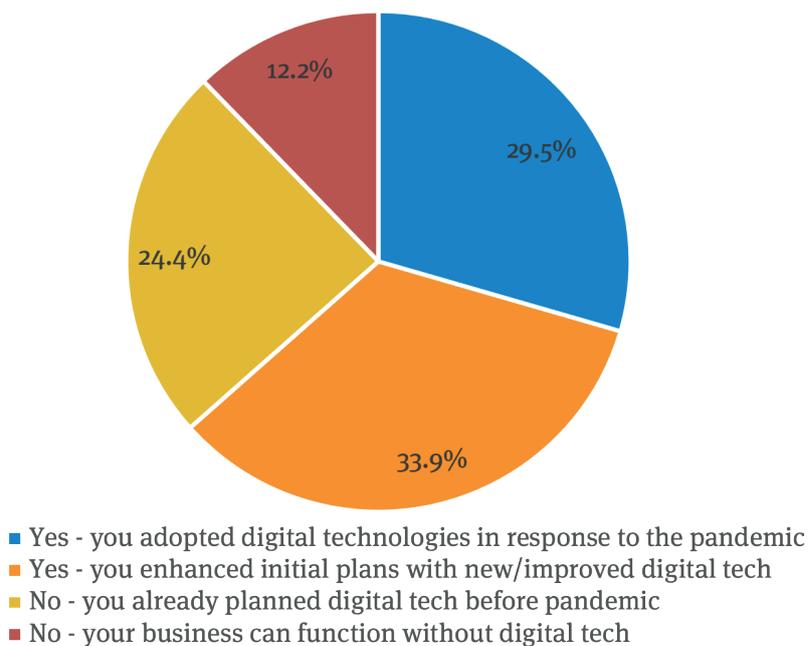


Figure 6.2: Start-ups - changes made in use of digital technologies to sell product/service in response to the coronavirus pandemic (Source: GEM UK APS 2021)

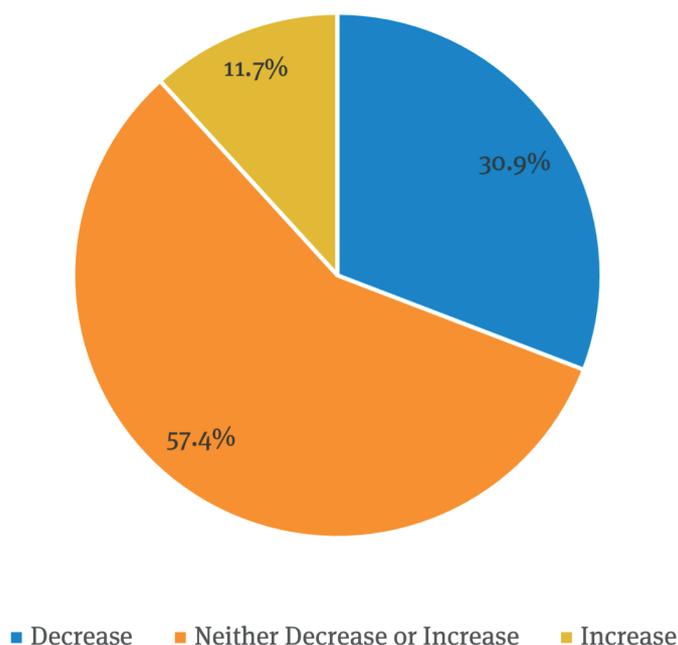


Figure 6.3: Changes in household income due to the coronavirus pandemic (Source: GEM UK APS 2021)

8 Conclusion

The results from the GEM UK Adult Population Survey (APS) and National Expert Survey (NES) for 2021 provided a unique opportunity to lift the lid on a range of issues which lie at the heart of the entrepreneurial process as we began to emerge from the COVID crisis. The 2022 surveys, currently underway, will provide insights into the 2022 version of crisis as the effects of COVID-19 are ever present and the cost of living crisis, war in Ukraine and the ramifications of Brexit combine to create a new set of challenges for running businesses or seeking to establish new ones.

Looking back to 2021 we can see some very positive indicators for the UK economy. In the UK in 2021, just under 29% of working age individuals were either engaged in entrepreneurial activity or intended to start a business within the next three years which was an increase compared to 2020. Attitudes of non-entrepreneurial individuals to entrepreneurship were more positive in 2021 than in 2020 especially start-up opportunity perception but fear of failure and skills needed to start a new venture have fallen.

Early-stage entrepreneurship is at an historical high level (11.5%) and within that headline so too is female early-stage entrepreneurial activity (9.7%). These increases are due to a rise in nascent entrepreneurship. We associate these increases to the postponement of start-up decisions we identified in the 2020 survey and also the recovery of the economy as COVID lockdown restrictions were eased completely on 'freedom day' on 19th July 2021.

There was an increase in the proportion of 55-64 year olds in the UK involved in early-stage entrepreneurial activity – 7.4% compared to 3.2% in 2020. This may be explained by the 'Great Resignation' what is now being associated with the COVID effects on the labour market as older individuals re-evaluate their future economic activity and their position in the labour market.

Similar to previous years, immigrant TEA levels were significantly above that of UK born life-long residents in 2021 and those ethnic-minorities have maintained their previous levels of early-stage entrepreneurial activity (TEA rate) which were significantly higher than for the non-ethnic minority population.

More early-stage entrepreneurs and established business owners are engaged in any high value activities in the UK in 2021 – high job expectation, new products and exporting. This is an improvement on the situation in 2020.

Yet an examination of the Entrepreneurial Framework Conditions (EFC) that entrepreneurs face as they develop their businesses still show some challenges ahead. Typically, the UK framework conditions mirror relatively closely the US EFCs, except for statistically significantly lower scores for cultural and social norms in terms of support of new and growing firms. Entrepreneurial finance, physical and professional infrastructure, as well as internal market dynamics also scored lower in the UK than in the USA in 2021 although the difference is not statistically significant.

One dimension for which the UK shows consistently higher scores than the US is ease of market entry for new and growing firms and internal market burdens and regulations, and this is again the case in 2021 – the UK ranked 7th for this framework condition among 50 countries which participated in NES in 2021.

In 2021, experts were again asked to evaluate entrepreneurs' and Government response to the COVID-19 crisis. Overall, UK measures to avoid a decline in new and growing businesses were judged as sufficient with the score of 5.24. It was in line with the effectiveness of the measures by US and German governments. However, the support was judged as significantly less effective compared to some other countries, including France and Netherlands.

Overall, this report has provided a range of indicators on the entrepreneurial attitudes, activity and aspirations in the midst of the public health emergency which led to the government(s) effectively closing down the vast majority of economic activity across the whole of the United Kingdom. Obviously, the effects of the ending of the transition period associated with Brexit are also intertwined with the pandemic, but the analysis has shown that the entrepreneurial foundations of the economy and society are still strong and these will be crucial for the recovery after the pandemic and in dealing with headwinds of the cost of living crisis, supply chain disruption, war in Ukraine and the on-going economic fallout from Brexit.

Appendix 1: GEM UK sampling and weighting methodology

GEM UK is one of the largest, longest-running national studies of entrepreneurial activity in the world, with over 250,000 individuals interviewed since monitoring began with a sample of 1,000 adults in 1998. In 2020, 10,044 adults aged 18-80 were interviewed. The distribution of respondents is not even across the UK. This is because the Hunter Centre for Entrepreneurship at the University of Strathclyde, the West Midlands Regional Economic Development Institute (WM REDI) at the University of Birmingham and Aston University, Welsh Assembly Government, and the Northern Ireland Department for the Economy chose to boost sampling in their region in order to have more detail about entrepreneurship in their area.

The raw sample of 10,044 was distributed across 12 geographic areas within which representative sub-samples of the population aged 18-80 were taken. These areas and the sample sizes are: South West: 567; South East: 900; East of England: 607; London: 850; West Midlands: 572; East Midlands: 474; Yorkshire & Humberside: 546; North East: 266; North West: 718; Wales: 1,525; Scotland: 2,000; Northern Ireland: 1,019.

According to Ofcom, households in the UK which have access to a mobile phone but not to a fixed telephone landline increased from 14% in Q1 of 2016 to 22% in Q1 of 2020¹⁹. In 2020, 20% of the unweighted GEM sample across the UK consisted of mobile-only households. At the same time, more people are using internet and spending increasing amount of time online each day. According to the World Bank, in 2019 the share of population using internet in the UK has reached 93%²⁰. According to Ofcom, the average time spent online each day by adults aged 18+ was 4 hours 2 minutes in April 2020, this increased by 37 minutes compared to January 2020. Internet take-up varies by age group with 100% of aged 25-34 going online²¹. Moreover, younger age groups, and specifically young males, are less likely to respond by phone as experience of GEM UK APS of recent years clearly demonstrated.

In this changing context, the question of the choice of appropriate method for data collection to assure representativeness of the sample has never been so acute.

Wherever the truth lies, it is clear that fixed line surveys are no more fully representative of UK households, that the distribution of mobile-only households and online panels is different to that of fixed line households, and that these differences are not fixed but change over time. There are advantages and disadvantages in each before mentioned method of data collection. Online panels are representative in terms of geo-demographics, but there are some questions about the attitudinal representativeness of people who opted into online panels. On the other hand, when answering online, people have more time to re-read questions before responding – this is an important advantage considering the length and complexity of GEM APS survey. In 2020, given the disruptions that COVID-19 caused, the GEM UK team felt that it was time to introduce a blended approach to data collection. Hence, GEM UK 2020 APS marks a methodological step change: for the first year, the data was collected via random digit dialling (RDD) of landlines, mobile phone numbers and BMG's online panel network.

Every attempt is made to ensure that the results reported are as reliable and robust as possible. To do this, four sets of weights were calculated for the UK data:

- Weights for the whole UK that take the UK area sub-samples and the age, gender and ethnic minority proportion of the population of the UK (aged 18-64) into account, based on the latest available area estimates from the UK Office of National Statistics, typically mid-year estimates for the previous year.
- Sub-sample area weights that take into account the population distributions within GEM UK sub-sample areas by age, gender and ethnicity. These are used when we report comparisons between GEM UK sub-sample areas.
- Government Official Region (GOR) weights that create representative samples at the GOR level from all sub-samples within the same GOR.
- In addition, separate weights were constructed for England, based on balanced GOR samples for each English region, to develop a final “home nations” weight.
- Moreover, the final dataset was calibrated by using separate weights to account for differences between CATI and online data collection methods (details available on request).

19 <https://www.statista.com/statistics/386778/share-of-calls-enabled-landlines-in-uk-hoseholds/> accessed 21/06/21

20 <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=GB/> accessed 21/06/21

21 https://www.ofcom.org.uk/_data/assets/pdf_file/0027/196407/online-nation-2020-report.pdf/ accessed 21/06/21

Disclaimer

This report is based on data collected by the GEM consortium and the GEM UK team; responsibility for analysis and interpretation of the data is the sole responsibility of the authors.

For further information on the GEM UK project, visit:

www.gemconsortium.org