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Global Entrepreneurship Monitor

UK Report 2022/23



Authors Mark Hart, Karen Bonner, Neha Prashar, Anastasia Ri, Samuel Mwaura, Sreevas Sahasranamam, Andy Loung and Jonathan Levie









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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 2022/23

Foreword by James Holian, NatWest Managing Director of Business Banking

The latest Global Entrepreneurship Monitor provides an authoritative voice on the past year's entrepreneurial trends. With over 10,000 adults participating in the UK survey alone, the research continues to maintain its high standard. Equally, NatWest continues to be proud to sponsor this report, and, for the second year, additional reports for Northern Ireland, Scotland and Wales.

Despite a backdrop of geopolitical turmoil, a cost-of-living squeeze and rocketing inflation, 2022 was a robust year for UK entrepreneurs, with almost a third of respondents engaged in entrepreneurial activity or planning to start a business; a figure that is still up from 2020.

Research from the report shows that when looking to the future of their businesses, social impact is a bigger consideration for early-stage entrepreneurs than established businesses. And new ventures are more likely to consider the environmental consequences of their decisions than established businesses, although are no more likely to act.

SMEs have reported that one of the biggest obstacles to this lack of movement is accessing tools to measure and reduce their carbon output amid high energy and material costs. Government policies and regulations to help businesses reach the United Nations' Sustainable Development Goals through grants or tax cuts is an area that needs improvement.

However, on a positive note, findings reveal that the female-to-male early stage entrepreneurial activity ratio was at its highest in 2022, a testament to female resilience in a time of flux, when fear of failure is slightly higher among women. Meanwhile, youth entrepreneurship is still rising, with those under 35 years of age significantly more likely to start a business than their older counterparts.

The number of people of working age who perceive good start-up opportunities during the six months ahead has fallen, reflecting the challenges of last spring and summer and highlighting the need to keep our pre-pandemic recovery energised and on track.

At NatWest we see this as a call to unlock the potential of our businesses and their communities. For those entrepreneurs starting up and scaling up, we are determined to be there to ensure they thrive, while supporting climate, talent and growth during economic uncertainty.

Main Findings

Background

- The Global Entrepreneurship Monitor (GEM) research consortium measured rates of entrepreneurship across multiple phases in 49 economies in 2022, making it the world's most authoritative comparative study of entrepreneurial activity in the general adult population. In the UK in 2022, 10,173 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 2022 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.
- Once again 2022 provided a volatile backdrop against which to undertake the GEM APS in the UK with geo-political events creating economic uncertainty manifested in a cost of living crisis, record high inflation and falling output in an already stagnating economy. This was made worse in Q3 by home-grown political turmoil throughout the summer months as the UK's Prime Minister was forced to resign. The result was a collapse of business confidence in an already fragile economy trying to recover from the effects of the pandemic and the UK's exit from the EU. A perfect storm indeed in which to undertake the GEM survey.

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 2022 was 11%.
- The TEA rate of 11% in the UK is no longer significantly higher than that of Germany (9.1%), France (9.2%) but it is significantly lower than that of the US (19.2%).

- In 2022, we observe some differences in TEA rates among the home nations: England (11.5%), Wales (7.8%), Scotland (8.8%) and Northern Ireland (8.7%). TEA rates in Wales and Scotland are significantly lower than England while the difference between Northern Ireland and other home countries is within the margin of error.
- In the UK in 2022, 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.
- Participation in the stages of entrepreneurship in 2022 revealed that:
 - 6.5% were engaged in established business ownership;
 - 4.0% in new business ownership;
 - 6.5% in nascent entrepreneurship and
 - 11.6% intending to start a business within the next 3 years.
- Nascent entrepreneurship remains high at around 62% of TEA and well above its historical level since 2002. Further, the number of individuals stating that they intended to start a business in the next three years is approaching 12% which is double what it was a decade ago.
- A higher proportion of early-stage entrepreneurs (68.6%) consider social implications when making decisions about the future of their business compared to established businesses (55.5%). TEA entrepreneurs are also more likely to take active steps to maximise the social impact of their business compared to established business owners (50.0% compared to 39.6%).
- New firms are more likely to consider the
 environmental consequences of business decisions
 (68.7% of TEA entrepreneurs) compared to
 established businesses (57.1% of EBO businesses).
 In contrast, there is no statistically significant
 difference between TEA and EBO entrepreneurs
 when it comes to taking actions to minimise
 environmental impacts of their business activities.

Population Sub-Groups

- In 2022 the male TEA rate was 12.8% and the female rate 9.7% which were significantly different.
- However, the UK female to male TEA ratio of 78% in 2022 is higher than in previous years and can be attributed to the significant rise in female early-stage entrepreneurial activity in recent years underlining the resilience of female early-stage entrepreneurial activity in the midst of the most severe economic crisis in 300 years.
- Youth entrepreneurship has been on the increase over the last 20 years and once again in 2022 individuals aged less than 35 were significantly more likely to be involved in early-stage entrepreneurial activity (the TEA rate) compared to older individuals.
- Similar to previous years, immigrant TEA levels were significantly above that of UK born life-long residents in 2022: the TEA rate for immigrants was 13.7% compared to 8.7% for life-long residents.
- Following previous trends, the TEA rate of the white ethnic population in the UK in 2022 was significantly lower than that of the non-white population, at 10.2% compared to 16.2% respectively.

Attitudes and Aspirations

- Just under half 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 which was a significant drop on the 63% in 2021.
- The rates for good start-up opportunities in the UK and Germany are also lower having each fallen by around 10 percentage points since 2021. Fear of Failure remains high in the UK in 2022 and has risen slightly for women since 2021. Taken together, these two results clearly reflect the high levels of economic uncertainty in the Spring and Summer of 2022.
- Males were more likely than females to report that "to build great wealth or a very high income" was their main motivation to start a business while females were significantly more likely to report "to earn a living because jobs are scarce" as their main motivation.

- The relative frequency of high job expectation among early-stage entrepreneurs in the UK settled at around 16% between the GFC and 2018, increased to just over 20% in the 2019-21 period, and dropped to its lowest historically at 14.6% in 2020-22.
- In 2022, the UK has similar shares to the US of TEA and established firms in the high or medium tech sectors at 5.7% and 5.5%, respectively. This is, however, a deterioration compared to 2021 (8.7% and 14.8%) when the UK showed the highest rates compared to the US, France and Germany. The UK also experienced a drop in the rate of exporters for TEA and established firms: from 23.3% and 27.2% to 19.3% and 21.6% respectively

The Entrepreneurial Context

- The entrepreneurial context in the UK is evaluated annually by at least 36 experts on 13 dimensions, i.e., Entrepreneurial Framework Conditions (EFCs), on a scale from 0 (very inadequate, insufficient status) to 10 (very adequate, sufficient status). In 2022, only 5 EFCs in 13 scored above the midpoint of 5.0.
- Compared to 2021, 9 out of 13 EFCs were downgraded with the remaining four improving only marginally. For the first time in five years, sufficiency of financing for entrepreneurs was rated below 5, i.e., as insufficient.
- EFCs scores remained relatively stable over the last five years, from 2018 to 2022, with no evidence of long-term improvement. A worrying tendency has emerged over the last three years with entrepreneurial finance, government policies in relation to support and relevance for new and growing firms, and physical infrastructure weakening progressively.
- Typically, the UK framework conditions mirror relatively closely those of the US EFCs, except for statistically significantly lower scores for cultural and social norms in terms of support of new and growing firms.
- Compared to France and Germany, the UK framework conditions in 2022 were statistically significantly less favourable in terms of government entrepreneurship programmes, sufficiency and ease of getting financing for entrepreneurs, and physical infrastructure.

- The overall index of entrepreneurial context, NECI, declined from 5.0 in 2020 to 4.7 in 2022, putting UK at 25th place among 51 countries.
- Experts judge the degree of recovery to prepandemic activity level as satisfactory with a score 5.57, above the midpoint threshold level. Although the benchmark countries show higher scores for this construct, the differences compared to the UK's are not statistically significant.
- In regard to the pursuit of the UN's SDGs, experts are fairly positive, with four out of five dimensions receiving scores higher than 5.0. One area which is still in the insufficient spectrum are government policies and regulations to support sustainability-focused start-ups and firms through grants, special rights, or tax cuts.

1. Introduction

1.1 Preamble

Once again 2022 provided a volatile backdrop against which to undertake the Global Entrepreneurship Monitor (GEM) annual population survey (APS) in the UK with geo-political events creating economic uncertainty manifested in a cost of living crisis, record high inflation and falling output in an already stagnating economy. This was made worse in Q3 by home-grown political turmoil throughout the summer months as the UK's Prime Minister was forced to resign. The ensuing Tory leadership contest resulted in a Truss administration by early September whose initial fiscal event led to an unprecedented economic shock as markets gave their judgment overnight. The result was a collapse of business confidence in an already fragile economy trying to recover from the effects of the pandemic and the UK's exit from the EU. A perfect storm indeed in which to undertake the GEM survey.

This report presents the key Global Entrepreneurship Monitor (GEM) measures of entrepreneurial attitudes, activity and aspiration in the United Kingdom (UK) over a 20 year period since 2002 and compares the rates to those in Germany, France and the United States (US). The choice of these three international comparators reflects the interest of our funders in the UK. The report will also summarise entrepreneurial attitudes, activity and aspiration across the four nations of the UK but there will be three additional reports one each for Scotland, Northern Ireland and Wales to provide more contextualised analysis and discussion.

Since 2019 there has been a step-change in some of the GEM trend data as well as great volatility in others and the results in 2022 will show whether the pandemic and the exit from the EU has left any permanent effects on the UK's entrepreneurial ecosystem. For example, following the collapse of start-up activity in 2020, we saw that overall early-stage entrepreneurial activity in 2021 rebounded sharply and that more women were engaged in start-up activity than ever before as the economy recovered after COVID lockdown restrictions were removed.

The resilience of small businesses over recent years is both inspiring and important. 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. This report presents analysis on how well the UK is equipped to deal with the challenges ahead.

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 2022 the study conducted surveys in 49 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 2022 GEM global study was based on an analysis of adult population survey (APS) results from over 170,000 interviews across 49 different 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 2022/23 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 on page 9.

¹ Hill, S., Ionescu-Somers, A.; Coduras, A.; Guerrero, M.; Menipaz, E; Zbierowski, P; Schott, T; Sahasranamam, S. and Shay, J. (2023) Global Entrepreneurship Monitor 2020/21 Global Report, Adapting to a "New Normal". London: Global Entrepreneurship Research Association.

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.

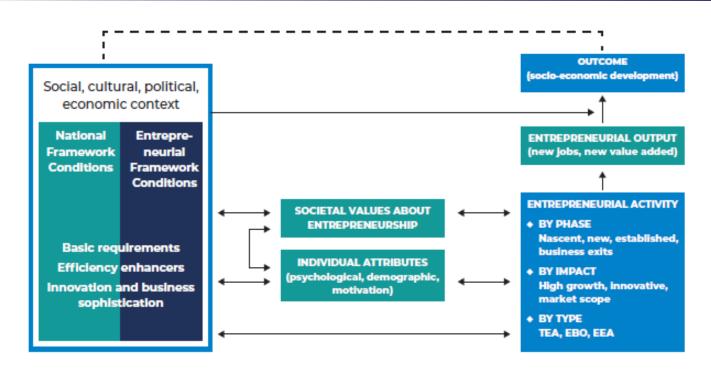


Figure 1.1: The Entrepreneurial Process and GEM Operational Definitions (Source: Hill, S., Ionescu-Somers, A.; Coduras, A.; Guerrero, M.; Roomi, M; Bosma, N., Menipaz, E; Zbierowski, P; Schott, T; Sahasranamam, S. and Shay, J (2022/23), p.28)

As much of this entrepreneurial activity is pre-startup 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. 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 2022 Adult Population Survey (APS) are explained in more detail in Appendix 1. In a major departure in 2020 the UK team decided to offer 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 in 2022 were conducted via CATI as usual and the results were reported in the GEM Global report published in February 2023.

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 mobileonly households in this survey was designed to match Ofcom estimates of the proportion of adults in mobileonly households in 20203 for the UK, to account for the higher mobile phone use (around 20%) of some hardto-reach individuals, such as young men. Once again in 2022 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/CAWI mixed method). See Appendix 1 for further details.

 $_{\rm 3}$ $\,$ 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 2022

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, France, 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	43.7	37.0	40.9	58.0
France	59.6	52.4	49.8	49.6
Germany	34.2	39.5	36.2	47.4
US	55.6	46.0	66.8	55.1

Table 2.1: Attitudes towards entrepreneurship in the UK, France, Germany and the US in 2022 - 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 2022)

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 lower than France by 15 percentage points. The equivalent figure for the US was over half of the non-entrepreneurial population.
- Just under half 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 which was a significant drop on the 63% in 2021. The rates in the UK and Germany are slightly

lower having each fallen by around 10 percentage points since 2021. In France the respective share is just over half.

- In the UK two-fifths of the non-entrepreneurial population perceive that they have the skills, knowledge and experience to start a business the same as in 2021; the rates in Germany are slightly lower while in France and the US the respective share is much higher 50% and 67% respectively.
- Fear of failure among those who perceive start-up opportunities is higher in the UK, at just under three-fifths (no change since 2021), than in the other three comparator countries, but it is noticeable that there has been rise in the rate in the US for the first time.

2.2 Entrepreneurial Attitudes in the UK: 2019-2022

Estimates of attitudes towards entrepreneurship by gender are shown in Table 2.2. Those stating they had the skills to start a business increased slightly from 43.1% in 2021 to 43.7% in 2022, while good opportunities perception had a large decrease from 47.7% in 2021 to 37.0% in 2022. There was a slight increase in fear of failure from 57.6% in 2021 to 58% in 2022 while other metrics did not differ much from the previous year.

These trends were also the same when looking at male and female attitudes. In particular, male attitudes towards good opportunities decreased from 51.7% in 2021 to 41.1% in 2022, while for females, this decreased from 44.1%% in 2021 to 33.3% in 2022. This is a large decrease from the previous year but remains higher than the values reported in 2020.

Those who stated that successful entrepreneurs have a high level of status and respect for society overall went down from 80.9% in 2021 to 80.4% in 2022. There was a decrease when looking at males only, however, when looking at females, this went up from 81.3% in 2021 to 81.8%.

	2020	2021	2022	2020	2020	2021	2021	2022	2022
	All	All	All	Male	Female	Male	Female	Male	Female
I personally know someone who has started a business in the last two years	47.0	43.1	43.7	47.1	47.0	42.9	43.3	43.6	43.9
There will be good start-up opportunities where I live in the next six months	32.0	47.7	37.0	37.2	27.1	51.7	44.1	41.1	33.3
I have the skills, knowledge and experience to start a business	44.3	39.0	40.9	51.0	38.4	46.3	32.7	48.9	33.9
Fear of failure would prevent me from starting a business (for those who agree there are good start-up opportunities)	53.0	57.6	58.0	49.9	57.0	54.7	60.7	54.0	62.6
Most people consider that starting a business is a good career choice	73.5	72.3	73.6	72.2	74.6	68.8	75.4	70.8	76.0
Those successful at starting a business have a high level of status and respect in society	80.8	80.9	80.4	81.8	79.8	80.4	81.3	78.8	81.8
You will often see stories about people starting successful new businesses in the media	74.6	79.5	76.4	75.8	73.5	78.9	80.2	76.6	76.2

Table 2.2: Entrepreneurial attitudes in the UK in 2020, 2021 and 2022 (% non-entrepreneurially active respondents aged 18-64 expressing an opinion and agreeing with the respective statement) (Source: GEM UK APS 2020,2021,2022)

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 since 2018 reflecting the increasing levels of uncertainty in the UK's economic performance due mainly to the pandemic and EU-exit. Over the same period those who stated they have the skills, knowledge and experience to start a business has decreased. Opportunity perception in the next 6 months has fallen back in 2022 reflecting the impact of the rapid rise in the cost of doing business, political instability, and the on-going threat of recession throughout the fieldwork period.

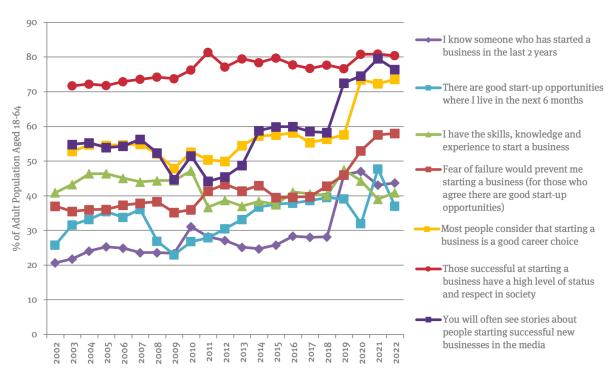


Figure 2.1: Entrepreneurial attitudes in the UK, 2002-2022: (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statement) (Source: GEM UK APS 2002-2022).

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 2022, there was a sharp fall in the perception of start-up opportunities for males and females. Fear of failure increased in 2022 for females while for males it declined marginally. In both cases, there has been an upward trend in fear of failure since the Global Financial Crisis (GFC) recession.

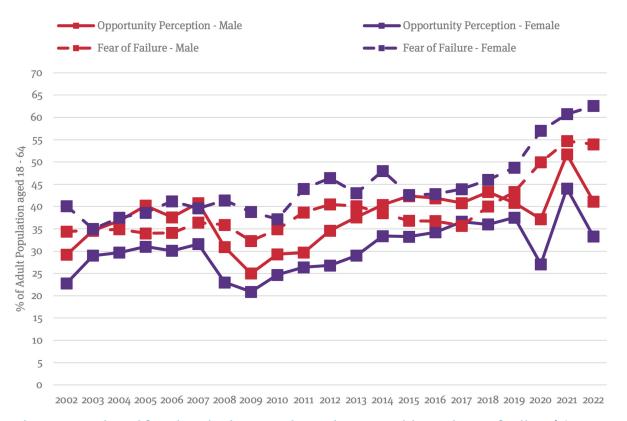


Figure 2.2: Male and female attitudes towards Good Opportunities and Fear of Failure (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statements "There are good start-up opportunities where I live in the next 6 months"; "Fear of failure would prevent me from starting a business") (Source: GEM UK APS 2002-2022).

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 2022 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 2022 this was just over two-fifths of the non-entrepreneurial population; Northern Ireland and Scotland had a slightly higher proportion than England.
- All home nations had a lower proportion of respondents who agreed that there were good startup opportunities in their local area in the next 6 months in 2022 compared to 2021 when the economy was beginning to recover from the last of the COVID lockdown restrictions (19th July 2021 was described

- as 'freedom day'). This fall in 2022 clearly reflected the effects of rising inflation, war in Ukraine, difficulties post EU-exit and political instability and associated fiscal policy errors at the time the GEM APS was in the field (June to September). No part of the UK was insulated from these effects on opportunity perception.
- The proportion of non-entrepreneurially active respondents who thought they had the skills to start a business were similar across the home nations: 41%-43%.
- The proportion who feared failure in the UK (58%) remained high in 2022 and there were no significant differences between the home nations. Again, the turbulent economic context, and the rapid rise in inflation putting a squeeze on household incomes, meant that three-fifths of the adult population were risk averse in each of the home nations in 2022.

	England	Wales	Scotland	Northern Ireland	United Kingdom
I know someone who has started a business in the last 2 years	43.2	44.8	47.0	48. 5	43.7
There are good start-up opportunities where I live in the next 6 months	37.9	33.0	33.7	29.4	37.0
I have the skills, knowledge and experience to start a business	40.8	42.6	40.5	43.0	40.9
Fear of failure would prevent me from starting a business (for those who agree there are good start-up opportunities)	57.6	59.8	60.1	60.6	58.0
Most people consider that starting a business is a good career choice	74.2	72.8	68.2	72.1	73.6
Those successful at starting a business have a high level of status and respect in society	80.8	76.4	78.9	79.2	80.4
You will often see stories about people starting successful new businesses in the media	76.4	75.1	75.6	79•9	76.4

Table 2.3: Perceptions of entrepreneurship among non-entrepreneurially active individuals in the UK Home Nations (%), 2022 (Source: GEM UK APS 2022)

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 2022. In this figure, individuals who engaged in more than one stage of the process at a time are included <u>in their most</u> established stage.

In the UK in 2022, 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 the same as in 2021. This has been increasing since 2018. Participation in the stages of entrepreneurship in 2022 revealed that 6.5% were engaged in established business ownership, 4.0% in new business ownership, 6.5% in nascent entrepreneurship and 11.6% intending to start a business within the next 3 years. The major trend that we can see is that nascent entrepreneurship remains high at over 62% and well above its historical level since 2002. Further, the number of individuals stating that they intended to start a business in the next three years is approaching 12% which is nearly double what it was a decade ago and clearly reflecting an on-going reassessment for many of their labour market position post pandemic.

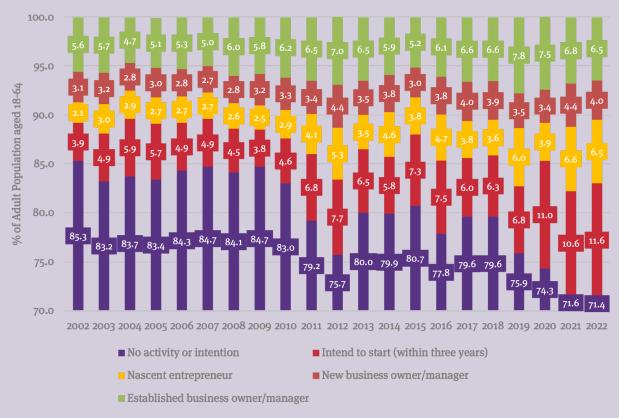


Figure 3.1: Participation in Entrepreneurship in the UK by most established stage of entrepreneurial activity (not including intrapreneurs), 2002 to 2022 (Source: GEM UK APS 2002 to 2022))

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 2022 for the UK, France, Germany, and the US are shown in Figure 3.2. 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 as the recovery got underway after the pandemic. 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. However, it remained broadly unchanged in 2022 at 11%,⁴ compared to 11.5% in 2021, which is still a high watermark in the 20 year trend of GEM data. By contrast TEA rates in the US, France and Germany rose markedly in 2022.

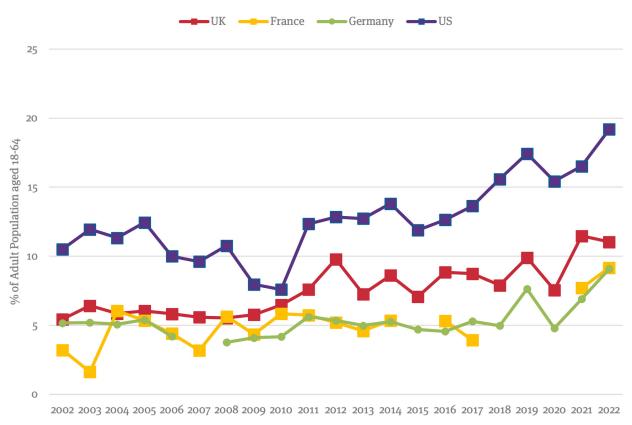


Figure 3.2: Total early-stage Entrepreneurial Activity (TEA) in UK, Germany and US (2002-2022) (Source: GEM Global APS 2002-2022)

Note: the gaps in the France data series are because they were unable to participate in the GEM Global project in some years since 2014.

TEA rates by age group for the UK, France, Germany and the US are shown in Figure 3.3. The UK's TEA rate is broadly similar to that in 2021 across each of the age-bands. What is striking is that the rise in overall TEA rates in the comparator countries is mainly due to an increase in youth entrepreneurship in both the US and Germany and to a lesser extent in France. For example, in the US the TEA rate for 18-24 year olds rose from 19% in 2021 to 28% in 2022 and in the 25-34 year old group it rose from 19% to 26%. In Germany the TEA rate for 18-24 year olds rose from 8% in 2021 to 15% in 2022.

In the UK, however, the TEA rates for older individuals (i.e., over the age of 44) remain higher than in Germany but similar to the rates in France. In the US these older age groups are more entrepreneurial than their counterparts in Europe.

⁴ This is lower than the 12.9% reported in the GEM Global report for the UK as that was based on only the first 2,000 CATI interviews achieved by the mid-July 2022 deadline for all participating countries in GEM in 2022. The GEM UK achieved sample is around 10,000 (CATI and CAWI) and we also introduce ethnicity into our weighting protocols.

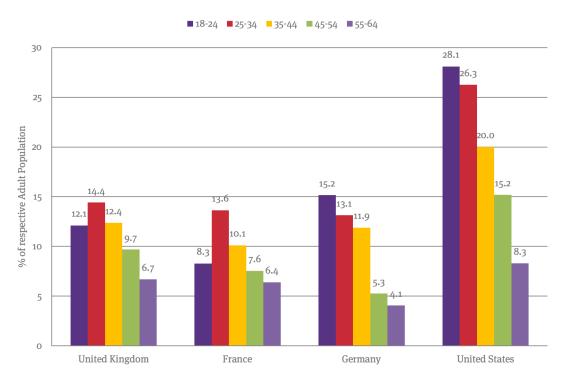


Figure 3.3: Total early-stage Entrepreneurial Activity (TEA) in the UK, France, Germany and the US by Age Group 2022 (Source: GEM APS 2022)

The trend in UK TEA rates by age group for the most recent three years is shown in Figure 3.4. The increase in all age groups between 2020 and 2021 has been maintained in 2022 and it is clear the effects of the pandemic are still working their way through the labour market decisions of many tens of thousands of individuals in the UK irrespective of their age.

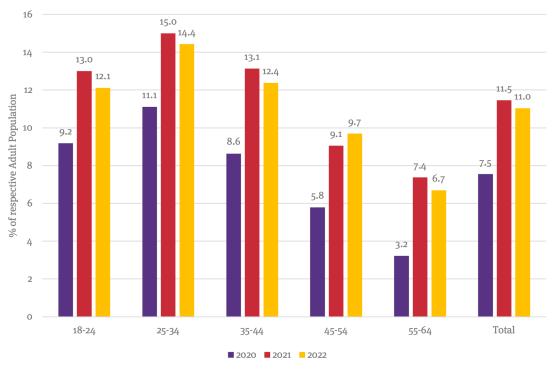


Figure 3.4: Total early-stage Entrepreneurial Activity (TEA) in the UK by Age Group (2020 to 2022) (Source: GEM APS 2020-2022)

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 2022 data for these metrics for the UK, France, Germany and the US are given in Table 3.1.

The business churn rate is the same for all three European countries at 0.4%. The proxy early-stage survival rate for the US is 0.3%. There was no increase in those that expect to start a business in the UK between 2021 and 2022 – remaining at just over one in six individuals which is similar to that in France but higher than in Germany. Nascent entrepreneurial activity rates, new business owner/manager rates and TEA rates were broadly the same as in 2022.

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 2022 the UK intention rate was closer to that in the US than in previous years 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	18.5	7.1	4.3	11.0	6.6	4.3	0.6	0.4
France	18.8	7.2	2.2	9.2	2.9	2.2	0.3	0.4
Germany	10.3	5.6	4.2	9.1	3.6	3.4	0.4	0.4
US	22.5	11.6	7.9	19.2	9.2	5.2	0.5	0.3

Table 3.1: Measures of entrepreneurial intention and activity in the UK, France, Germany and the US, 2022 (Source: GEM Global APS 2022)

3.2 Male and Female Entrepreneurial Activity Compared

In the UK the female TEA rate in 2022 was 9.7%, the same as in 2021, while the male rate was significantly higher at 12.4%. Both the male and female TEA rates were the same as in 2021 after a significant rise between 2020 and 2021. TEA rates by gender for the UK, France, Germany and the US are shown in Figure 3.5. In most high-income countries, females are around two-thirds as likely to be early-stage entrepreneurs as males, and, in the case of the UK, it was around three-quarters (78%) in 2022. Therefore, as the evidence builds year on year from the GEM survey 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 in the UK. Both the Germany and US TEA rates for females increased in 2022 when compared with 2021. The gap between male and female TEA rates for France and Germany increased in 2022 as more males were engaged in early-stage entrepreneurship. In contrast, in the US, for every ten male early-stage entrepreneurs there were nine females at the same stage of setting up a new venture in 2022.

Comparing rates by gender across countries, the UK male and female early-stage entrepreneurial activity rates are both higher than that of Germany (11% and 7.1%, respectively) and France (11.1% and 7.2% 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 -78% compared to 90% in the US.



Figure 3.5: Total early-stage entrepreneurial activity by gender in the UK, France Germany and the US in 2022 (Source: GEM Global APS 2022)

Figure 3.6 presents the established business ownership (EBO) rates by gender. Comparing this with Figure 3.5 shows a wider gap in participation rates between male and female established business owners (EBO) in the UK than was the case for early-stage entrepreneurs (TEA), suggesting that the transition rate from early-stage entrepreneurial activity to established business ownership is relatively lower for female as compared to male entrepreneurs. In the UK, France and Germany, there were roughly half as many female established business owners as there were males in 2022. This follows a similar trend in recent years. In the US the gap is lower with females accounting for 75% of the male rate, which is yet lower than the 90% female to male ratio in TEA.

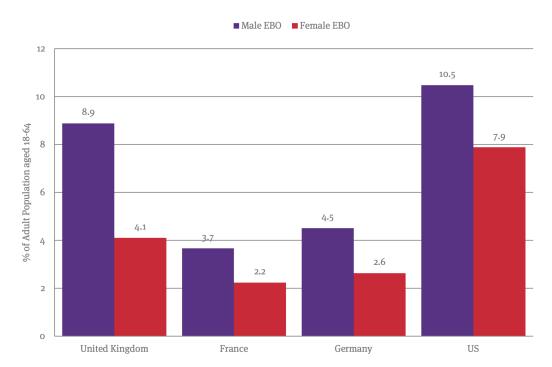


Figure 3.6: Established business ownership by gender in the UK, France, Germany and the US, 2022 (Source: GEM APS 2022)

The trend in female TEA rates in the selected countries over 20 years is shown in Figure 3.7. The TEA rate increased in the US and Germany between 2020 and 2022. France also saw an increase from its previous measure in 2018. There was no change in the female TEA rate in the UK between 2021 and 2022. 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 early-stage entrepreneurial activity is at its highest since 2002.

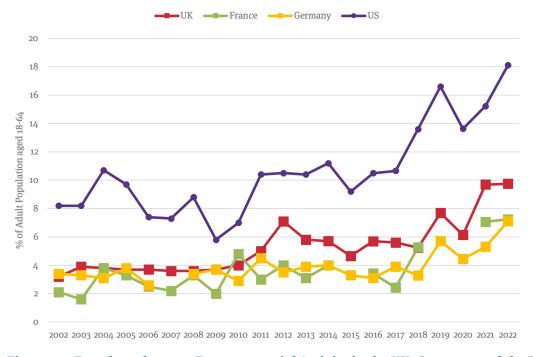


Figure 3.7: Female early-stage Entrepreneurial Activity in the UK, Germany and the US, 2002-2022 (Source: GEM APS 2002-2022)

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 2022. Together, these measures allow us to assess the degree of entrepreneurial dynamism and stability across the UK's constituent political jurisdictions.

When looking at nascent entrepreneurial activity, Scotland, Wales and Northern Ireland all had a fall in rates by 1-2 percentage points when compared with 2021. Scotland and Wales had a statistically significant lower rate of nascent entrepreneurial activity than England/UK. Similarly, TEA also was significantly lower in Scotland and Wales compared to England/UK; differences in estimated rates for Northern Ireland as compared to other home nations are within the margin of error. In the UK, the proportion of the adult population intending to start a business remained the same at 18.5% in 2022 after a significant rise from 16.2% in 2020.

Across the home nations significant differences in rates were found in new business ownership, whereby the rate in Wales (2.7%) was significantly lower than in England/UK (4.4%). There were no significant differences in Established Business Ownership between any of the home nations.

	I expect to start a business in the next 3 years	Nascent Entrepreneurial Activity rate (paying wages for 3 months or less)	New Business Owner- manager rate (4-42 months)	Nascent + New business owner-manager rate	Established Business Owners (>42 months)	Business closure rate (Business closed in the last 12 months that has not continued)	Proxy early-stage business survival rate	Proxy business churn rate
	(FUT)	(NEA)	(NBO)	(ТЕА)	(EBO)	(BC)	(EBO/ TEA)	BC/ (NBO +EBO)
England	18.9	7.5	4.4	11.5	6.8	4.4	0.6	0.4
Wales	15.7	5.2	2.7	7.8	5 . 6	4.5	0.7	0.5
Scotland	16.0	5.2	4.0	8.8	5.4	3.0	0.6	0.3
Northern Ireland	18.1	5.9	2.9	8.7	5.0	4.1	0.6	0.5
UK	18.5	7.1	4.3	11.0	6.6	4.3	0.6	0.4

Table 3.2: Measures of Entrepreneurial Intention and Activity in the UK Home Nations, 2022 (Source: GEM APS 2022)

Figure 3.8 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 2022 the rates, especially in Wales, all dipped after reaching record levels in 2021, although the rate of just under 8% in the latter still remains relatively high when looking over the last 20 years – matched only by 8.1% in 2011 just after the GFC.

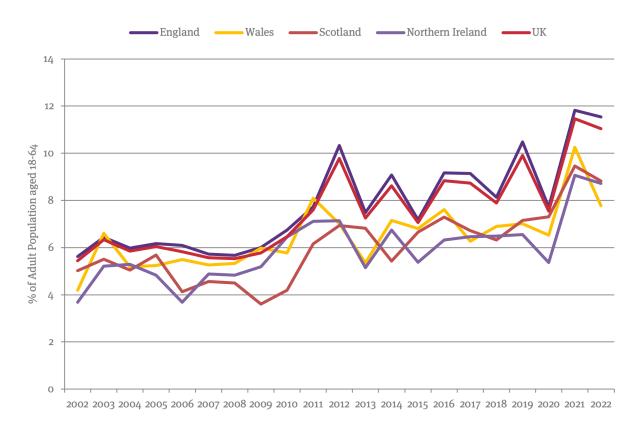


Figure 3.8: Total early-stage Entrepreneurial Activity in the UK Home Nations, 2002-2022 (Source: GEM UK APS 2002-2022).

TEA rates may be expected to vary based on the extent of deprivation in an area and the differing start-up opportunities available⁵. Figure 3.9 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 2022. The highest TEA rate was observed in the 5th quintile in England at 12.3%. In a reverse on the situation observed in 2021 it was the most deprived areas in Northern Ireland that had the highest TEA level (11.3%) relative to the other quintiles, although the least deprived areas had the second highest TEA rate (10.7%). In England a similar pattern was observed with the most and least deprived areas having the highest TEA rates. However, there were no significant differences between the home nations or between each quintile in each home nation and as a result these small differences are only nominal.

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.

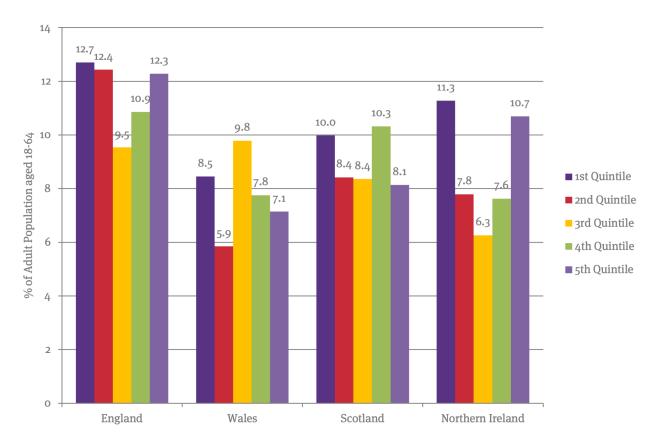


Figure 3.9: Total Entrepreneurial Activity in the UK Home Nations by Index of Multiple Deprivation 2022 (Source: GEM UK APS 2022).

The female early-stage entrepreneurial activity rate in the UK in 2022 was 9.7% compared to 12.4% for males and exhibited almost no change since 2021 with the female rate identical and the male rate slightly down from 13.2%. The female rate was significantly lower than the male rate in the UK, but this was not the case in any of the four home nations (Figure 3.10). This is mostly due to smaller sample sizes at the home nation level resulting on wider margins of error in the estimates. There were also no significant differences in the male TEA rates across the home nations in 2022, but female rates in Wales (6.1%) and Scotland (7.2%) were significantly lower than England (10.3%).

The UK female to male TEA ratio of 78% in 2022 was higher than in 2021, where the ratio was 73%. The ratio in Wales was 64% a fall from the unusually high ratio of 92% observed in 2021. All ratios increased in the other home nations in 2022: Northern Ireland (71% up from 65%), Scotland (68% up from 47%) and England (80% up from 73%).

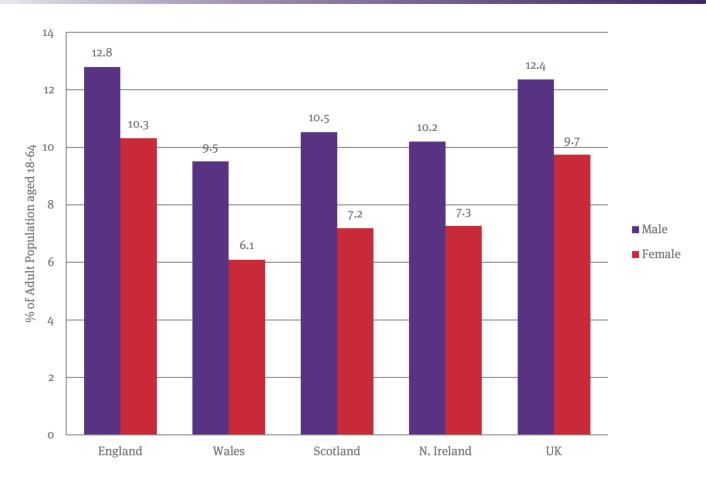


Figure 3.10: Male and Female Total early-stage Entrepreneurial Activity in the UK Home Nations, 2022 (Source: GEM UK APS 2022).

Combining data from the 2019-22 GEM UK annual surveys to analyse the female to male TEA rates in all the UK NUTS1 regions⁶ reveals considerable variation in the ratios (Figure 3.12). The South East has the highest ratio with 99 female entrepreneurs per 100 male entrepreneurs which is driven primarily by a lower than average male rate. The comparable ratio in 2021 was 99% for the same reason. Northern Ireland has the lowest ratio with just 60 female entrepreneurs per 100 male entrepreneurs driven by a relatively low female TEA rate of 5.7% for the 2019-22 period. Note, however, that this is yet a sharp increase on the 49% recorded for the 2018-2021 suggesting that the situation with female entrepreneurship in Northern Ireland is improving although the gap remains relatively large.

⁶ Combining data over several years provides more robust samples for disaggregation by gender at the regional level than the annual level data provides.

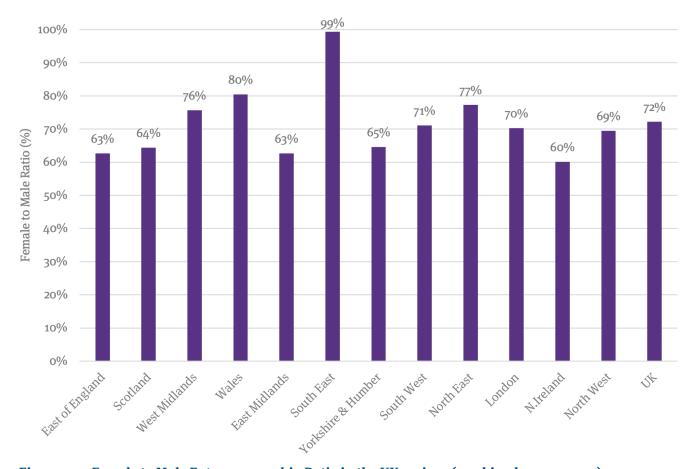


Figure 3.11: Female to Male Entrepreneurship Ratio in the UK regions (combined over 2019-22) (Source: GEM UK APS 2019-2022).

Since 2002, there has been a general upward trend in female entrepreneurship activity in the UK home nations (Figure 3.12). Despite the volatility observed since 2011, the rates have converged to around 75% of the male rate. However, there was a sharp increase in female TEA between 2020 and 2021, but, with the exception of Wales which saw a fall to its 2020 level, this has stabilised somewhat at these historical high levels. The last 20 years has seen a significant rise in the level to female early-stage entrepreneurship in all parts of the UK – from around 2-4% to between 6-10%, although, as earlier noted, this is yet to translate to similar growth in female EBO rates.

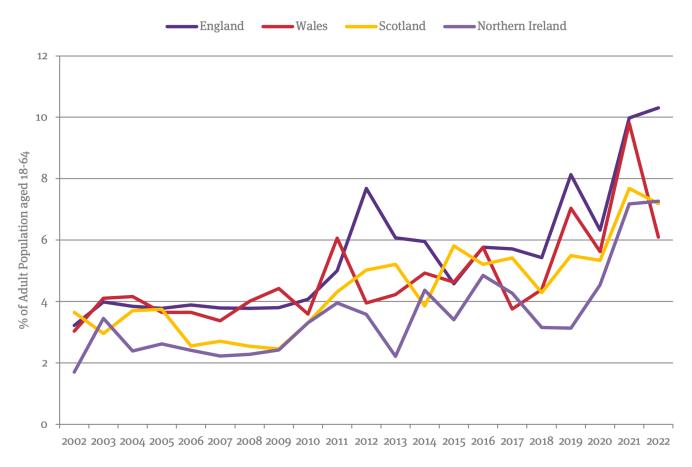


Figure 3.12: Female Total early-stage Entrepreneurial Activity in the UK Home Nations, 2002 to 2022 (Source: GEM UK APS 2002-2022)

The early-stage entrepreneurial activity rates of different age groups across the home nations are shown in Figure 3.13. The 45-54 age group was significantly lower in Wales and Northern Ireland when compared with England at 4.8% and 4.7%, respectively compared to 10.4%. There were no other statistical differences between each age group in each home nation. In England individuals under the age of 35 years had a significantly higher rate than those over the aged 45 years and over.

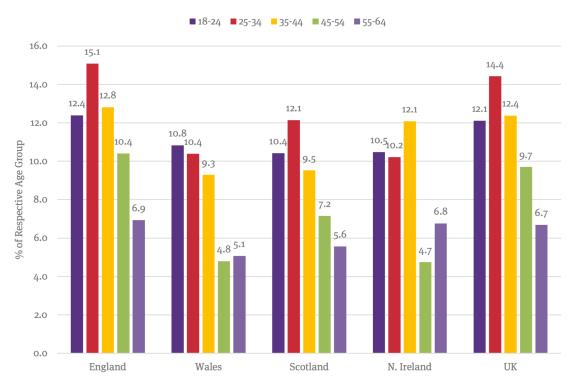


Figure 3.13: Total early-stage Entrepreneurial Activity in the UK Home Nations by Age Group, 2022 (Source: GEM UK APS 2022)

Figure 3.14 shows the trend in TEA rates for 18-29 year olds from 2002 to 2022. Only England saw a slight increase in TEA from 13.4% in 2021 to 13.5% in 2022. All other home nations saw a decrease from the previous year. The most significant decrease was in Wales where TEA dropped from 16.3% to 10.1%.

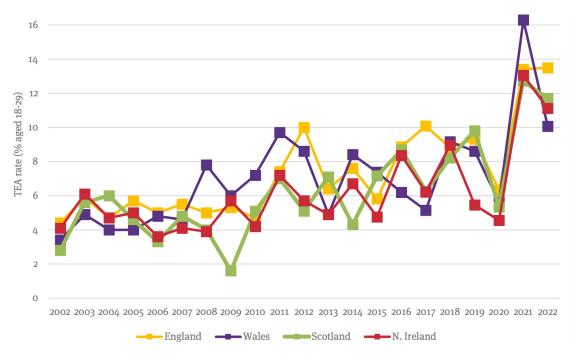


Figure 3.14: Trend in Total early-stage Youth Entrepreneurial Activity in the UK Home Nations (18 to 29 year olds) 2002-2022 (Source: GEM UK APS 2002-2022)

3.4 Entrepreneurial Activity by Ethnicity and Resident Status

Following previous trends over many years, the TEA rate of the white ethnic population in the UK in 2022 was significantly lower than that of the non-white population, at 11% compared to 18.7% respectively (Figure 3.15). The TEA rate for both the white and non-white ethnic group was broadly the same in 2022 as in 2021.

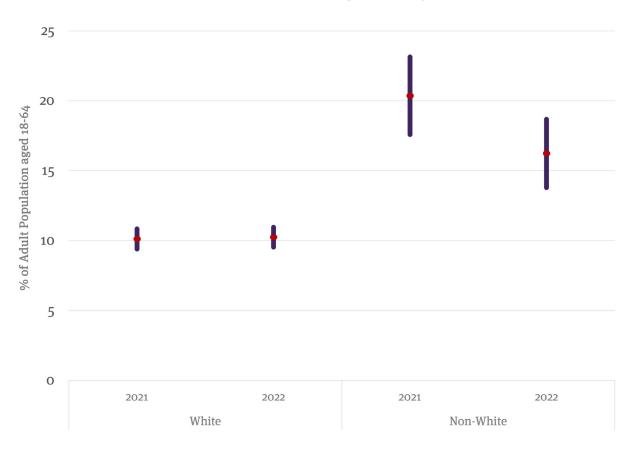


Figure 3.15: Total early-stage Entrepreneurial Activity Rate by White and Non-White Ethnic Status 2021-2022 (Source: GEM UK APS 2021, 2022)

Entrepreneurial activity by migrant status is shown Figure 3.16. In 2022 immigrant TEA (13.7%), although slightly lower in 2022, was still significantly higher than the rate for life-long UK residents (8.7%) but not significantly different from UK regional migrants (13%). When comparing with 2021, life-long UK residents saw a significant fall in TEA. Immigrant and non-white ethnic populations continue to be the most entrepreneurial groups in the UK.

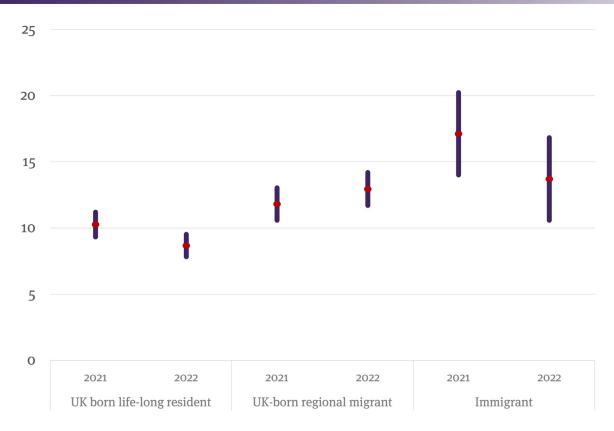


Figure 3.16: Total early-stage Entrepreneurial Activity Rate by Migrant Status 2021-22 (Source: GEM UK APS 2021-22)

Another perspective on these migrant status data is to look at those who were UK-born but have lived abroad for some period. Figure 3.17 shows that living a broad significantly increases your likelihood of becoming an early-stage entrepreneur. Although we have seen that regional migration in the UK increases the likelihood of an individual born in the UK to be engaged in early-stage entrepreneurial activity, this is significantly increased if they have spent a period of time living and/or working abroad. Being exposed to different cultures and societies would appear to enhance the ability to identify new business opportunities and exploit them. More importantly, they are just as likely to be setting up new ventures as immigrants as the differences in TEA rates are not statistically significant (17.5% compared to 13.7% respectively).

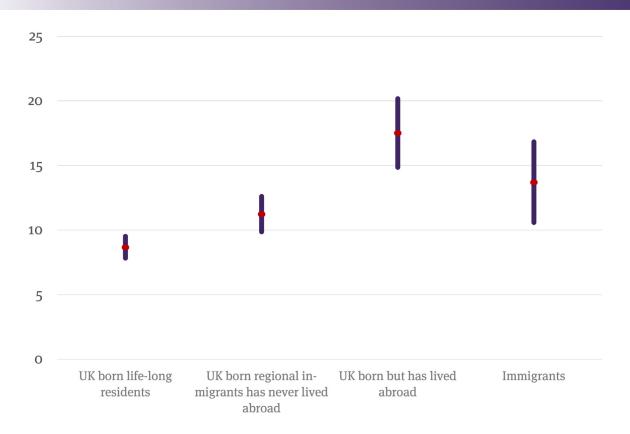


Figure 3.17: Total early-stage Entrepreneurial Activity Rate by UK Birth, Living Abroad and Migrant Status 2022 (Source: GEM UK APS 2022)

4 Entrepreneurial aspiration, ambition and funding

4.1 Introduction

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. Of even greater importance for the UK economy in the post EU-exit period is the desire for new and established businesses to start or increase the intensity of their export activity. The complex nature of the contribution of firms of different age and size to job creation in the UK has been highlighted in recent research.

4.2 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 activity.

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 4.1 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 slightly higher rate of 67% when compared with females at 58%. In contrast, among those who stated, "to earn a living because jobs are scarce", females had a significantly higher rate of 71% compared with 58% of males. There was very little change in these findings since the 2021 survey with only small percentage changes. The two significant differences by gender were also present in 2021.

⁷ 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.

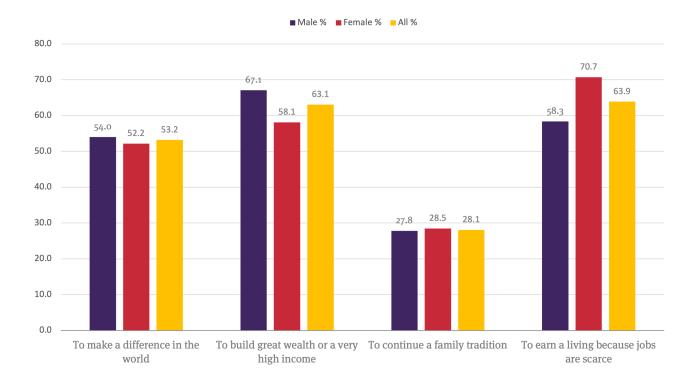


Figure 4.1: Motivations for starting a business in the UK by gender 2022 (percentage of TEA entrepreneurs agreeing somewhat or strongly with the motive) (Source: GEM UK APS 2022))

4.3 High Impact Entrepreneurs

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 years. 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.

⁸ 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.

(% of TEA or EBO entrepreneurs)	More than ten j	xpectation: obs and growth an 50%	High or Medium tech sectors		More than 25%	rting: % of customers ne country
	TEA	ЕВО	TEA EBO		TEA	ЕВО
UK	13.2	7.3	5.7	5.5	19.3	21.6
France	23.3	4.2	9.7	11.7	13.6	11.1
Germany	7.1	1.6	3.0	6.8	22.0	20.6
US	19.6	6.8	5.5	6.6	16.5	11.7

Table 4.1: Measures of entrepreneurial aspiration in the UK, Germany, France and the US, 2022 (Source: GEM Global APS 2022)

The results show considerable variation in the entrepreneurial aspiration metrics across the selected countries, and between early-stage and established business owners. Just 13.2% 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 7.3%. Both the US and France experienced an increase in this rate from 3.9% and 2.5% in 2021 to 6.8% and 4.2%, respectively, while Germany saw a drop from 4.0% to 1.6%.

In 2022, the UK has a similar share to the US of TEA and established firms in the high or medium tech sectors at 5.7% and 5.5%, respectively. This is, however, a deterioration compared to 2021 (8.7% and 14.8%) when the UK showed the highest rates compared to the US, France and Germany. The UK also experienced a drop in the rate of exporters for TEA and established firms: from 23.3% and 27.2% to 19.3% and 21.6% respectively. Despite this decline, the UK still has the highest exporters rate among EBO but shows lower rate than Germany in regard to exporting early stage entrepreneurs.

Table 4.2 shows new potential impact variables that were added to the 2019 survey to replace the previous "new product to market" variables9. The first set of results show the propensity of early-stage entrepreneurs and established business owner-managers with potential national impact. Just 2% or less of UK, French and German early-stage entrepreneurs and nearly 4% of the US comprised TEA entrepreneurs with national impact in 2022. The percentages of established business owner-managers whose businesses had potential national impact were lower in the UK (0.9%) compared to the US (1.5%) and slightly higher than in France and Germany (0.3%).

When looking at international impact, there was very little variation between countries for established business owner-managers, from 0.1% in the UK to 0.6% in the US. In the US, 1.7% of early-stage entrepreneurs stated potential international impact compared with 0.4/0.3% of entrepreneurs in the UK and Germany, and 0.9% in France.

	National i	mpact	International Impact				
	At least national scope fo national scope for new pr		At least international scope for market and at leas international scope for new product or new process				
	TEA (%) EB (%)		TEA (%)	EB (%)			
UK	1.6	0.9	0.4	0.1			
France	2.0	0.3	0.9	0.05			
Germany	1.7	0.3	0.3	0.05			
US	3.8	1.5	1.7	0.6			

Table 4.2: Measures of entrepreneurial potential impact rates in the UK, France, Germany and US, 2022 (Source: GEM Global APS 2022)

⁹ 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. The second measure takes the scope and novelty to an international level.

The trend in the relative frequency of high job expectation TEA entrepreneurs for the UK, France, Germany, and the US, is shown in Figure 4.2. It uses a three-year rolling average 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, increased to just over 20% in the 2019-21 period, and dropped to historically lowest 14.6% in 2020-22. The US rate also dropped from its 2017-19 peak. In contrast, the German rate increased to its historically highest level 23.9% in 2020-22, despite the dramatic drop in 2021 and 2022. The gap between the UK and US rates has nearly doubled: from only 4 percentage points in 2019-2021 to near 8% in 2020-2022.

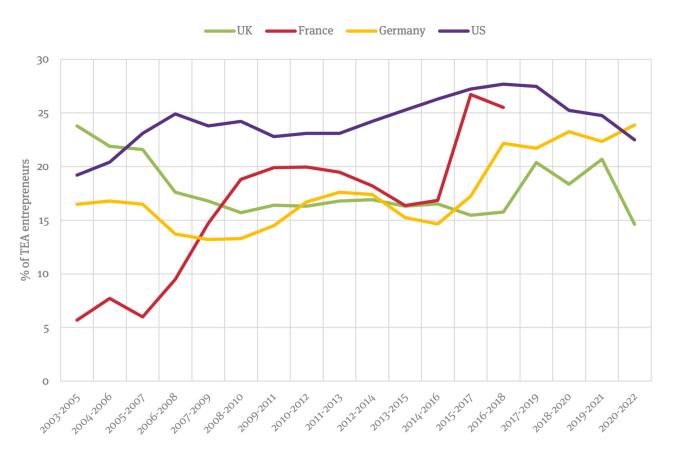


Figure 4.2: Relative frequency of high job expectation early-stage entrepreneurs in the UK, France, Germany and the US, three-year rolling averages, 2003-2005 to 2020-2022

(Source: GEM Global APS 2003-2022)

The trend in relative frequency of high job expectation among established business owner-managers is shown in Figure 4.3 using the same method as for 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 France, downward trend continued until 2011-2013. In contrast to early-stage entrepreneurs all countries experienced an increase in established business high expectation rates in 2019-21. The UK, US and Germany appeared to be converging and attained a peak of around 9% in 2019-21. In 2020-2022, while the UK and US rates are still close, the German rate experienced a dramatic drop.

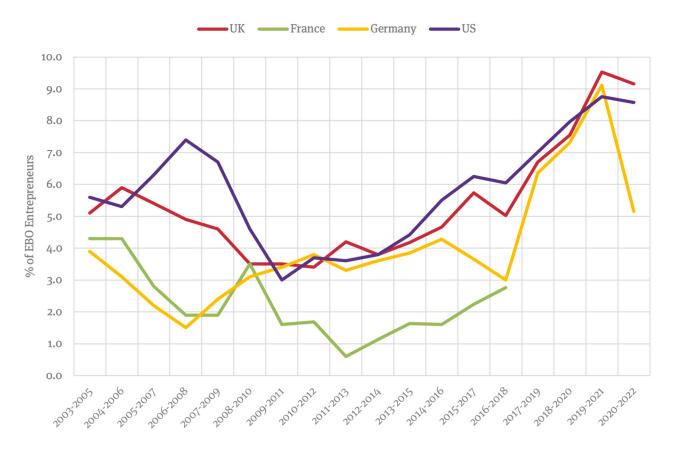


Figure 4.3: Relative frequency of high job expectation among established business owner-managers in the UK, France, Germany and the US, three-year rolling averages, 2003-2005 to 2020-2022 (Source: GEM APS 2003-2022)

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. Nearly one in two early-stage entrepreneurs and almost three in five established business owners are not engaged in any high value activities in the UK in 2022. This is a deterioration compared to 2021.

Just over one-third of early-stage entrepreneurs undertake one of these activities, with a lower proportion of established business owners (28%). The number of both TEA entrepreneurs and established business owners engaged in two or more activities decreased in 2022 to 13.6/12.2% respectively, after an uplift in 2021. In 2022, new young firms are slightly more ambitious and innovative than their incumbent counterparts.

High Value Activities	(% of TEA or EBO entrepreneurs)								
(high job expectation; new product markets;		TEA		EBO					
exporting)	2020	2021	2022	2020	2021	2022			
None of these activities	48.6	43.5	47.2	59.3	46.4	57.5			
1 of these activities	34.8	36.8	36.9	23.6	32.3	27.9			
2 of these activities	13.1	17.6	13.6	15.4	17.4	12.2			
3 of these activities	3.4	2.2	2.3	1.7	3.9	2.4			
Total	100	100	100.0	100	100	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), 2022 (Source: GEM APS 2022)

4.4 Entrepreneurship and Social and Environmental impacts

As discussed in the previous chapter, more than half of early-stage businesses in the UK are motivated to make a difference in the world. This is confirmed by new questions introduced in 2021 and 2022, asking entrepreneurs whether they consider social and environmental implications of business decisions, and whether they have taken steps to maximise their social and minimise environmental impact.

The left-hand side of Figure 4.4 shows that a majority of UK businesses care about the social impact of their business with new businesses being more likely to consider social implications when making decisions about the future of business compared to established businesses: 68.6% of TEA entrepreneurs compared to 55.5% of established business - the difference is statistically significant.

The right-hand side of Figure 4.4 also shows that a higher proportion of early-stage entrepreneurs (50.0%) has also taken active steps to maximise business social impact compared to established businesses (39.6%). Figure 4.4 also provides an insight into intentionaction gap: a larger proportion of both early stage and established businesses would consider implications compared to a smaller proportion taking active steps to maximise impact.

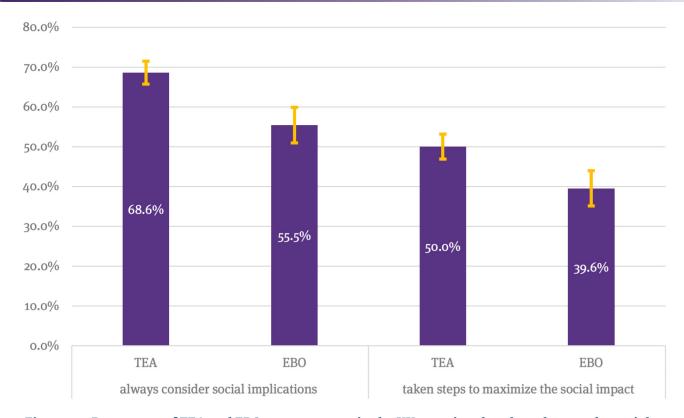


Figure 4.4 Percentage of TEA and EBO entrepreneurs in the UK agreeing that they always take social implications of business decisions into account and taking steps to maximise the social impact (Source: GEM APS 2022)

Figure 4.5 shows that a substantial proportion of UK entrepreneurs also consider environmental implications and take actions to minimise business environmental impact. Again, new firms are more likely to consider environmental consequences of business decisions (68.7% of TEA entrepreneurs) compared to established businesses (57.1% of EBO entrepreneurs).

In contrast, there is no statistically significant difference between TEA and EBO entrepreneurs when it comes to taking actions to minimise environmental impact. Also, the intention-action gap is much smaller for established businesses compared to early-stage entrepreneurs. This may be explained by the cost of investment necessary to undertake environmental practices that have been shown to be one of the major barriers to adoption.

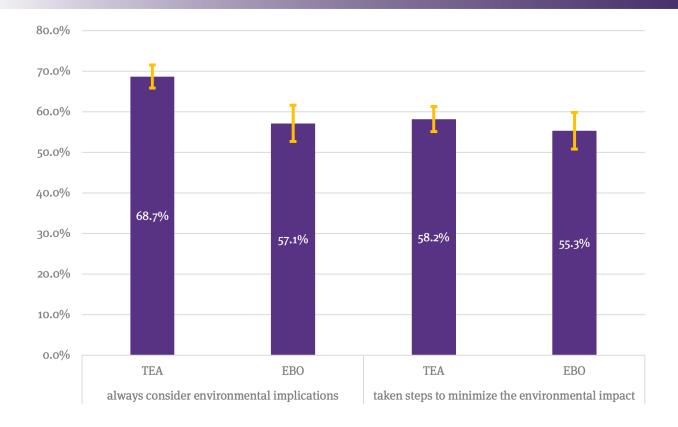


Figure 4.5 Percentage of TEA and EBO entrepreneurs in the UK agreeing that they always take environmental implications of business decisions into account and taking steps to minimise the environmental impact (Source: GEM APS2022)

4.5 Anticipated versus Actual Sources of Funding for Start-ups

Funding remains a major obstacle for many start-ups in the UK. Since 2006 (excluding 2021), GEM has tracked the mix of funds that nascent entrepreneurs expect to use. Table 4.4 shows these expected funding sources over 2018-2022. The results suggest that around 10% required no funding, which is an increase from 2020 when only 3.7% stated no funding was needed. Around 49% stated that they will fund it themselves, a slight increase from 2020 when 47% said they will self-fund, but less than in 2018 where 53% stated this.

Those that obtained funding from close family members, other relatives and/or friends and neighbours and crowdfunding decreased in 2022 when compared with 2020 but there was an increase in expected funding from banks and government programmes or grants. This could be an implication from COVID-19 support the previous year when individuals were more able to get required capital from government institutions.

Table 4.5 shows the level of investment from individuals in other people's new businesses in the last three years.

Type of funding expected	2018	2019	2020	2022	
No funding needed	8.4	5.0	3.7	10.0	
All funded by entrepreneur	53.0	41.0	46.9	48.8	
None funded by entrepreneur	2.1	2.9	0.6	0.3	
Close family member (spouse, parent, sibling)	16.7	27.5	27.3	26.2	
Other relatives, kin or blood relations	7.5	3.7	11.3	9.3	
Employer or work colleagues	5.1	8.4	7.7	8.2	
Private investor or venture capital	10.4	14.7	14.6	9.9	
Friends or neighbours	3.8	3.8	9.1	8.9	
Banks or other financial institutions	15.1	22.5	17.8	23.6	
Government programmes, donations or grants	11.6	13.9	17.5	17.9	
Online crowdfunding	5.8	6.5	13.3	7.2	
Any other source	6.2	5.5	10.2	8.9	

Table 4.4: Percentage of nascent entrepreneurs expecting funding from different sources 2018-2022 (Source: GEM UK APS 2018-2022)

The informal investment rate increased to 7% in 2022 from 2.6% a decade earlier. Investment into companies owned by close family was the most common investment choice, at 36.4%, but this has been dropping from its peak in 2012 when it was 57.5%. Interestingly, those investing in other relative's investments that are not close family relatives has increased from 10.5% in 2021 to 21.6% in 2022. Investing in a stranger's business increased slightly from 12.4% in 2021 to 13% in 2022, while all other investments saw a decrease, particularly with friends or neighbours which fell by 10 percentage points to 18.3%.

Informal investment rate	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2022
% aged 18-64 who have invested in someone else's new business in the last 3 years	2.9	2.4	2.6	2.1	1.9	2.3	3.2	2.9	2.8	5.0	6.6	7.0
Relationship of latest investee (% of latest investments)												
Close family member (spouse, parent, sibling)	37.0	50.2	57.5	46.8	40.3	38.0	37-3	43.4	36.8	37.3	33.3	36.4
Other relative, kin or blood relations	7.5	6.2	2.2	6.6	11.1	0.4	2.1	1.4	2.8	2.1	10.5	21.6
Work colleague	2.2	7.4	8.9	3.9	5.1	0.5	4.0	6.7	8.0	13.4	13.6	9.5
Friend or neighbour	48.5	28.4	23.4	38.7	25.5	39.2	38.4	28.0	29.6	27.9	28.2	18.3
A stranger with a good business idea	4.5	7.9	4.1	4.0	17.9	16.3	15.8	15.6	22.8	13.5	12.4	13.0
Other	0.4	0.0	3.8	0.0	0.1	5.7	2.4	4.9	0.0	5.8	2.1	1.2

Table 4.5: Percentage of individuals aged 18-64 who have invested in someone else's new business in the last 3 years, and the nature of relationships to the latest investee, 2010 to 2022 (Source: GEM APS 2010 - 2022)

5 The Context for entrepreneurship

5.1. Introduction

The focus so far has been on the individual decision to start a new venture, as well as on attitudes and motivations which may drive this decision. What about the context in which this decision is made? The context, or entrepreneurial environment, which encompasses a wide range of economic, political, institutional, financial and social conditions may influence individual decision to start a business. 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, it can also reflect government priorities and spending.

- **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** Policies promote and support start-ups
- **B2. Government Policy: Taxes and Bureaucracy**New businesses are not over-burdened?
- **C. Government Entrepreneurial Programs**Quality support programs are widely available
- **D1. Entrepreneurial Education at School** Schools introduce entrepreneurial ideas
- **D2. Entrepreneurial Education Post-School**Colleges offer courses in how to start a business

- **E.** Research and Development Transfers
 Research is easily transferred into new businesses
- **F.** Commercial and Professional Infrastructure Quality services are available and affordable
- **G1. Ease of Entry: Market Dynamics**Markets are free, open and growing
- **G2. Ease of Entry: Burdens and Regulation**Regulations encourage not restrict entry
- H. Physical Infrastructure Good quality, available and affordable
- Social and Cultural Norms
 Encourage and celebrate entrepreneurship

Table 5.1: National Entrepreneurship Framework Conditions (EFCs)

(Source: GEM (Global Entrepreneurship Monitor) (2023), p. 106)

GEM created a specific tool to assess an economy's entrepreneurial ecosystem against nine Entrepreneurship Framework Conditions (EFCs). These are based on more than twenty years of research and experience. Each condition is multidimensional and is not directly observed, i.e., 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 ecosystem 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. Each of the nine framework conditions is derived from the responses

of the experts to 5-8 questions and calculated by the application of a Principal Component Analysis. Four of the EFCs (Entrepreneurial finance¹², Government policy, Entrepreneurship education and Ease of entry) were further split into two subsets bringing the overall number of EFCs to thirteen¹³ (Table 6.1).

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)¹⁴ in 2018. It is a composite index which represents the arithmetic average of EFCs as set out in Table 5.1.

¹¹ GEM (Global Entrepreneurship Monitor) (2023). Global Entrepreneurship Monitor 2022/2023 Global Report: Adapting to a "New Normal". London: GEM.

¹² 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.

 $^{^{13}}$ Each of the thirteen blocks is assessed to satisfy internal consistency and reliability conditions.

¹⁴ See, Bosma et al. (2020) for details.

5.2. EFCs and NECI in the UK

The scores representing each framework condition are evaluated on a scale of 0 to 10. The midpoint 5 may be seen as a threshold: EFCs taking value below 5.0 are evaluated by the experts to be an inadequate or insufficient condition to support entrepreneurial activity and EFCs taking value 5.0 and above are regarded as adequate still allowing differences in magnitude. In 2022, most of the EFCs in the UK occupy the middle ground, taking values between 4 and 6, with only five EFCs in thirteen scoring 5.0 and more.

Figure 5.1 presents a more detailed picture by reporting the values and 95% confidence intervals for each of the thirteen pillars describing the entrepreneurial context. Among these pillars, only one has value statistically significantly higher than 5 (out of 10) meaning that, according to the national experts surveyed, commercial and professional infrastructure (5.68) are in sufficient state to support entrepreneurial activity. On the contrary, four conditions – R&D transfer (4.28), easiness to get financing for entrepreneurs (4.05), government policies regarding business support (3.94), and entrepreneurial education at school age (3.24) – may be considered insufficient with 95% of confidence meaning that these are areas that need significant improvement.

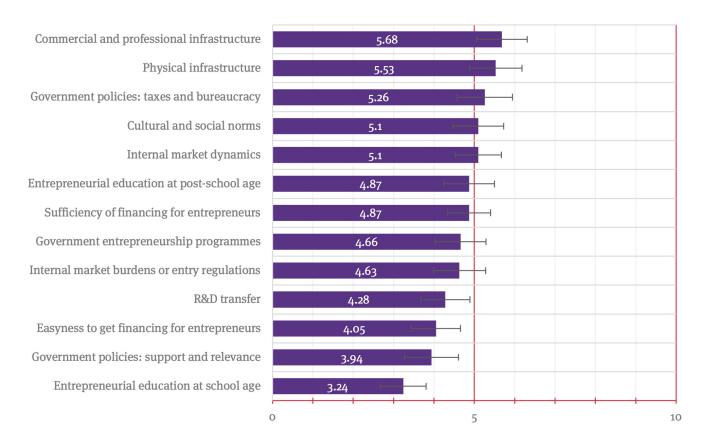


Figure 5.1: Entrepreneurial Framework Conditions in the UK in 2022

(Source: GEM UK National Expert Survey 2022)

Note: EFCs scale: o = very inadequate, insufficient status; 1o = very adequate, sufficient status; black bars represent the 95% confidence intervals

Although the EFCs scores are based on a rigorous methodology, the small sample size is associated with a wider margin of error which makes it difficult to compare EFCs taking values close to 5 with sufficient confidence. Thus, while four further pillars, physical infrastructure (5.53), government policies in relation to taxes and bureaucracy (5.26), cultural and social norms (5.1), and internal market dynamics (5.1), scored above five, followed closely by entrepreneurial education at post-school age (4.87), sufficiency of financing for entrepreneurs (4.87), government entrepreneurship programmes (4.66), and internal market burdens (4.63), these figures are not significantly different from the threshold of 5.

Still, compared to 2021, 9 out of 13 EFCs were downgraded with the remaining four improving only marginally. For the first time in five years, sufficiency of financing for entrepreneurs was rated below 5, i.e., as insufficient. Compared to 2021, easiness to get financing has slid down from 4.36 to 4.05, and government support policies from 4.23 to 3.94. A considerable drop concerned the state of physical infrastructure which declined from 6.53 in 2021 to 5.53 in 2022. Experts also downgraded internal market burdens or entry regulations, which was one of the strongest framework conditions compared to other countries in the past years, so that in 2022 it is below the threshold of 5.0. On a more positive note, experts see an improvement in Government entrepreneurship programmes, which is probably partially driven by the deployment of Help to Grow programmes which was mentioned by experts on several occasions in their "free text" responses. However, there is still much to be done as the score 4.66 is still below sufficiency level. Internal market dynamics, after a slide down in 2021, is again just above the sufficiency threshold (5.1). Entrepreneurial education and R&D transfer remained broadly in line with 2021.

Figure 5.2 shows the dynamic of EFCs in the UK over the last five years, from 2018 to 2022. EFCs scores remain relatively stable over the period, with no evidence of long-term improvement. On the contrary, a worrying trend is that over the last three years where entrepreneurial finance, government policies in relation to support and relevance, physical infrastructure, and cultural and social norms appear to be progressively weakening (Figure 5.3). This is also reflected in the overall index of entrepreneurial context, NECI, which declined from 5.0 in 2020 to 4.7 in 2022 (Figure 5.2).

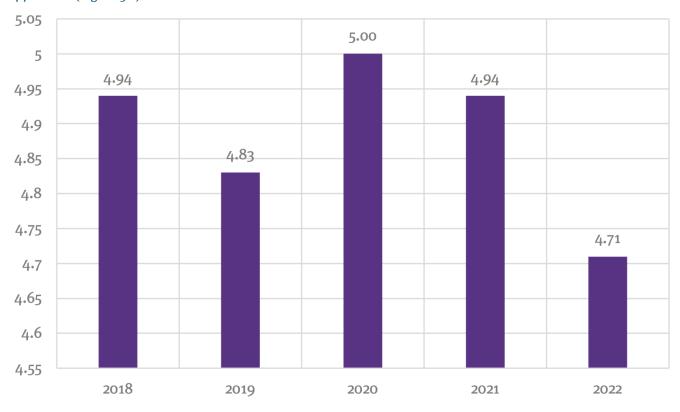


Figure 5.4a: EFCs in the UK and benchmark countries in 2022 (Source: GEM UK National Expert Surveys 2018- 2022)

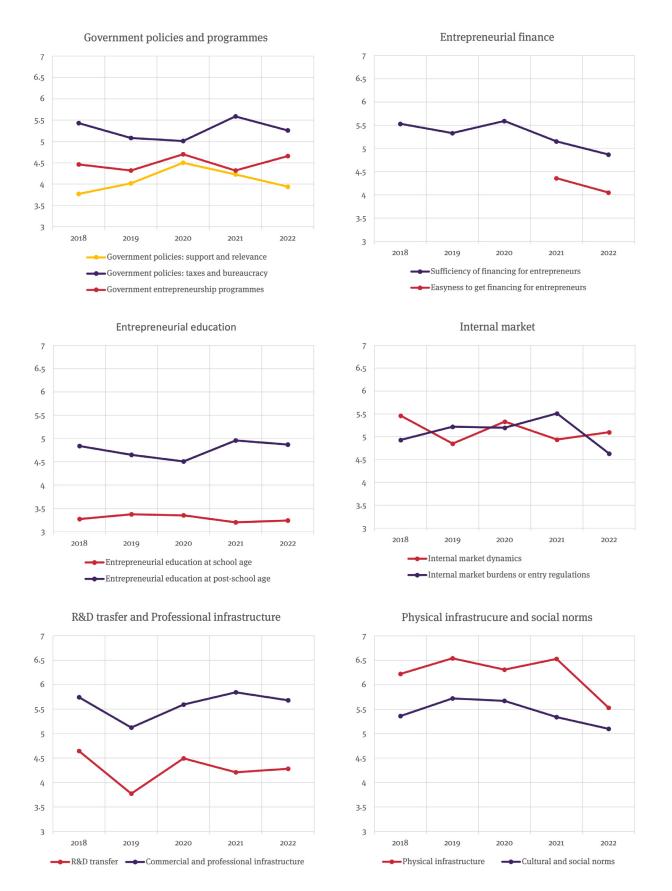


Figure 5.3: Dynamic of EFCs in 2018-2022 (Source: GEM UK National Expert Surveys 2018- 2022)

5.3. Comparison with Benchmark Countries

EFCs and NECI are based on experts' perceptions of the entrepreneurial conditions within a particular economy and at a particular moment. 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.

Typically, the UK framework conditions mirror relatively closely the US EFCs. In 2022, however, the picture is slightly different compared to previous years (Figure 5.4a). One dimension for which the US shows consistently higher scores than the UK is Cultural and social norms about support of new and growing firms. It is still the case in 2022 with the difference in scores being statistically significant. Entrepreneurial finance, physical and professional infrastructure, as well as internal market dynamics also scored lower in the UK than in the USA in 2022 although the difference is not statistically significant. For two pillars which were traditionally evaluated by the US experts higher than by their UK peers – entrepreneurial education at school and post-school age – the situation reversed in 2022. This is, however, due to the downgrading of the US scores rather than an improvement in UK scores. In previous years, the ease of market entry for new and growing firms and internal market burdens and regulations have traditionally been relatively strong framework conditions. However, these scored lower in the UK than in the US in 2022.

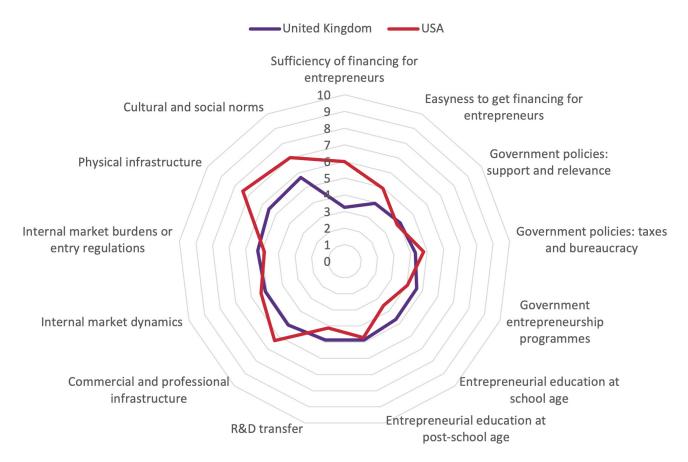


Figure 5.4a: EFCs in the UK and benchmark countries in 2022 (Source: GEM NES 2022)

Compared to France (Figure 5.4b) and Germany (Figure 5.4c), the UK framework conditions in 2022 were statistically significantly less favourable in terms of government entrepreneurship programmes (4.63 in the UK vs 5.88 in France and 6.6 in Germany), sufficiency and ease of getting financing for entrepreneurs, and physical infrastructure. Government policies for support to new and growing firms also received lower scores in the UK than in France and Germany, with difference compared to France being statistically significant. In contrast, in the UK social and cultural norms and entrepreneurial education at school-age scored statistically significantly higher than in both France and Germany despite the negative dynamic in the last years. The EFCs scores also indicate more favourable conditions in the UK than in France when it comes to internal market dynamics.

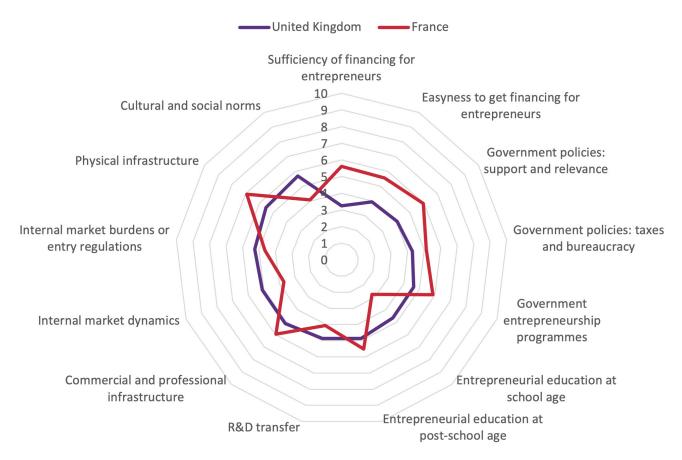


Figure 5.4b: EFCs in the UK and benchmark countries in 2022 (Source: GEM NES 2022))

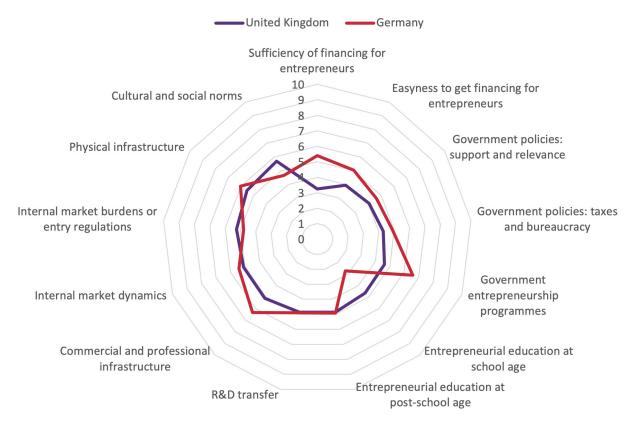


Figure 5.4c: EFCs in the UK and benchmark countries in 2022 (Source: GEM NES 2022)

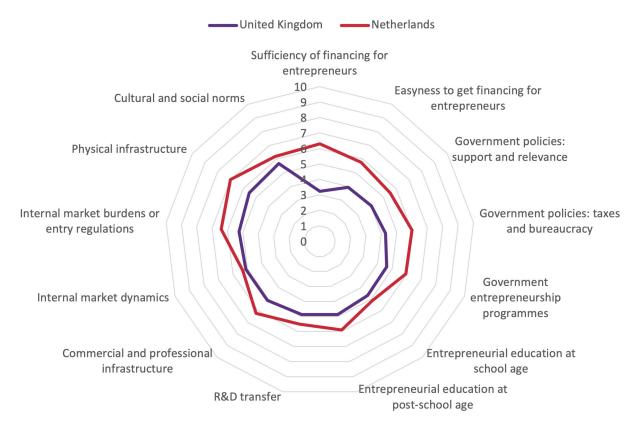


Figure 5.4d: EFCs in the UK and benchmark countries in 2022 (Source: GEM UK NES 2022, GEM Global NES 2022)

Compared to the Netherlands (Figure 5.4d), the country with the second highest NECI in the world in 2019, 2020 and 2021, and the highest NECI among European countries for the last few years (including in 2022), the UK had a similar score for internal market dynamics (5.1 vs 5.3). For all other entrepreneurial framework conditions, the Netherlands reported much higher scores. In 2022, the gap is particularly notable for sufficiency of financing for entrepreneurs (3.2 vs 6.3), and easiness to obtain entrepreneurial finance (3.9 vs 5.8), government policies in relation to support and relevance (4.05 vs 5.5), government policies related to taxes and regulation (4.3 vs 6), and government entrepreneurship programmes (4.6 vs 5.9). The differences in internal market burdens, commercial and professional and physical infrastructure are also statistically significant.

Spotlight: Support for Entrepreneurship in the Netherlands by Prof Niels Bosma

The Netherlands has seen consistent support for entrepreneurship in government policies since the early 1990s. Initially the focus was on stimulating individuals to start a business, as this was far from a popular choice in those days. Securing a permanent job was the norm and starting a business, let alone failing one, was not something to proudly share with others. From the 1990 onwards, barriers were removed, starting with abandoning a mandatory 'entrepreneurship skills certificate' and gradually further removing more red tape and stimulating competition. Since the mid 1990's, startup rates have consistently grown, as mirrored by the trend in the GEM TEA rate¹⁵. In 2012 the so-called flex-Ltd was introduced, enabling to setup a Ltd in a simpler form and without capital restrictions.

The TEA rate continued to grow, however a large part can be explained by the increase of self-employed who have no employees and also have no desire to hire employees. These are independent professionals whose activities would previously have been executed as an employee. The growth of this group also came with concerns, as a substantial share is not paying themselves decent salaries and are not insured in case of incapacitation. At the moment new initiatives are being introduced that aim to safeguard these independent professionals to accumulate pensions and sufficiently insure themselves.

In 2014, the policy focus moved to ambitious entrepreneurship and a few years later to enhancing the entrepreneurial ecosystems in order to facilitate scale-ups. This has led the government to focus on issues such as enabling startups to hire talented employees, enhancing the supply of (early) growth capital, facilitating knowledge transfer towards entrepreneurship and reinforcing international networks. Furthermore, the introduction of StartupDelta in 2015, which was transformed into Techleap.nl (connecting and empowering startups to grow and sustain a productive tech community) in 2019, has contributed to the state of the Dutch ecosystem as can be observed now¹⁶. Still, despite all efforts and the positive evaluation as witnessed for the GEM Expert Surveys, ambitious entrepreneurship is still lagging behind in some international comparisons¹⁷. Calls for further steps are paired with calls to shape the entrepreneurial ecosystem more towards entrepreneurial outcomes that are addressing pressing societal challenges¹⁸.

Currently, most gains that can still be made according to the Dutch GEM National Experts include public policy, followed by entrepreneurship in education and training and financing¹⁹. The public policy suggestions mentioned are very diverse, including: more tax incentives for risk-taking and investing in venture capital, policies focused on sustainability (e.g. in procurement and tendering), gender equality (such as better and affordable childcare), policy aimed at continuing existing businesses rather than of new businesses, consistent policy and clear legislation, simplification and lowering taxes, reducing regulatory burden, clear climate policy and relaxation of dismissal law. In the area of financing mainly aspects are mentioned that relate to access to and availability of different forms of financing, such as private capital, venture capital, funds for the very early stage, and the like.

- 15 Panteia (2022). Global Entrepreneurship Monitor Netherlands 2021. Zoetermeer: Panteia.
- 16 See for a recent evaluation: https://www.rijksoverheid.nl/documenten/rapporten/2023/04/18/evaluatie-startupdelta-en-techleap
- 17 See Techleap & UU (2021). Thinking Bigger: How ambitious is the Dutch entrepreneur?
- 18 Bosma (2022). Ondernemingsklimaat in Nederland: van kwantiteit naar kwaliteit. ESB 107 (4811S), 14 juli 2022.
- 19 Panteia (2022). Global Entrepreneurship Monitor Netherlands 2021. Zoetermeer: Panteia.

Overall, in 2022, the UK ranked 25th out of 51 countries on the general quality of national entrepreneurship context (Figure 5.5). The ranking is a slide down from 18th place in 2021, with the index score decreasing from 4.9 in 2021 to 4.7 in 2022. The UK's NECI score is slightly lower than in benchmark countries: France (5.06), Germany (5.1) and in the USA (5.16), and much lower than the Netherlands (5.94).

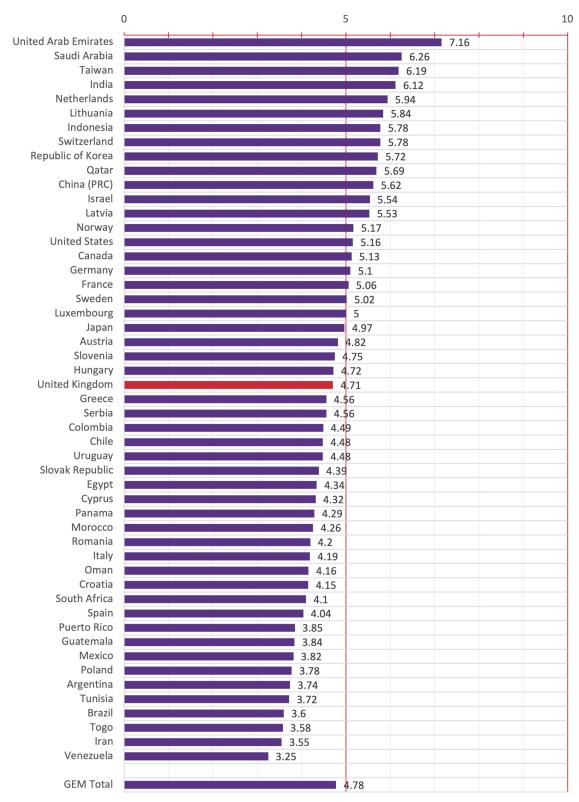


Figure 5.5: National Entrepreneurship Context Index (NECI) in 2022 (Source: GEM Global NES 2022)

5.4. COVID Recovery and SDGs

Additionally, in 2022 NES included blocks of special questions to evaluate the degree of recovery from the pandemic and level of advancement in pursuit of the United Nations Sustainable Development Goals (SDGs) (Table 5.2).

COR. Recovery to pre-pandemic levels of activity

firms recovered their activity and hiring to pre-pandemic levels, increased digital capabilities

SDGS. Social contribution and social responsibility firms prioritise social contribution and introduce social responsibility principles

SDGE. Equality, economic opportunities, and performance

same economic opportunities are available to minority groups, investors are satisfied with economic performances, firms see paying taxes as part of their social responsibility

SDGN. Firms' environmental practices

firms prioritise environmentally conscious practices and energy efficiency

SDGC. Cultural norms: sustainability

national culture encourage sustainability practices and celebrate SDGs within business sector

SDGG. Government policy: business sustainability

policies and regulations to support sustainability-focused start-ups and firms

Table 5.2: Special topics (Source: GEM NES UK 2022)

Figure 5.6 shows that UK experts judge the degree of recovery to pre-pandemic activity levels as satisfying with the score 5.57, above the threshold level. Although benchmark countries show higher scores for this construct, the differences compared to the UK's are not statistically significant.

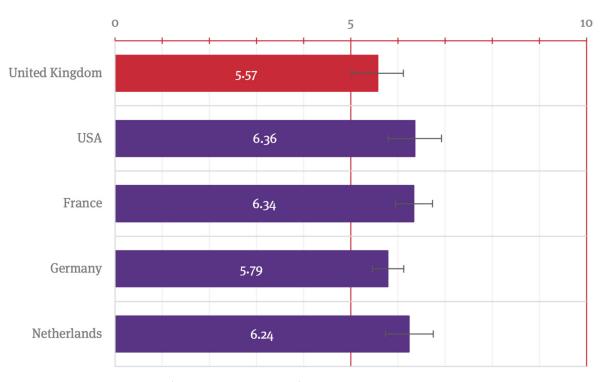


Figure 5.6: Covid recovery (Source: GEM NES 2022)

Regarding the pursuit of the UN's SDGs, experts are fairly positive with four out of five dimensions receiving scores higher than 5.0. Perceived social contribution and social responsibility of UK firms shows the highest score (5.8), followed by cultural norms for sustainability (5.6) and firms' environmental practices (5.5). Equality and perceived economic opportunities and performances for all businesses returned a score of 5.1. This is broadly in line with the scores in the benchmark countries (Figure 5.7), with only Germany showing a statistically higher score for cultural support for sustainability practices. One area which is still in the insufficient range is government policies and regulations to support sustainability-focused start-ups and firms through grants, special rights or tax cuts (4.1). The UK's score for this dimension is statistically significantly lower than that of France and the Netherlands.

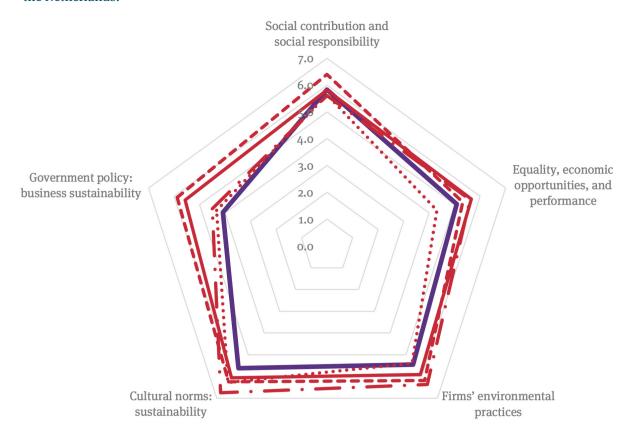


Figure 6.6: SDGs (Source: GEM NES 2022)

5.5. Recommendations

Experts were also asked to state one area that is fostering entrepreneurial activity in the UK. The responses varied with "a strong technological and science base" and R&D transfer being the most highly cited (24.2% of valid responses), followed by overall economic climate (12.1%), political, institutional and social context, as well as capacity for entrepreneurship and access to physical infrastructure (9.1%).

The areas for improvement, according to experts, are government policies (42.4% of valid expert responses highlight this area), education and training (18.2%) and financial support (15.2%). Interestingly, 6% of experts also suggest that an improvement in cultural and social norms to support entrepreneurship is also much needed. For the experts surveyed, this rated as highly as recommendations related to labour costs, access to market, and regulations.

Public policy recommendations mainly concern tax incentives, especially for start-ups. They include measures like corporation tax relief, lower corporation tax for smaller (low turnover) businesses, and appropriate fiscal tools to stimulate investment, through, for example, the revival of the super-deduction for investment in learning and development (Learning and development tax credit), but also better support for Innovate UK activities to further expand Knowledge Transfer Partnerships and EDGE programmes. Experts also highlight that a major shift in focus is needed towards better support to SMEs and solo-entrepreneurs, normalisation of the status of non-PAYE businesses, which are very much still perceived to be excluded from the attention of government policy. We saw only too clearly during the COVID pandemic when hundreds of thousands of the self-employed were excluded from financial support. In regard to business support measures, experts see a lot of potential in committing more resources to Growth Hubs and government-backed funding schemes. A call for a more consistent, stable, coordinated support ecosystem with a local perspective consistently comes up in policy recommendations over the last few years.

When it comes to government actions which positively affected entrepreneurship since the beginning of the pandemic, experts cited the furlough scheme, CIBL and Bounce Back Loan schemes, introduction of the Help to Grow programme, continued funding for the national Growth Hub network, and pro-active measures of Innovate UK. In sum, government-backed support to the enterprise sector during the pandemic is acknowledged. Experts also noted a number of government actions which were thought to have negatively affected entrepreneurial activity. Among the most cited were Brexit, both the decision itself and post-exit handling of the situation, as well as the consequences such as the loss of important labour force coming from the EU. According to the experts, other factors that had a negative effect on entrepreneurship in the UK include: the reduction of entrepreneur's tax relief; increase in national insurance; the inadequacy of measures to contain inflation, the cost of borrowing, and the rise in the cost of doing business; and lack of consistency and stability in government policy, with too many changes in Government in a short period of time.

6 Conclusion

The results from the GEM UK Adult Population Survey (APS) and National Expert Survey (NES) for 2022 provided a unique opportunity to lift the lid on a range of issues which lie at the heart of the entrepreneurial process in the UK.

Looking back to 2022, we can see some very positive indicators for the UK economy despite the range of challenging economic national and international pressures. Around 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.

Early-stage entrepreneurship remains at an historical high level (11%) and within that headline, so too is female early-stage entrepreneurial activity (9.7%). These increases are due to a rise in nascent entrepreneurship. In part, we associate these increases to the postponement of start-up decisions we identified in the 2020 survey.

Similar to previous years, immigrant TEA levels were significantly above those of UK born life-long residents in 2022 and 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.

However, there are some challenges that need to be addressed quite urgently. 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 is low and needs to be addressed. Nearly one in two early-stage entrepreneurs and almost three in five established business owners are not engaged in any high value activities in the UK in 2022. This is a deterioration compared to 2021.

Further, an examination of the Entrepreneurial Framework Conditions (EFC) that entrepreneurs face as they develop their businesses still show some challenges ahead. Overall, in 2022, the UK is ranked 25th out of 51 countries on the quality of entrepreneurship framework conditions. This has worsened from 18th in 2021, with the index score decreasing. Further, the UK's NECI score is slightly lower than in benchmark countries of France, Germany and in the USA (5.16), and much lower than the Netherlands, which leads the way in Europe.

Overall, this report has provided a range of indicators on the attitudes, activity and aspirations of individual entrepreneurs in the midst of some of the most challenging economic headwinds ever seen in the UK. The analysis has shown that entrepreneurial fundamentals remain relatively strong in the UK. However, a number of areas have taken notable knocks and are starting to show early trends that should be of concern to policy. Urgent interventions by a range of private and public sector stakeholders are therefore required to help strengthen the context and conditions for entrepreneurship, and in turn entrepreneurial activity, to fully harness the contributions entrepreneurship can make to the UK economy and society, nationally and in the regions.

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 2022, 10,173 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 and Aston University, Welsh 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 10,173 was distributed across 12 geographic areas within which representative subsamples of the population aged 18-80 were taken. These areas and the sample sizes are: South West: 587; South East: 913; East of England: 634; London: 844; West Midlands: 596; East Midlands: 487; Yorkshire & Humberside: 552; North East: 283; North West: 740; Wales: 1,513; Scotland: 2,020; Northern Ireland: 1,004.

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 2020. 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%. 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 online. 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 marked 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 subsamples 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 subsample areas.
- Government Official Region (GOR) weights that create representative samples at the GOR level from all subsamples 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).

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

²² https://www.ofcom.org.uk/__data/assets/pdf_file/0027/196407/online-nation-2020-report.pdf / accessed 21/06/21

