



Global
Entrepreneurship
Monitor



Global Entrepreneurship Monitor

United Kingdom 2019
Monitoring Report

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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.

Foreword

by Paul Thwaite NatWest CEO, Commercial Banking

NatWest is here to provide help and support to those who need it and as the UK's biggest bank for business, we understand the needs of entrepreneurs.

We recognise we are living, and working, in exceptional times. Every person, family and business has been affected by the ongoing coronavirus pandemic, and the impacts of lockdown have placed demands on organisations of every size, in every sector. We are very aware of the critical role we can play in supporting the extraordinary spirit of enterprise around the country, especially at times like these.

It is a privilege for NatWest to once again sponsor the annual Global Entrepreneurship Monitor (GEM), the most authoritative annual research into entrepreneurial activity and trends. While the global business landscape has changed since 2019, the report and the data within is full of insight as we consider the health of entrepreneurship following the events of this year.

The report highlights that the UK's entrepreneurial spirit continued to grow in 2019. It shows that entrepreneurial activity in the UK in 2019 was up from 7.9% to 9.9%. *

Following the Rose Review, it is also encouraging to see that in 2019 that activity for female entrepreneurs also grew from 5.2% to 7.7%; up from in 2019.

Support for entrepreneurs is at the core of NatWest's business banking offering. Through our Accelerator programme, we provide a fully funded proposition of bespoke coaching, mentoring, insight and access to the bank's supply chain, partners and network.

As well as this, Business Builder, our completely free digital tool launched this year to support entrepreneurs through a programme of online learning, community support and events, has proven hugely popular. Throughout 2020, Business Builder has supported more than 6,900 individuals through digital learning and over 7,000 through its online events, with over 4,500 online community members. The insight in the report has always helped to make sure that our programmes are specifically designed to meet the needs of entrepreneurs who want to grow and scale their business.

2020 has brought new and different challenges. As our 12 Accelerator hubs across the UK closed, we adapted to run the programme digitally, with one-to-one and group coaching, all events and seminars online. This has enabled us to continue providing bespoke support to more than 900 entrepreneurs in 2020. We have also delivered more than 800 digital events, with 34,000+ attendees. Since April 2018, our Accelerator businesses have created 2,200+ jobs, secured £223M million in investment and generated millions of pounds for their local economies.

We know that if entrepreneurs do well, the economy benefits, and our communities will be better placed to face the demands of the new challenges we are facing. Supporting entrepreneurs to start, scale and succeed remains a critical priority to support the sustainable growth of the UK economy beyond the impact of Covid 19.

** This is known as the TEA' rate (i.e. the sum of the nascent entrepreneurship rate and the new business owner-manager rate - without double counting).*

Executive Summary

Background

- The Global Entrepreneurship Monitor (GEM) research consortium measured rates of entrepreneurship across multiple phases in 50 economies in 2019, making it the world's most authoritative comparative study of entrepreneurial activity in the general adult population. In the UK in 2019, 6,787 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, Germany and the United States. It also compares the results across the four home nations of the UK.

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 2019 was 9.9%.
- The 2019 UK TEA rate of 9.9% was statistically higher than the rate in 2018 (7.9%) and exceeded the previous long-run rate of around 6% which prevailed until 2010. It is important to note, however, that this increase is largely in low job expectation entrepreneurial activity.
- The TEA rate of 9.9% in the UK is also statistically significantly higher than that of Germany (7.6%) and lower than that of the US (17.4%). The UK nascent entrepreneurship rate was significantly higher in 2019 (6.5%) than in 2018 (4.0%), while the new business owner-manager rate was lower but not significantly in 2019 (3.6%) than in 2018 (4.0%).
- TEA rates in 2019 were similar across the home nations of Wales (7.0%), Scotland (7.2%) and Northern Ireland (6.6%). The rate in England at 10.5% was significantly higher than Wales and Scotland.
- Employees can also be engaged in entrepreneurial activity on behalf of their employers; this is measured through the Entrepreneurial Employee Activity (EEA) Rate. In 2019 the UK's rate was 5.6%, which was the same as the 2018 rate (5.7%). Considering both TEA and EEA together provides a more comprehensive picture of entrepreneurial activity in a nation.

Entrepreneurial Activity Types

- In total, around 1 in 4 individuals of working age in the UK were engaged in some type of entrepreneurial activity or intended to start a business within the next three years. This is similar to 2018 and, again, higher than the historical trend.
 - 11% of working age adults expected to start a business within the next 3 years in the UK, which is lower than in Germany (12.5%) and the US (20.4%).
 - 6.5% of the adult population in the UK were actively trying to start a business (**nascent entrepreneurs**), compared with 5.3% in Germany and 11.8% in the US.
 - 3.6% of the working age adult population were owner-managers of a business that was 4 to 42 months old (**new business owner-managers**). This is lower than the US rate of 5.9% and slightly higher than the German rate of 2.6%.
 - 8.0% of the UK adult population owned and managed a business older than 42 months (**established business owner-managers**). This increased from 6.6% in 2018 and lay between the rates for Germany (5.2%) and US (10.6%).
 - 2.1% of working age people in the UK discontinued a business (either through closure or sale) in the past 12 months. Discontinuation rates of businesses were similar in the US (2.9%) and Germany (2.2%).
- All the entrepreneurial activity measures in the UK, except intention to start a business, nascent entrepreneurial activity and TEA, remained significantly unchanged from 2018.

Demographics

- In 2019 the male TEA rate stood at 12.1% and the female rate 7.7%; the female rate is statistically higher than the 2018 rate of 5.2%. The ratio of female to male early-stage entrepreneurship varies across the UK regions so care needs to be taken using the often repeated statement that ‘women are half as likely as men to be starting their own business in the UK.’ The UK female to male TEA ratio of 63% in 2019 is higher than in previous years.
- Those aged 25-34 in 2017-19 in the UK are significantly more likely to be involved in early-stage entrepreneurial activity than all other age groups. Only 4.5% of 55-64 year olds in the UK are involved in early-stage entrepreneurial activity while in the US it was three times higher at 13.4%.
- Similar to previous years, immigrant TEA levels were above that of UK born life-long residents. The TEA rate for immigrants was 10.2% in 2017-19 compared to a rate of 10.5% in 2016-2018. The rate for the life-long resident population in 2017-19 is 8.5% and the UK-born regional migrant rate is 8.9%. There are no statistically significant differences in the rates by resident status.

Attitudes and Aspirations

- Attitudes of non-entrepreneurial individuals to entrepreneurship remained relatively upbeat in 2019. Similar shares to those observed in 2018 felt they had the skills, knowledge and experience to start a business (47.5%) and the start-up opportunity perception also remained unchanged (39.1%).
- Around 77% of the non-entrepreneurial population believe that entrepreneurs have a high status in society, however, there is a 19-percentage point gap between that share and those that believe starting a business is a good career choice.
- Around 1 in 4 UK early-stage entrepreneurs have high job expectations, a statistically significant increase from 2018 where 1 in 6 had high job expectations. This rate is similar to that of the US (27.0%) and Germany (20.8%). The rate of established business owners with high job expectations in the UK (8.4%) is similar to the US (8.9%) but lower than in Germany (13.1%). The rate of established business owners with high job expectations also increased in each country when compared with 2018.

Entrepreneurial Framework Conditions

- The Entrepreneurial Framework Conditions (EFC) that entrepreneurs face as they develop their businesses were examined using the GEM UK National Expert Survey (NES). Among twelve EFCs, six have values superior to five (out of ten) meaning that, according to experts, these framework conditions may be considered as sufficient although subject to improvement. In contrast, six other EFCs were evaluated as insufficient. These are internal market dynamics; government policies to support entrepreneurship; government entrepreneurship programmes; entrepreneurial education at school and post-school age; and R&D transfer.
- In total, the National Entrepreneurship Context Index or NECI, which combines in one figure weighted averages of the twelve EFCs, was 4.83 (out of 10) in the UK in 2019. This decreased from 4.94 in 2018. This was driven by a combination of two factors: the fall in individual scores of a number of EFCs and, at the same time, by the increase of their importance for entrepreneurial activity under current circumstances in experts’ view. In particular, this was the case for entrepreneurial finance; commercial, professional and legal infrastructure; government policies concerning taxes and regulations; and R&D transfer.
- The most striking change between 2018 and 2019 concerned internal market dynamics: it dropped from 5.46 to 4.85. This is most likely to be driven by the effect of Brexit and the uncertain political and investment climate, which were much more of a concern for experts in 2019.
- By contrasting the UK’s NECI and EFCs with those of the other 53 countries which participated in the survey in 2019, the UK occupies 21st place. This is a relatively weak position compared with benchmark countries: the US (5.31, rank 10/54), Germany (5.04, rank 16/54) and Switzerland (6.05, 1/54).
- A comparison with benchmark countries across different entrepreneurial framework conditions (EFCs) allows us to identify potential strengths and weaknesses of the entrepreneurial context in the UK in 2019. Entrepreneurial finance; ease of market entry and doing business; government policies in relation to taxes and regulations, as well as cultural and social norms are identified as the principal strengths, while R&D transfer; government policies and programmes to support entrepreneurship and internal market dynamics are pinpointed as areas for particular attention.

1. Introduction

1.1 SCOPE OF REPORT

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

1.2 GEM: HISTORY, PURPOSE AND MEASURES

The Global Entrepreneurship Monitor (GEM) research consortium has been measuring the entrepreneurial activity of working age adults across a wide range of countries in a comparable way since 1998. In 2019 the study conducted surveys in 50 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 2019 GEM global study was based on an analysis of adult population survey (APS) results from 50 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 2019 Report was published in February 2020¹ 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 opposite.

¹ Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J. and Tarnawa, A. (2020) Global Entrepreneurship Monitor 2019/20 Global Report. London: Global Entrepreneurship Research Association.

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

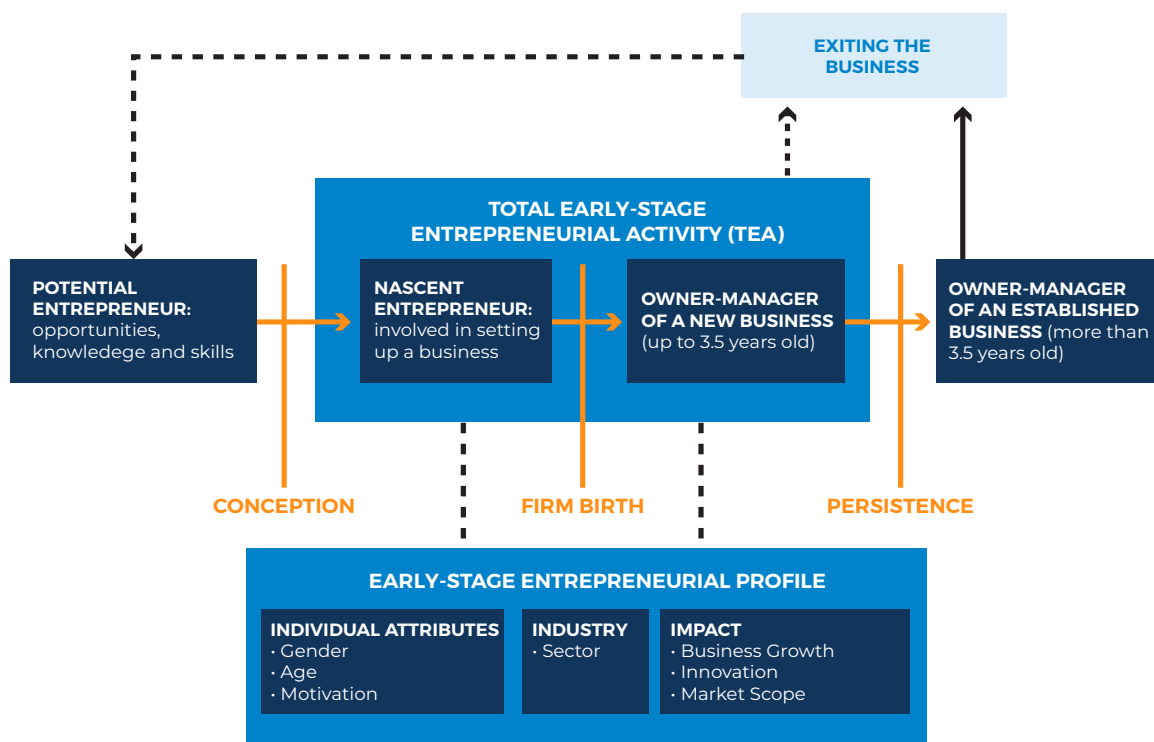


Figure 1.1: The Entrepreneurial Process and GEM Operational Definitions

(Source: Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J. and Tarnawa, A., 2020, pg.26)

As much of this entrepreneurial activity is pre-start-up or includes very small new businesses that do not have to register 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.

Once again in 2019 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). See Appendix 1 for further details on the implications of the growth in mobile only households for the GEM survey.

The methodology, sample sizes and weighting systems used for the GEM UK 2019 adult population survey are explained in more detail in Appendix 1. An important change in the sample design was introduced in 2010 when 10% of respondents in each Government Office Region (GOR) were selected at random from households which had mobile phones but not fixed phone landlines. The proportion of mobile-only households in this survey (19%) matched OfCom estimates of the proportion of adults in mobile-only households in 2019 for the UK (21%)³, to account for the higher mobile phone use of some hard to reach individuals, such as young men.

³ <https://www.statista.com/statistics/386778/share-of-calls-enabled-landlines-in-uk-hoseholds/> accessed 12/07/20

2. Entrepreneurial attitudes

2.1 ENTREPRENEURIAL ATTITUDES IN THE UK AND BENCHMARK COUNTRIES IN 2019

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

Points of note include the following:

- Nearly half of the non-entrepreneurial population of the UK know of a recent start-up entrepreneur which is similar to Germany and the US.
- Just under 65% of the non-entrepreneurial working age population in the US perceive that there are good start-up opportunities in their area in the next 6 months. The rates in the European comparator countries are substantially lower. In the UK the respective share is two-fifths while in Germany roughly half of the non-entrepreneurial population perceive good start-up opportunities.
- In the UK half of the non-entrepreneurial population perceive that they have the skills, knowledge and

experience to start a business; the rates in Germany are lower at two-fifths while in the US the respective share is 55%. These have increased since 2018.

- Fear of failure among those who perceive start-up opportunities is similar in the UK and the US with around two-fifths of respondents agreeing that fear of failure would prevent them from starting a business. Germany have a lower share with only a third.

2.2 ENTREPRENEURIAL ATTITUDES IN THE UK: 2017-2019

Estimates of attitudes towards entrepreneurship by gender are shown in Table 2.2. In 2019, GEM changed most attitude questions from yes/no questions to five point Likert scale items. These have been converted to agree/other responses to harmonise with prior years. There was also a significant change in the way the item asking respondents if they know someone who has started a business in the last 2 years was measured in 2019, where for the first time the number of people known was asked. This could account for the significant rise between 2018 and 2019 in the proportion of people who report knowing someone who has started a business in the last 2 years for both males and females. There was also a significant increase in males stating they felt they had the skills to start a business, which went from 48.3% in 2018 to 54.7% in 2019. Here too it is possible that the change in measurement has affected the result.

	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	46.1	39.1	47.5	46.0
Germany	42.4	48.7	39.7	33.6
US	53.5	63.3	55.4	42.0

Table 2.1: Attitudes towards entrepreneurship in the UK, Germany and US in 2019 - 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 2019)

	2017	2018	2019	2017	2017	2018	2018	2019	2019
	All	All	All	Male	Female	Male	Female	Male	Female
I personally know someone who has started a business in the last two years	28.1	28.2	46.1	28.7	27.5	30.8	25.8	47.2	45.2
There will be good start-up opportunities where I live in the next six months	38.6	39.5	39.1	40.8	36.6	43.3	36.0	40.8	37.5
I have the skills, knowledge and experience to start a business	40.6	40.1	47.5	48.8	33.4	48.3	32.8	56.6	39.6
Fear of failure would prevent me from starting a business (for those who agree there are good start-up opportunities)	39.7	42.8	46.0	35.7	43.9	40.0	46.0	43.3	48.8
Most people consider that starting a business is a good career choice	55.4	56.3	57.6	54.1	56.5	57.7	55.1	58.8	56.6
Those successful at starting a business have a high level of status and respect in society	76.7	77.7	76.6	77.3	76.3	77.8	77.6	77.5	75.9
You will often see stories about people starting successful new businesses in the media	58.5	58.2	72.5	60.1	57.2	60.2	56.4	72.6	72.5

Table 2.2: Entrepreneurial attitudes in the UK in 2017, 2018 and 2019 (% non-entrepreneurially active respondents aged 18-64 expressing an opinion and agreeing with the statement)

(Source: GEM UK APS 2017, 2018, 2019)

As in previous years, there are some differences between males and females with respect to attitudes. In 2019 two-fifths of non-entrepreneurial females felt they had the skills, knowledge and experience to start a business compared to over one-half of males. This is significantly lower for females. Despite the incremental changes in these rates over time it remains that females continue to possess a differing set of attitudes to entrepreneurship compared to males.

In 2019 there remains a wide and significant difference between the 77% of the non-entrepreneurial population in the UK who agree that successful business founders have a high status in society, and the 58% who agree that most people would agree that starting a business is a good career choice. This is despite the fact that 72.5% of the non-entrepreneurial working age population, a significant increase from 2018 (58.2%), agree they see stories about people starting successful new businesses in the media.

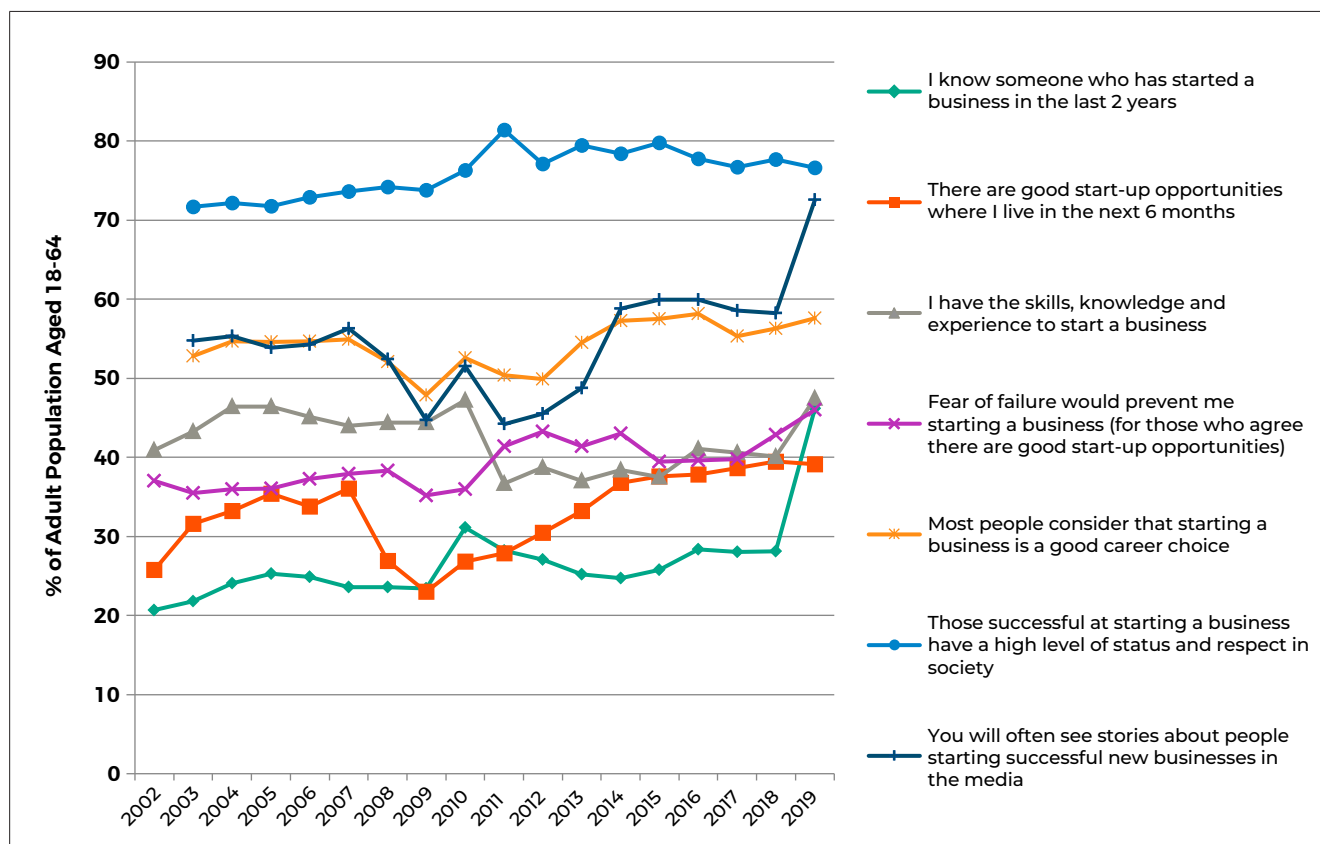


Figure 2.1: Entrepreneurial attitudes in the UK, 2002-2019: (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statement)
(Source: GEM UK APS 2002-2019).

There are large differences seen in the proportion of people who agree that starting a new business is easy (around 80%) and those that perceive that there are good opportunities to start a business in their local area (around 40%), suggesting that the lack of opportunity may be hindering the transition to entrepreneurial activity⁴. This contrasts with other countries such as Slovak Republic and Poland, where there is some association between the two perceptions, and both are either high or low. Understanding better what is causing the large gap between the two metrics could help in designing measures to reduce it.

The trend in attitudes towards entrepreneurship is shown in Figure 2.1. Attitudes across nearly all measures have generally become more optimistic since 2002, although the proportion of people who perceive entrepreneurs to have high status has been in decline since 2011.

There was a sharp increase in 2019 in those seeing stories in the media about successful entrepreneurs and those that know someone who has started a business in the last 2 years, although, as mentioned, the latter could be due to a change in measurement. The share of those agreeing that starting a business is a good career choice has also increased, as has fear of failure while the perception of high status for those starting a business has decreased. This would be in line with Brexit uncertainty having an impact on perceptions of starting a business as a similar effect was seen during the financial crisis where between 2010 and 2011 fear of failure sharply rose and status dropped. However, it is important to note that the wording of the fear of failure item was changed in 2019 to “I would not start a business for fear it might fail”.

⁴ Global Entrepreneurship Monitor (GEM) 2019/20 Global Report

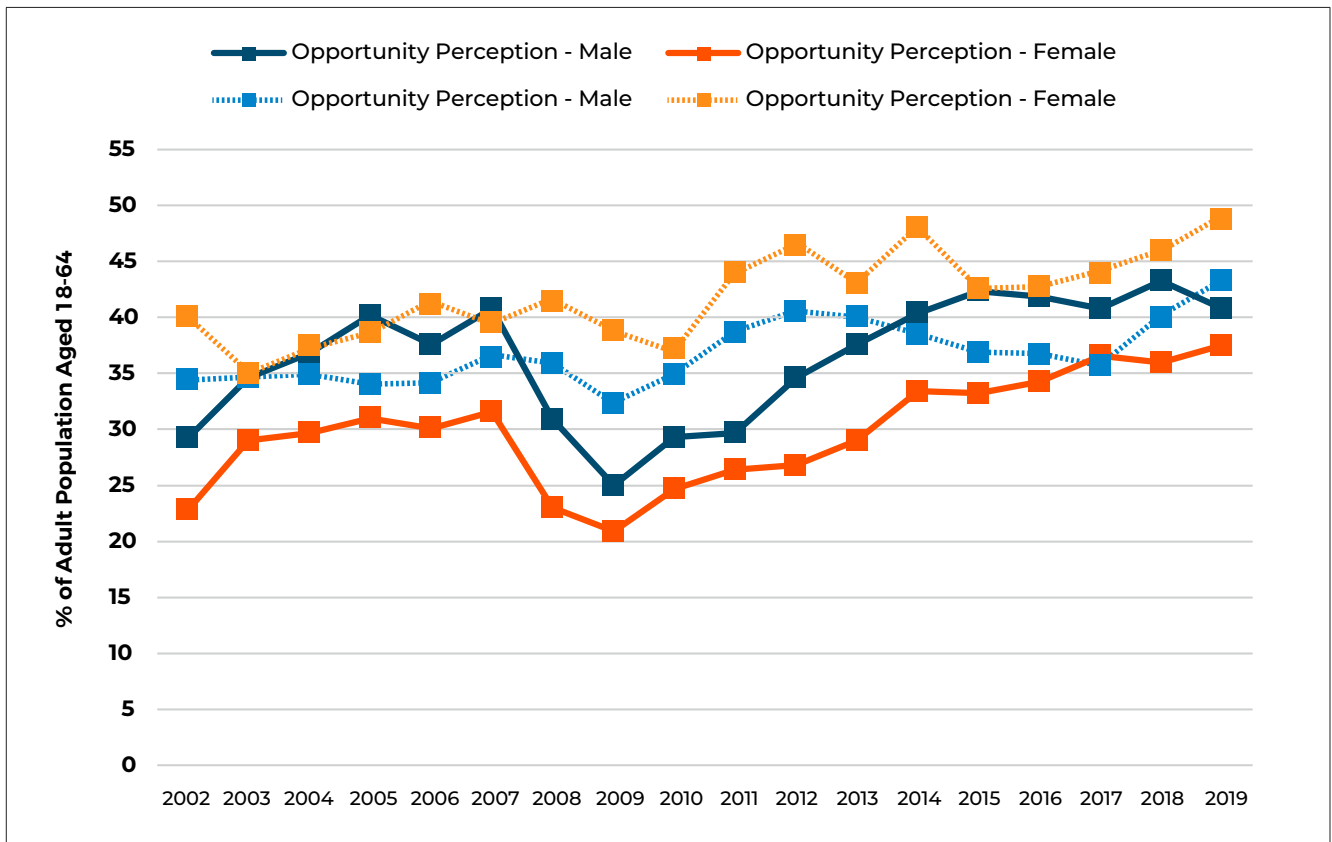


Figure 2.2: Male and female attitudes towards Good Opportunities and Fear of Failure
 (% non-entrepreneurially-active respondents aged 18-64 expressing an opinion and agreeing with the statements “There are good start-up opportunities where I live in the next 6 months”; “Fear of failure would prevent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

(Source: GEM UK APS 2002-2019) See text for change in wording of fear of failure item in 2019.

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 2019, male perceptions decreased while female perceptions increased, however these were not statistically different and perception of opportunity is still lower among females than males. In both cases, perceptions have recovered since the drop observed over the Global Financial Crisis (GFC) recession.

Fear of failure amongst females has been consistently higher than males across the same period and has been increasing since 2015. In 2019, there was an almost 6 percentage point gap between male and females, however this is not statistically different. Interestingly, the last time the male fear of failure rate exceeded the male opportunity perception rate was 2008. This happened again in 2019: perhaps a harbinger of worse to come as the uncertainty over Brexit continued throughout the survey period in mid-2019?

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 2019 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 2019 this was just over two-fifths of the non-entrepreneurial population; there were no significant differences across the four UK nations.
- 40% of the non-entrepreneurially active population in England agreed that there were good start-up opportunities in their local area in the next 6 months which was significantly higher than in Wales and Northern Ireland, where only 30% reported good opportunities.
- The proportion of non-entrepreneurially active respondents who thought they had the skills to start a business and the proportion who feared failure were similar across the four home nations at around half for each measure.
- Most non-entrepreneurs had favourable attitudes towards those starting a business; over half of non-entrepreneurial individuals in the home nations agreed with the statement that “most people consider that starting a business is a good career choice”.
- A higher share, more than three-quarters of non-entrepreneurial individuals, agreed that “those successful at starting a business have a high level of status and respect in society”. This was consistent across the home nations.
- Over 70% of non-entrepreneurs agreed that “you will often see stories about people starting successful new businesses in the media”. Again this was a consistent finding across the UK home nations.

	England	Wales	Scotland	Northern Ireland	United Kingdom
I know someone who has started a business in the last 2 years	45.8	49.1	49.0	43.4	46.1
There are good start-up opportunities where I live in the next 6 months	40.3	29.4	36.4	30.9	39.1
I have the skills, knowledge and experience to start a business	47.6	45.2	47.8	49.0	47.5
Fear of failure would prevent me from starting a business (for those who agree there are good start-up opportunities)	45.6	50.6	47.6	46.4	46.0
Most people consider that starting a business is a good career choice	58.1	56.7	53.2	58.0	57.6
Those successful at starting a business have a high level of status and respect in society	76.5	76.5	76.7	79.6	76.6
You will often see stories about people starting successful new businesses in the media	72.5	69.8	72.8	78.1	72.5

Table 2.3: Perceptions of entrepreneurship among non-entrepreneurially active individuals in the UK Home Nations (%), 2019
(Source: GEM UK APS 2019)

3. Entrepreneurial activity

3.1 ENTREPRENEURIAL ACTIVITY IN THE UK AND BENCHMARK COUNTRIES

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 2019. In this figure, individuals who engaged in more than one stage of the process at a time are included **in their most established stage** (see Figure 3.1b in Appendix 2 for gross rates for each stage).

In the UK in 2019, over one-fifth of working age individuals were either engaged in entrepreneurial activity or intended to start a business within the next three years. Participation in the stages of entrepreneurship in 2019 revealed that 8% were engaged in established business ownership, 4% in new business ownership, 6% in nascent entrepreneurship and 7% intending to start a business within the next 3 years. Nascent entrepreneurship increased from 3.6% in 2018 to 6% in 2019.

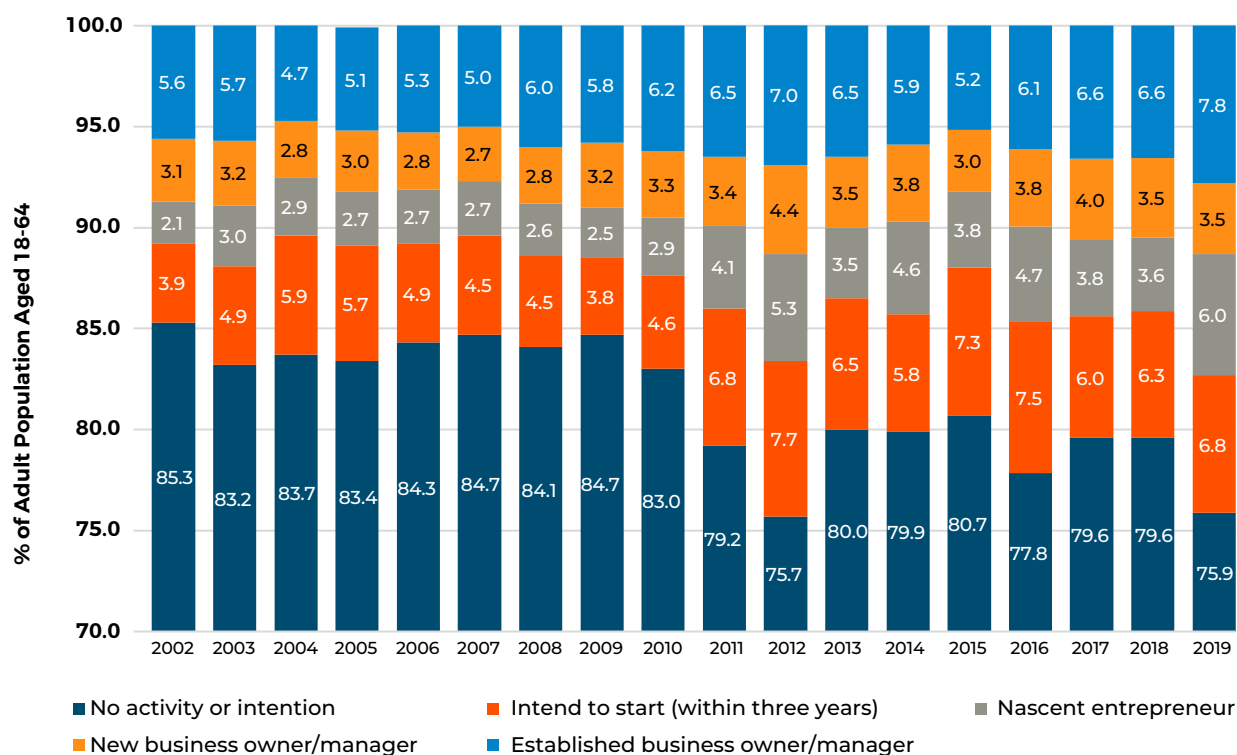


Figure 3.1: Participation in Entrepreneurship in the UK by most established stage of entrepreneurial activity (not including intrapreneurs), 2002 to 2019
(Source: GEM UK APS 2002 to 2019)

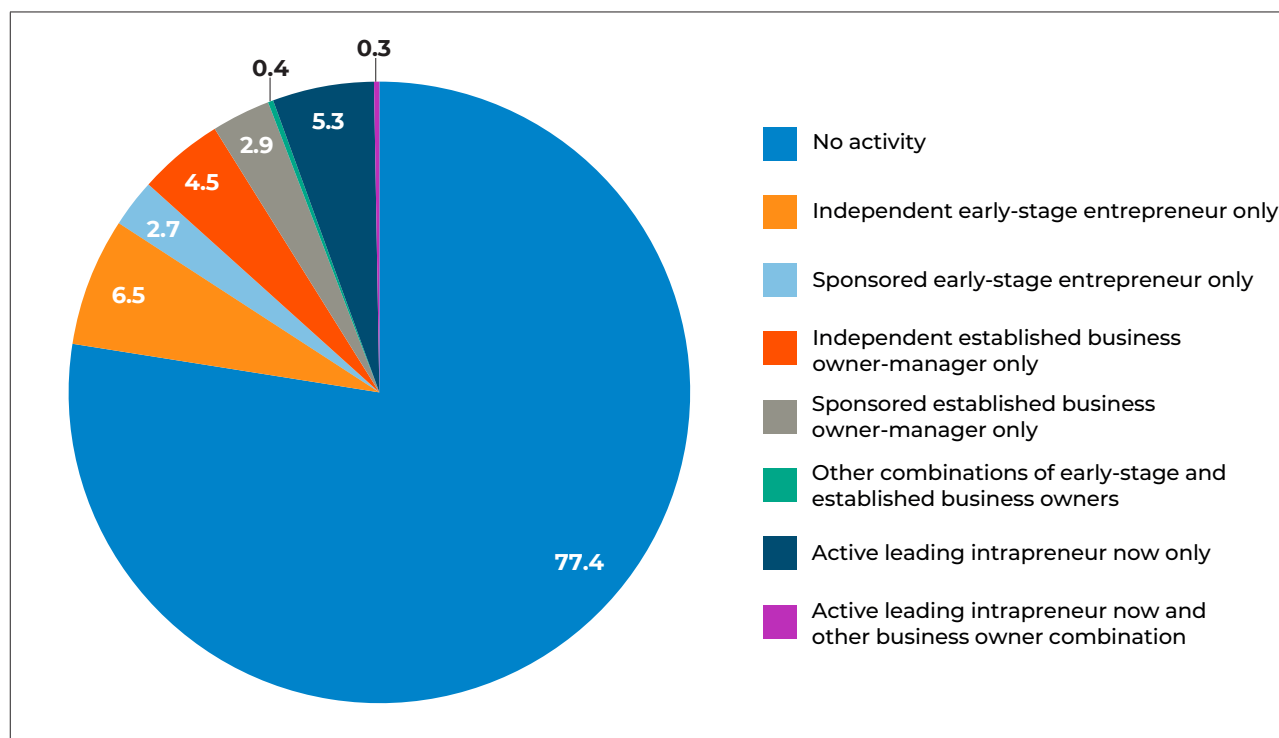


Figure 3.2: Distribution of modes of entrepreneurial activity in early-stage and established businesses
(Source: GEM UK APS 2019)

Figure 3.2 shows a breakdown of entrepreneurial activity by a more refined business categorisation which includes entrepreneurial employees (intrapreneurs) and separates early-stage and established entrepreneurs into those who are independent and those whose business is sponsored by their employer⁵. The majority of active entrepreneurs fell into the “Independent early-stage entrepreneur only”, “Independent established business owner-manager only” and “Active leading intrapreneur now only” categories with over 4% of the population in each.

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 2019 for the UK, Germany and the US are shown in Figure 3.3. For the UK and US there appeared to be a break in the long-run trend after the GFC in 2010, with both moving to a higher average TEA rate thereafter. The TEA rate in the US has increased continuously since 2015 and in 2019 reached its highest level since the survey began. The German TEA rate increased in 2019 to a new peak of just below 8% while the UK TEA rate has nearly reached its previous peak of 10% in 2012. The UK and German TEA rates were not statistically different in 2019 but both were statistically lower than the US.

TEA rates by age group for the UK, Germany and the US are shown in Figure 3.4. In each country entrepreneurial activity is most prevalent in the 25-34 age group, apart from the US where the 35-44 age group also experienced the same TEA rates as the 25-34 group. In the UK TEA rates follow a similar pattern for each age group as Germany.

TEA rates in the US are much higher when compared with the UK and Germany, remaining above 10% for each age group. Young people in the UK and Germany have comparable entrepreneurial activity rates in 2019 which are lower than in the US. For the other age groups, the gap in TEA rates between the UK and the US is even larger. In the US, more than 22% of 25-44 year olds and more than 13% of 45-64 year olds are involved in early-stage entrepreneurial activity. Interestingly, in the US 55-64 year olds are almost 2.5 times more likely to be engaged in early-stage entrepreneurial activity than in the UK and Germany.

⁵ Note that those intending to start a business are included in the “no activity” category to focus on those actively engaging in starting a business.

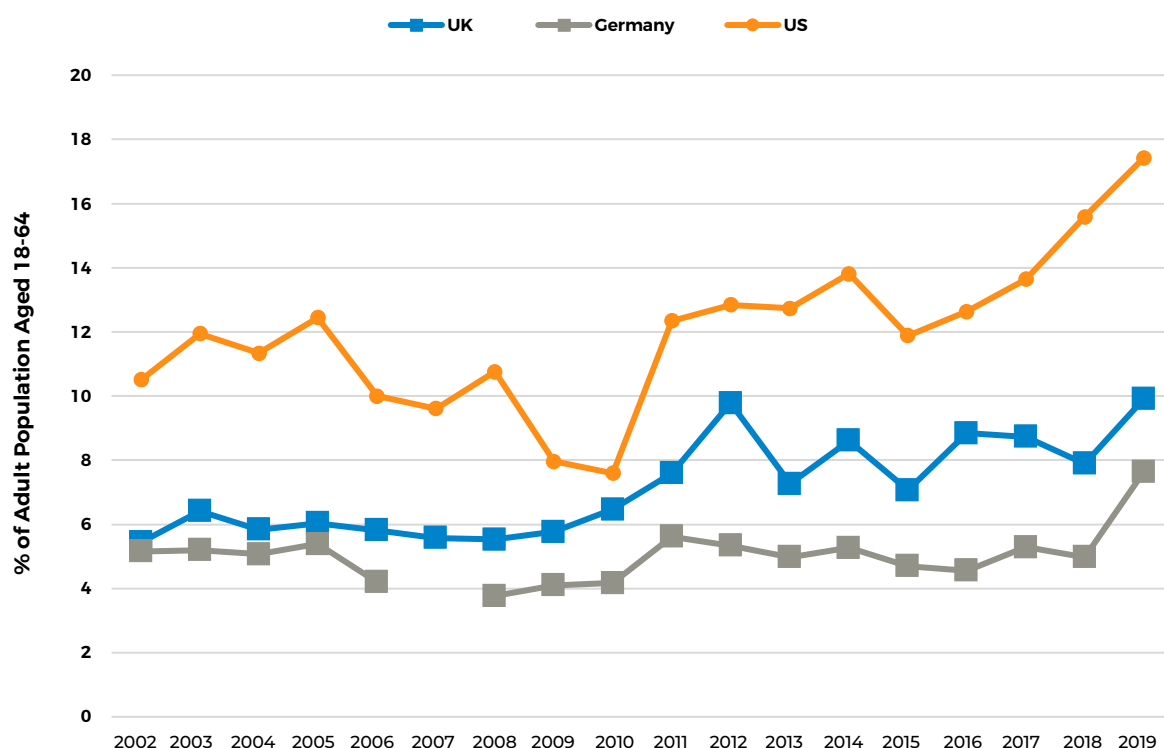


Figure 3.3: Total early-stage Entrepreneurial Activity (TEA) in UK, Germany and US (2002-2019)
(Source: GEM Global APS 2002-2019)

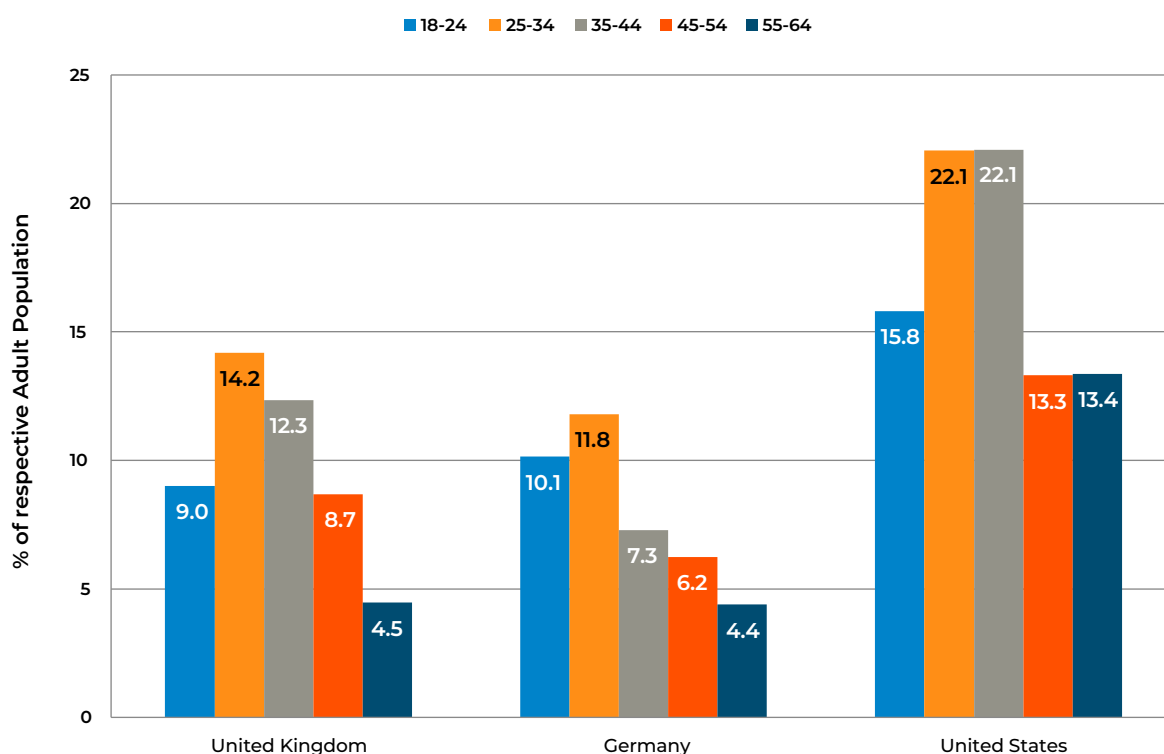


Figure 3.4: Total early-stage Entrepreneurial Activity (TEA) in the UK, Germany and the US by Age Group 2019
(Source: GEM APS 2019)

The trend in UK TEA rates by age group for the most recent three years is shown in Figure 3.5. The TEA rate for 18-24 years old saw an increase over two consecutive years: from 7.2% in 2017 to 9.0% in 2019, however this is not a statistically significant difference. After a decline in 2018, the TEA rate of 25-34 year olds and 35-44 years olds bounced back statistically significantly in 2019 to attain a level of over 14% and over 12%, respectively. Early-stage entrepreneurial activity remained stable over three years for 55-64 year olds. After a sharp decrease from 9.8% in 2017 to 6.7% in 2018, the TEA rate of the 45-54 age group stabilised at 8.7%.

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 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 2019 data for these metrics for the UK, Germany and the US are given in Table 3.1.

The business churn rate is similar for all countries at between 0.2% and 0.3%. The proxy early-stage survival rate for the UK is 0.2 percentage points higher than that of the US and 0.1 percentage points higher than Germany. The German survival rate was 1.5% in 2018; the German TEA rate increased significantly in 2019 while the established business owner-manager rate declined, resulting in an apparent sharp drop in early-stage business survival.

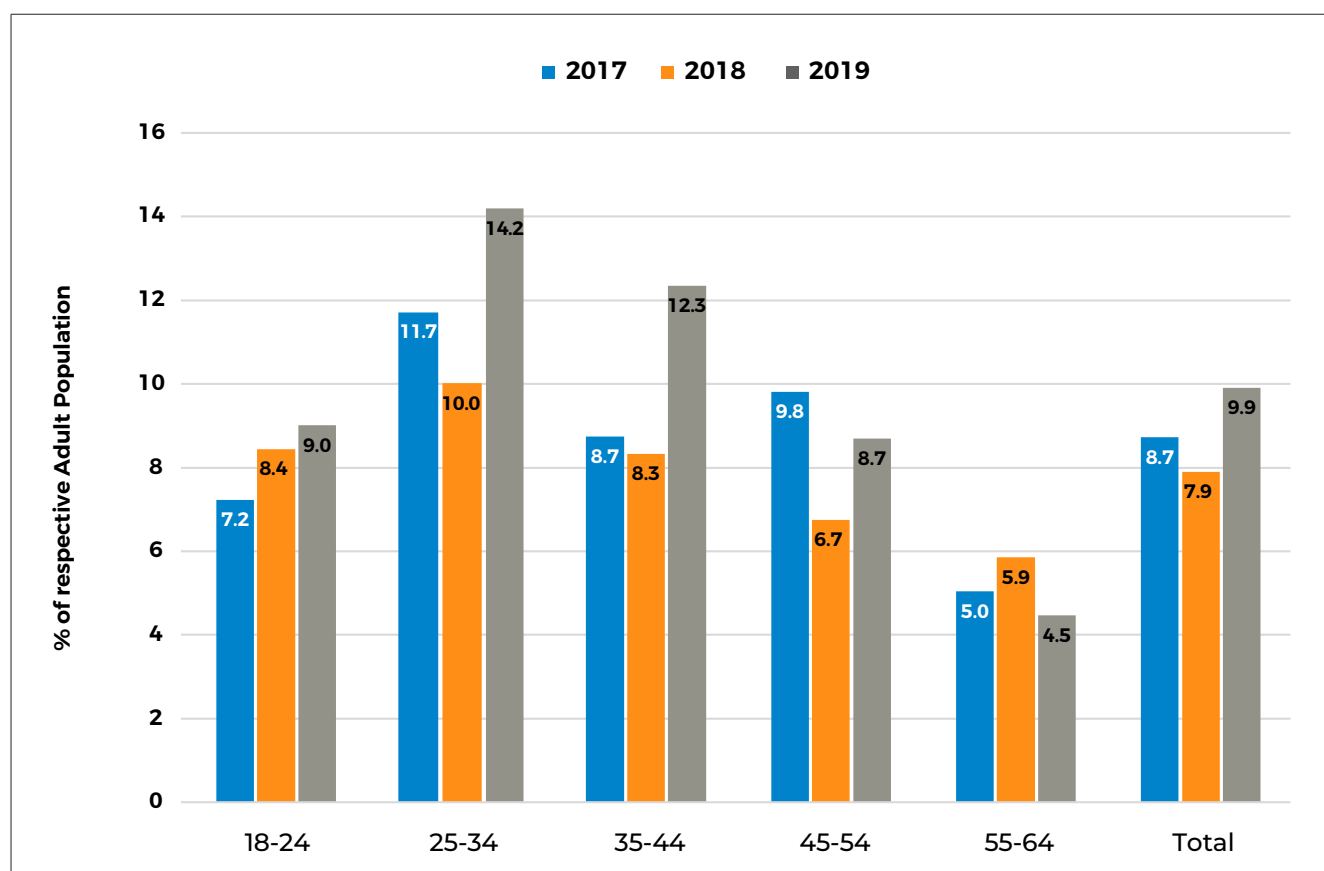


Figure 3.5: Total early-stage Entrepreneurial Activity (TEA) in the UK by Age Group (2017 to 2019)
(Source: GEM APS 2017, 2018, 2019)

There was a significant increase in the nascent entrepreneurial activity rate from 4.0% in 2018 to 6.5% in 2019 in the UK and a significant increase in TEA from 7.9% in 2018 to 9.9% in 2019. There were no other significant differences in the UK with regards to the other measures of entrepreneurial activity outlined in Table 3.1.

In general, the UK measures of entrepreneurial activity typically lie between those observed in its European counterparts and the US. The US generally leads in all measures of activity, in particular, when looking at intention to start a business in the next three years and TEA rates, which were 20.4% and 17.4%, respectively, in 2019.

		UK	Germany	US
I expect to start a business in the next 3 years (FUT)	(FUT)	11.0	12.5	20.4
Nascent Entrepreneurial Activity rate (paying wages for 3 months or less) (NEA)	(NEA)	6.5	5.3	11.8
New Business Owner-manager rate (4-42 months) (NBO)	(NBO)	3.6	2.6	5.9
Nascent + New business owner-manager rate (TEA)	(TEA)	9.9	7.6	17.4
Established Business Owners (>42 months) (EBO)	(EBO)	8.0	5.2	10.6
Business closure rate (Business closed in the last 12 months that has not continued) (BC)	(BC)	2.1	2.2	2.9
Proxy early-stage business survival rate (EBO/TEA)	(EBO/TEA)	0.8	0.7	0.6
Proxy business churn rate BC/(NBO+EBO)	BC/ (NBO+EBO)	0.2	0.3	0.2

Table 3.1: Measures of entrepreneurial intention and activity in the UK, Germany and the US, 2019
(Source: GEM Global APS 2019)

3.2 MALE AND FEMALE ENTREPRENEURIAL ACTIVITY COMPARED

In the UK the female TEA rate in 2019 was 7.7% while the male rate was significantly higher at 12.1%. However, the female TEA rate is significantly higher in 2019 than in 2018, when the rate was 5.2%. TEA rates by gender for the UK, Germany and the US are shown in Figure 3.6. In most high income countries, females are around two-thirds as likely to be early-stage entrepreneurs as males, and this was the case for the UK and Germany in 2019. In contrast, in the US the female TEA rate was only 1.6 percentage points below that of the male rate.

Comparing rates by gender across countries, the UK male and female early-stage entrepreneurial activity rate is higher than that of Germany (9.5% and 5.7%, respectively). However, both male and female UK rates are well below those in the US, with the female rate being more than half of the US rate.

Figure 3.7 presents the established business ownership rates by gender. Comparing this with Figure 3.6 shows that the gap in participation rates between males and females in the UK broadly follows the same pattern for established business owner-managers (EBO) as for early-stage entrepreneurs (TEA). The gender gap is significantly higher, however, with male EBO at 11.5% and female EBO at 4.0%, resulting in a female to male established business ownership ratio of 35%, lower than that in Germany (58%) and the US (78%).

The trend in female TEA rates in the three nations is shown in Figure 3.8. Both the UK and Germany saw an increase in female TEA rates when compared with 2018. The rate in the US in 2019 was the highest recorded since the survey began in 2002 and a 3-percentage point increase on 2018 rates.

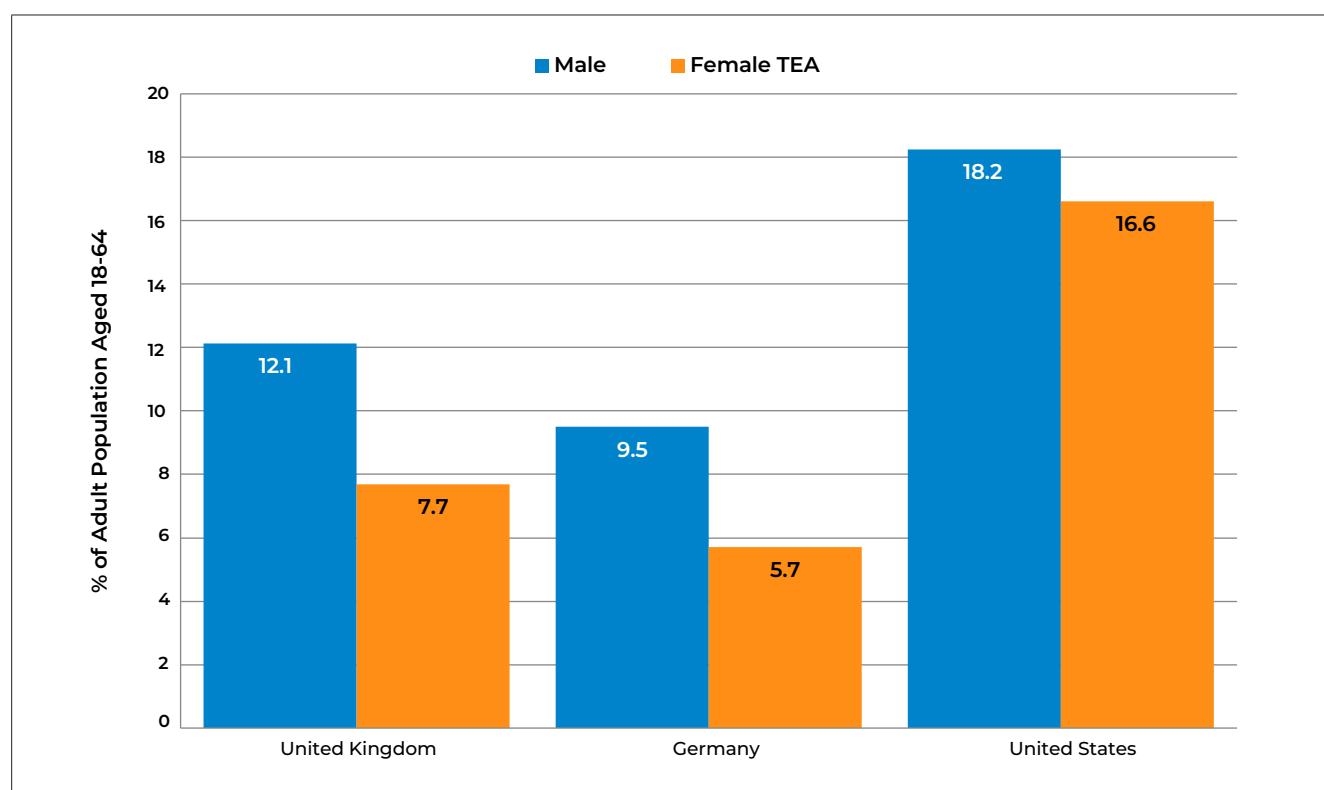


Figure 3.6: Total early-stage entrepreneurial activity by gender in the UK, Germany and the US in 2019
(Source: GEM Global APS 2019)

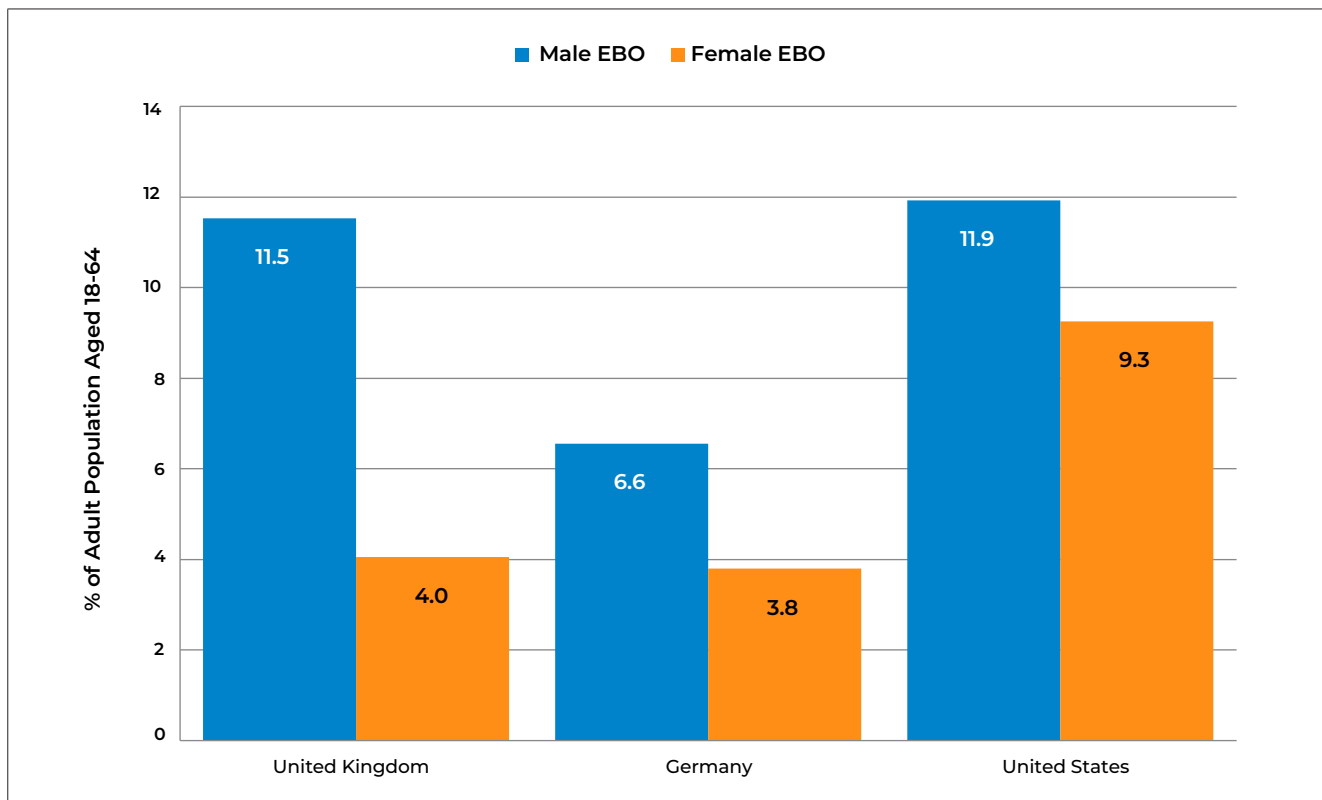


Figure 3.7: Established business ownership by gender in the UK, Germany and the US, 2019
(Source: GEM APS 2019)

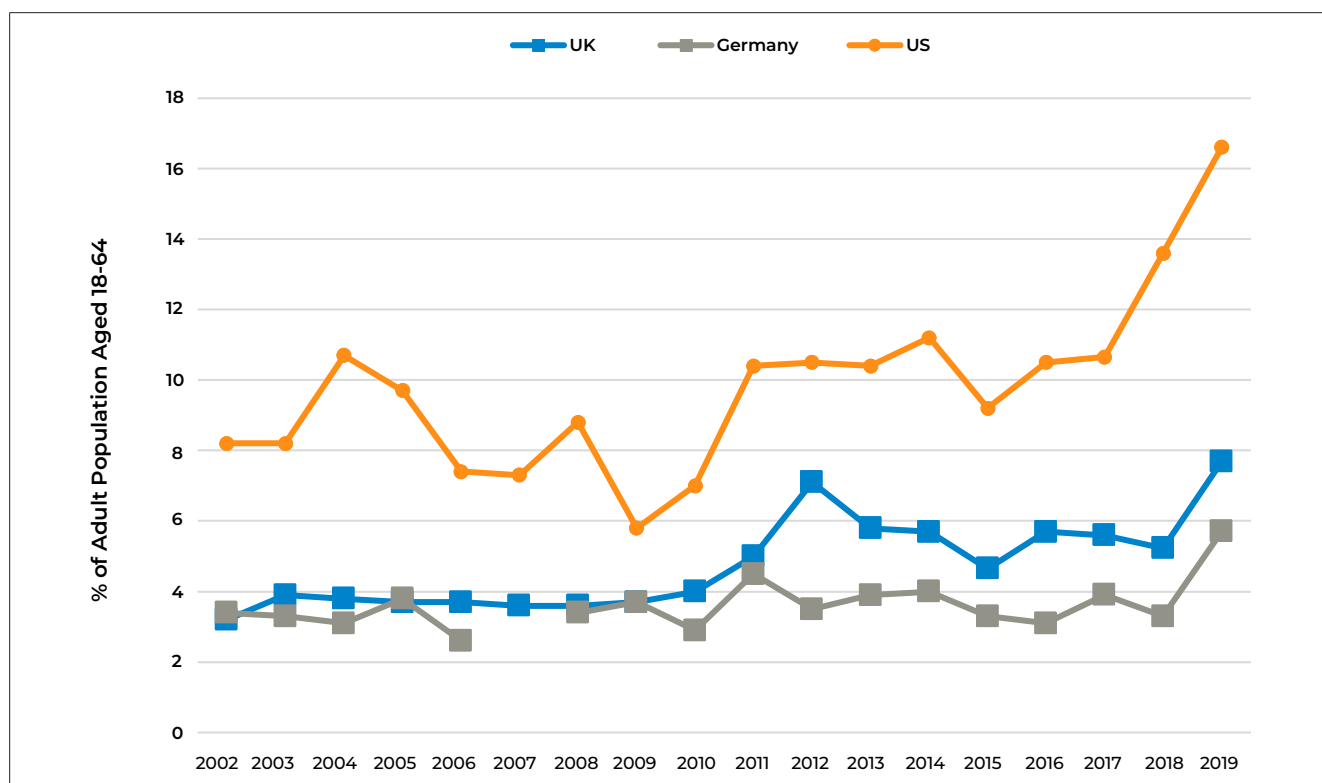


Figure 3.8: Female early-stage Entrepreneurial Activity in the UK, Germany and the US, 2002-2019
(Source: GEM APS 2002-2019)

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 2019. Together, these measures allow us to assess the degree of entrepreneurial dynamism and stability across the UK's constituent parts.

There were no significant differences business ownership rates in the UK and home nations between 2018 and 2019 but TEA rates increased significantly. This was mainly driven by the TEA rate in England, which was significantly higher than the other home nations in 2019. There was a significant increase in nascent entrepreneurial activities in England from 4.1% in 2018 to 7.0% in 2019.

Wales, Scotland and Northern Ireland had similar rates of intention to start a business in 2019 at around 8%, significantly lower than England's rate of 11.6%. Wales and Scotland also had significantly lower

nascent entrepreneurial activity rates at 4.1% and 4.0%, respectively, than England (7.0%) in 2019.

Figure 3.9 displays the trend in TEA rates in the home nations since 2002. The rates were relatively stable during the mid to late 2000s with a break in the long-run trend observed from 2011 after which the rates became more volatile. In 2019 the rates were all above their previous long-run average, with those in Wales, Scotland and Northern Ireland converging at around 6.5% in 2018. However, in 2019, Scotland's TEA increased to 7.2% while Northern Ireland and Wales had similar rates to 2018. England's TEA rate increased from 8.1% to 10.5% in 2019 and is statistically higher than the other home nations.

TEA rates may be expected to vary based on the extent of deprivation in an area and the differing start-up opportunities available⁶. Figure 3.10 displays TEA rates by Index of Multiple Deprivation quintiles, where the first quintile refers to the most deprived area, and the fifth quintile the least deprived for 2017-2019⁷.

		England	Wales	Scotland	Northern Ireland	UK
I expect to start a business in the next 3 years	(FUT)	11.6	7.6	8.1	8.3	11.0
Nascent Entrepreneurial Activity rate (paying wages for 3 months or less)	(NEA)	7.0	4.1	4.0	4.5	6.5
New Business Owner-manager rate (4-42 months)	(NBO)	3.7	3.0	3.4	2.2	3.6
Nascent + New business owner-manager rate	(TEA)	10.5	7.0	7.2	6.6	9.9
Established Business Owners (>42 months)	(EBO)	8.1	7.5	7.2	7.0	8.0
Business closure rate (Business closed in the last 12 months that has not continued)	(BC)	2.2	1.4	2.3	1.1	2.1
Proxy early-stage business survival rate	(EBO/TEA)	0.8	1.1	1.0	1.1	0.8
Proxy business churn rate	BC/ (NBO+EBO)	0.2	0.1	0.2	0.1	0.2

Table 3.1: Measures of entrepreneurial intention and activity in the UK, Germany and the US, 2019
(Source: GEM Global APS 2019)

⁶ See Sahasranamam, S., Murzacheva, K. & 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

⁷ Due to low sample size, 2017, 2018 and 2019 GEM data were amalgamated for some of the TEA figures.

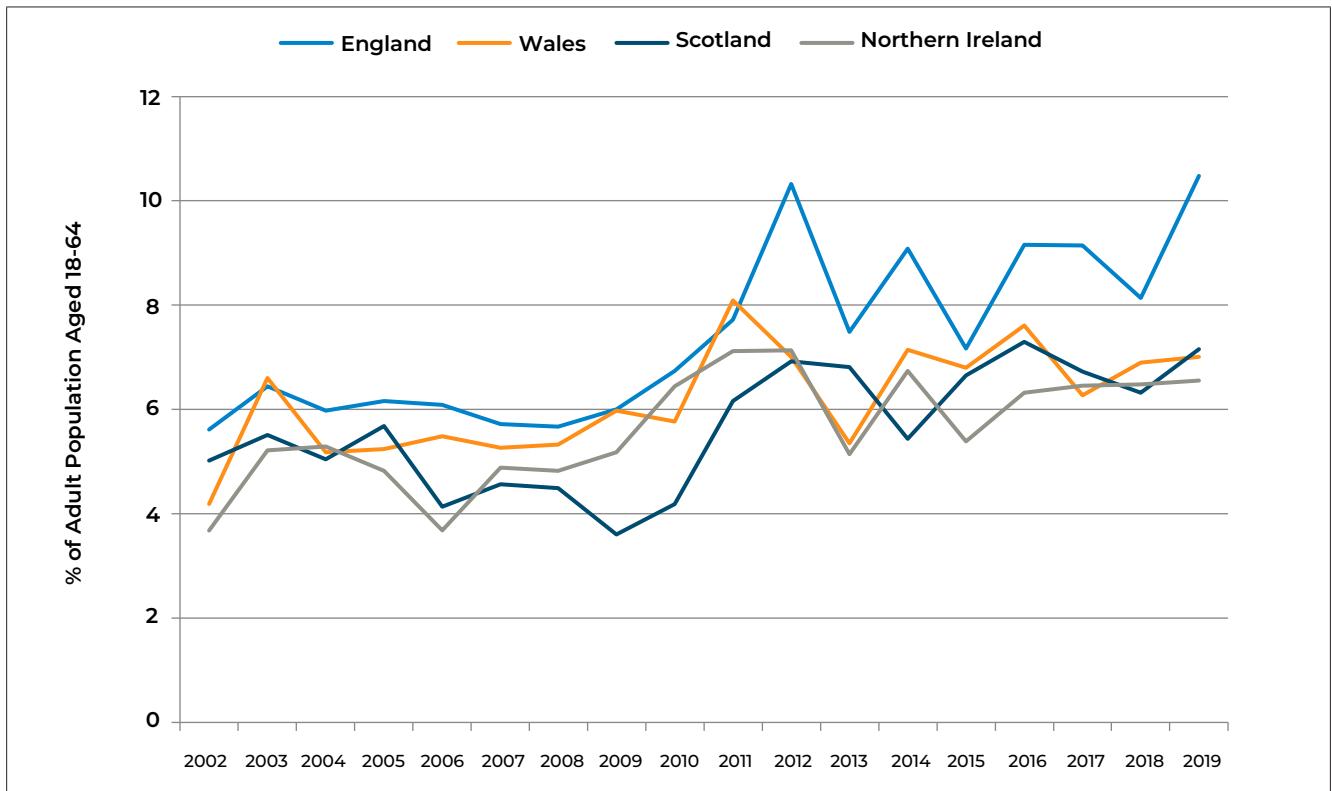


Figure 3.9: Total early-stage Entrepreneurial Activity in the UK Home Nations, 2002-2019
(Source: GEM UK APS 2002-2019)

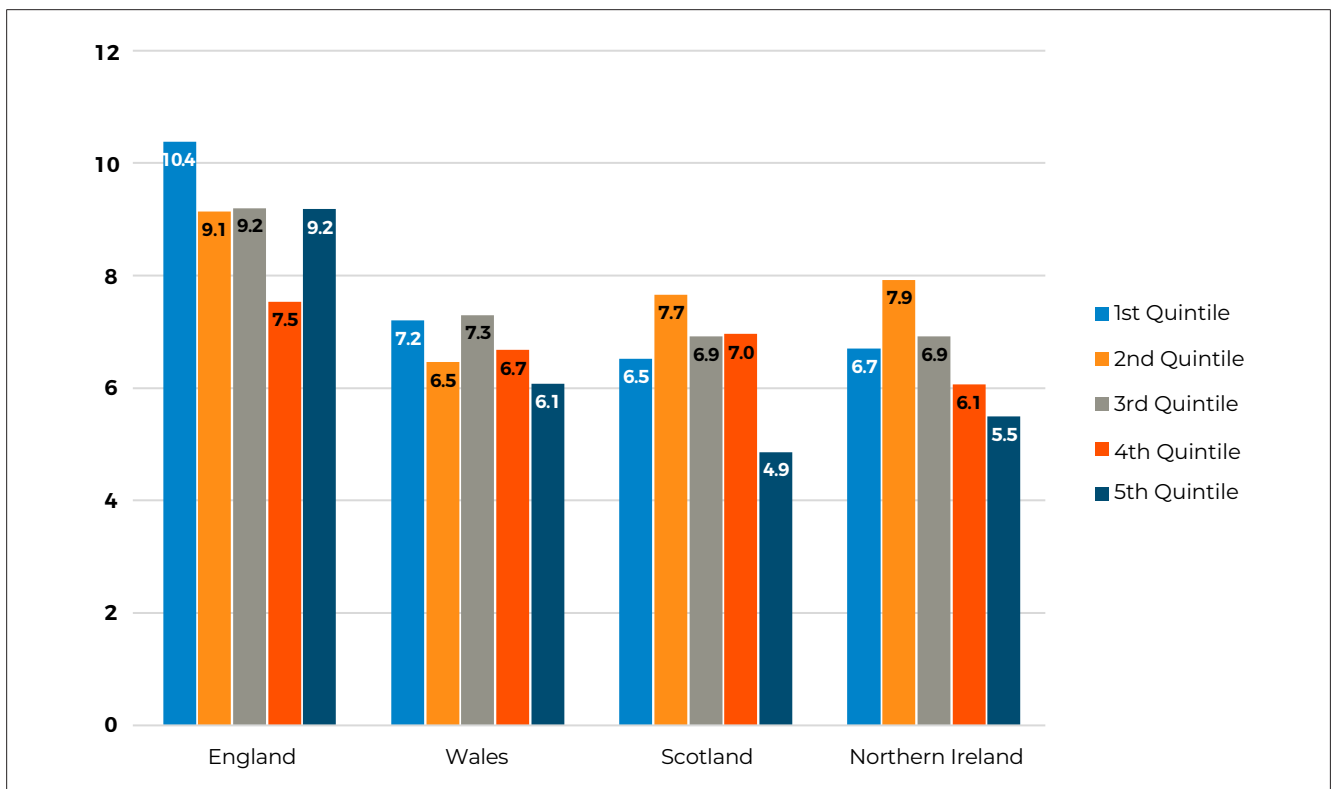


Figure 3.10: Total Entrepreneurial Activity in the UK Home Nations by Index of Multiple Deprivation 2017-2019
(Source: GEM UK APS 2017, 2018, 2019)

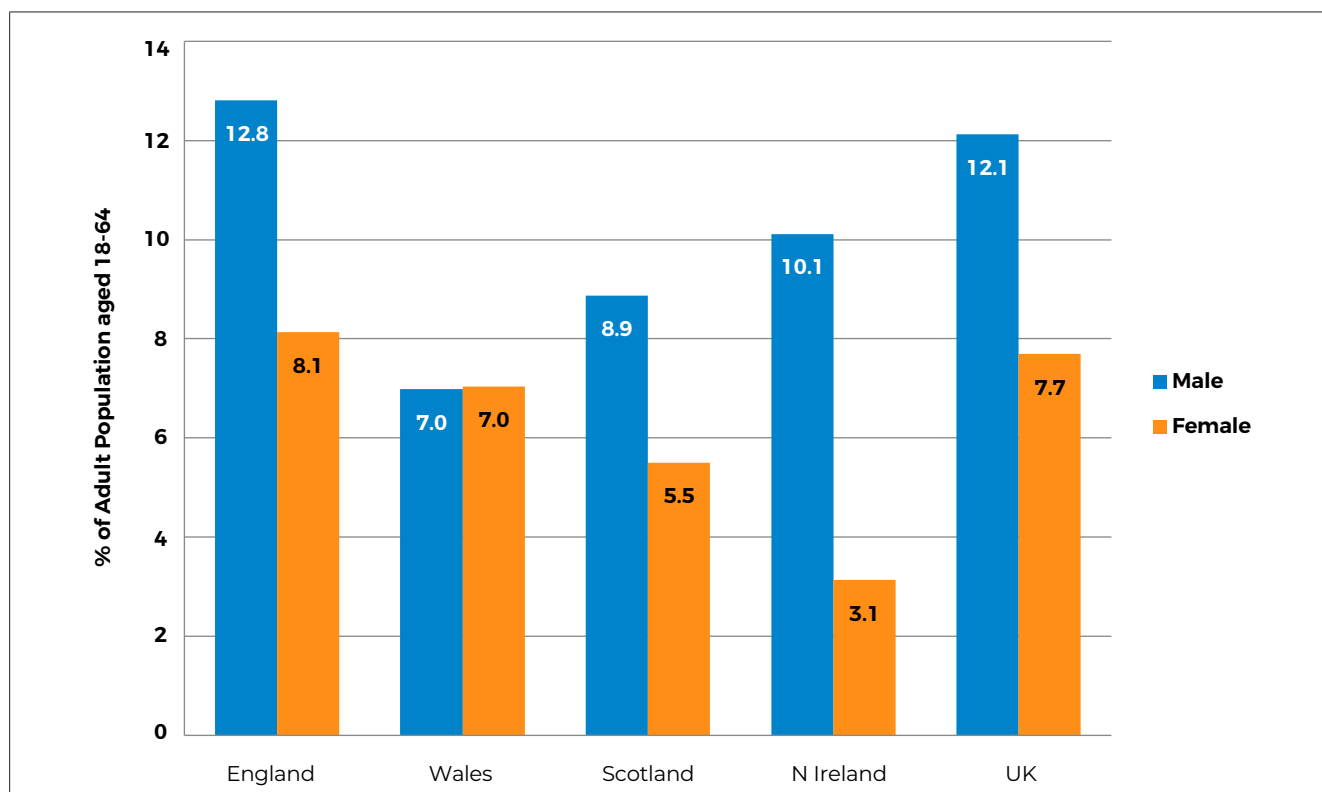


Figure 3.11: Male and Female Total early-stage Entrepreneurial Activity in the UK Home Nations, 2019
(Source: GEM UK APS 2019)

The highest TEA rate was observed in the least deprived quintile in England at the rate of 10.4%, which was significantly higher than the same quintile in Wales and Scotland. England also has the highest TEA in each of the other quintiles when compared with the other home nations, but the difference is not statistically significant. With the exception of England, the most deprived areas experienced the lowest TEA levels.

The female early-stage entrepreneurial activity rate in the UK in 2019 was 7.7% compared to 12.1% for males. The female rate was significantly lower than the male rate in the UK, this was also the case for England and Northern Ireland when comparing home nations, as Figure 3.11 shows⁸.

Wales has a male TEA rate of 7% in 2019, significantly lower than in England (12.8%). Northern Ireland has a female TEA rate of 3.1%, much lower than the other home nations and significantly lower than England. However, Northern Ireland also has an unusually high male TEA rate of 10.1%, the second highest after England.

The UK female to male TEA ratio of 63% in 2019 was higher than previous years. The ratios in Scotland and England were similar at 63% and 62% respectively. Northern Ireland had the lowest ratio at 31%, due to the relatively low female TEA rate and high male TEA rate. The ratio in Wales is 101% due to the higher female TEA rate relative to the male TEA rate. This is an unusual finding and can perhaps be partly explained due to a new drive to increase support for female entrepreneurs by the Welsh Government^{9 10}.

Combining data from the 2016-19 GEM UK annual surveys to analyse the female to male TEA rates in all the UK regions¹¹ reveals considerable variation in the ratios (Figure 3.12). The East of England has the highest ratio with 75 female entrepreneurs per 100 male entrepreneurs which is driven primarily by a higher than average female rate. In contrast, the high ratio in Scotland is driven by the lower than UK average male rate (3 percentage points below the UK average) and slightly lower female rate (0.9 percentage points down).

⁸ Expressing the female TEA rates as a proportion of the economically active population rather than the working age population, as shown here, does not alter the results. In the UK the respective rates expressed as a share of the economically active population are 6.4% for females and 10.4% for males.

⁹ <https://gov.wales/new-drive-support-women-entrepreneurs>.

¹⁰ It's important to note that the sample sizes were smaller for 2019 than in previous years and so these results should be taken with some caution due to high confidence intervals for some home nations.

¹¹ Combining data over several years provides more robust samples for disaggregation by gender at the regional level than the annual level data provides.

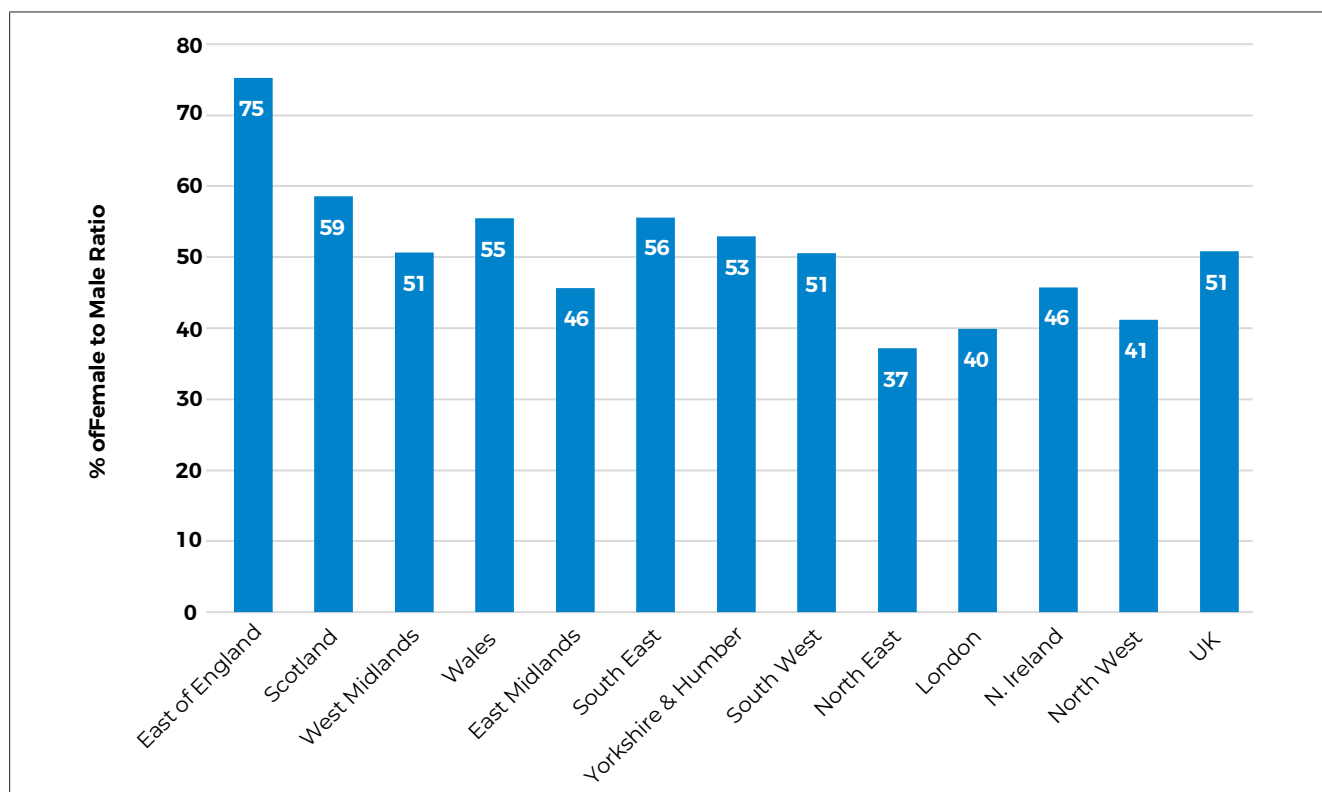


Figure 3.12: Female to Male Entrepreneurship Ratio in the UK regions (combined over 2016-19)
(Source: GEM UK APS 2016-2019)

When looking at the three-year averages, Wales looks more in line with the UK average than in Figure 3.11, with 55 female entrepreneurs per 100 male entrepreneurs. The North East has the lowest ratio with just 37 female entrepreneurs per 100 male entrepreneurs driven by a very low female TEA rate of 2.5%.

In this pooled regional analysis, the female TEA rates in the North East (2.5%), Wales (5.0%), Scotland (5.1%) and Northern Ireland (4.1%) are significantly lower than the highest performing region – East of England (8.4%).

Since 2003-05, there has been a general upward trend in female entrepreneurship activity in the UK home nations (Figure 3.13). Despite the volatility observed since 2011, the rates have remained at around half of the male rate except for Northern Ireland. In 2017-19, both Wales and Northern Ireland had significantly lower female TEA when compared with England.

The early-stage entrepreneurial activity rates of different age groups across the home nations are shown in Figure 3.14. There were no statistical differences for each age group in each home nation between 2018 and 2019.

In the UK in 2017-2019 the activity rate of those aged 35-44 years old and older were significantly lower than those in the 25-34 year old age group. TEA rates among those aged 55-64 years old were also significantly lower than all other age groups. Interestingly, the 18-24 years olds group has a significantly lower TEA rate than the 25-24 years old group in 2017-2019. This pattern was broadly similar in England but doesn't hold true in the other home nations.

Grouping 18 to 29 year olds together, Figure 3.15 shows the trend in their TEA rates, via rolling averages over 2002-04 to 2017-19. The chart highlights the increase in entrepreneurial activity amongst this age group since 2002, especially in England, and shows that activity continued to rise even during the recession. Rates across all nations are above pre-GFC rates with Scotland and Wales experiencing a sharp increase in 2017-19. In contrast, Northern Ireland experienced a decline in TEA within the 18 to 29 year old age group in the last three years after a broadly upward trend since the GFC.

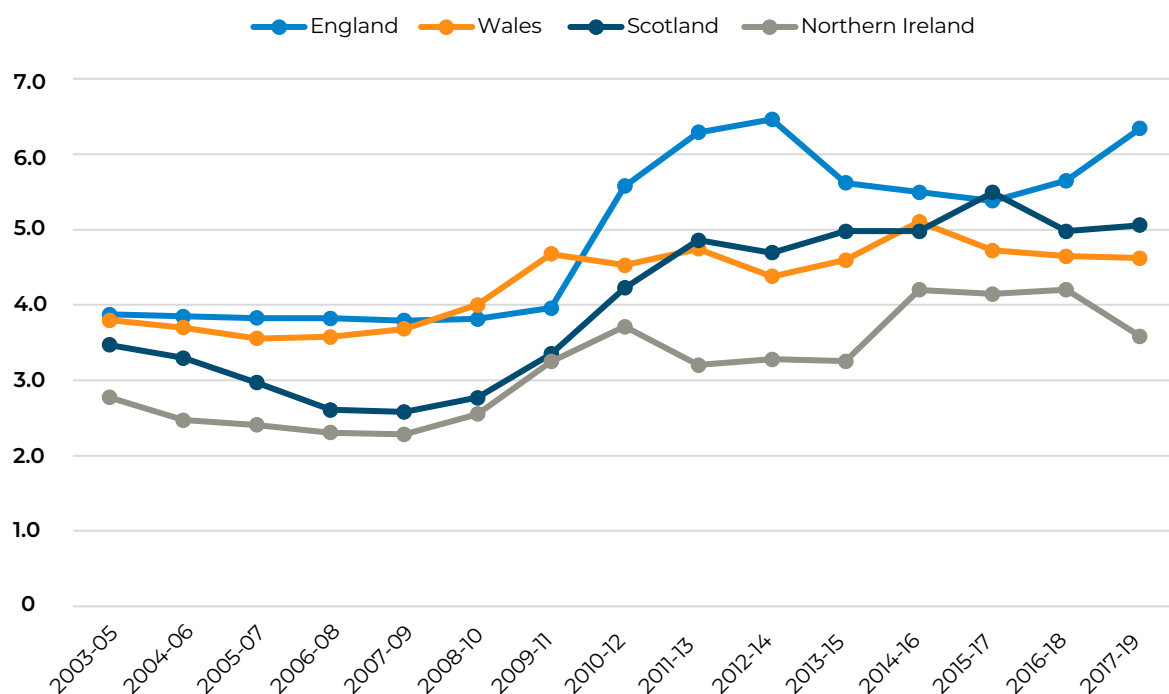


Figure 3.13: Female Total early-stage Entrepreneurial Activity in the UK Home Nations, 2003-2005 to 2017-2019
(Source: GEM UK APS 2002-2019)

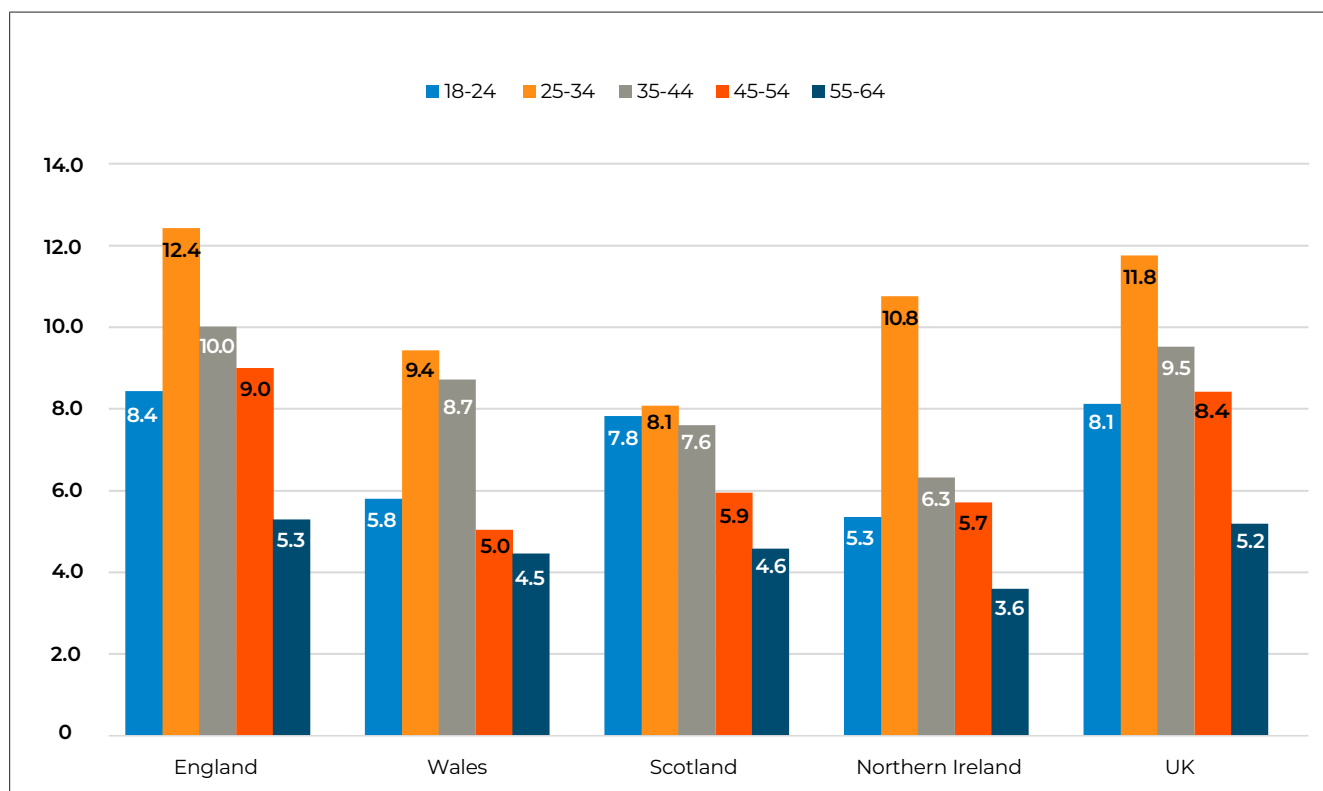


Figure 3.14: Total early-stage Entrepreneurial Activity in the UK Home Nations by Age Group, 2017 - 2019
(Source: GEM UK APS 2017, 2018, 2019)

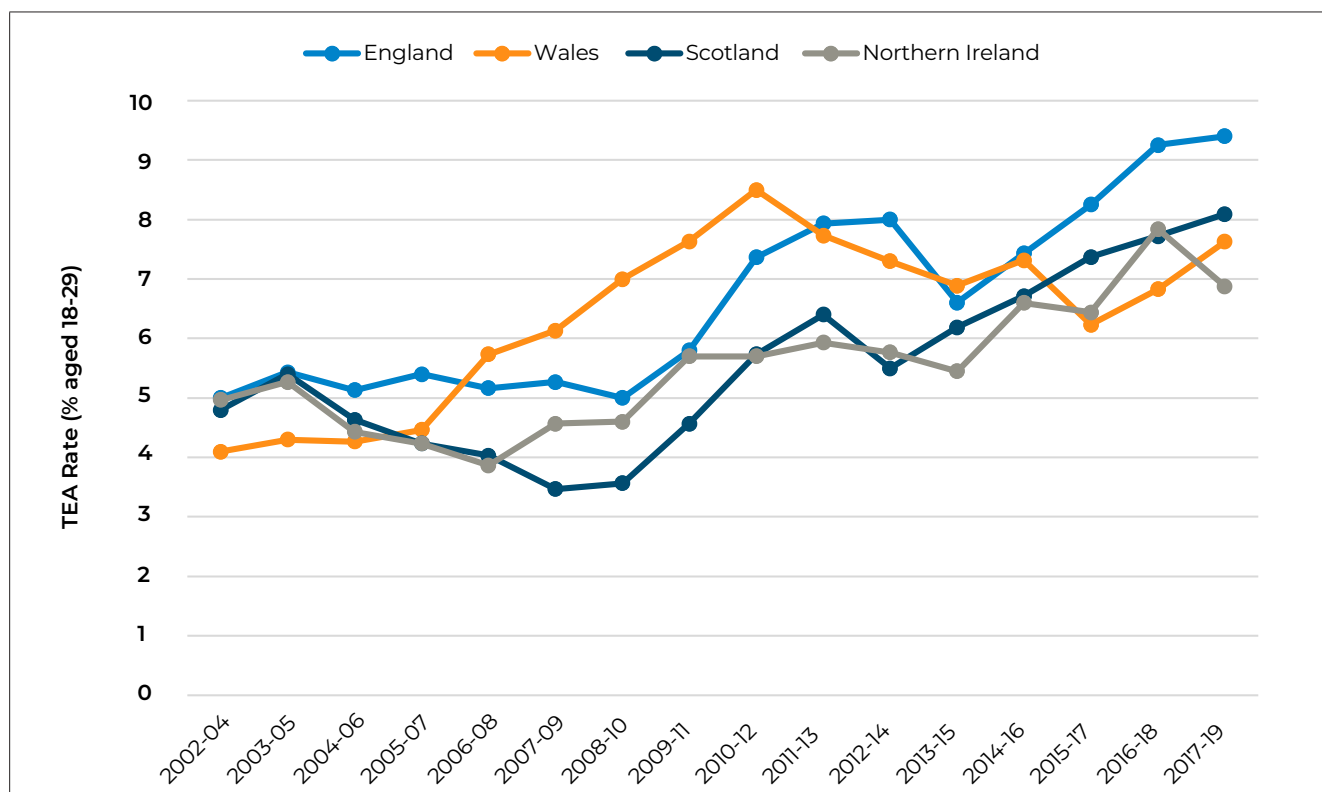


Figure 3.15: Trend in Total early-stage Entrepreneurial Activity in the UK Home Nations for 18 to 29 year olds, 3-year rolling averages 2002-04 to 2017-19

(Source: GEM UK APS 2002-2019)

Start-up Motivation

In 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 and only allowed for one choice between necessity and opportunity. These questions were replaced with new questions which allowed for a combination of motives that show a more realistic set of drivers for start-up.

The four motives were "to make a difference in the world", "to build great wealth or very high income", "to continue a family tradition" and "to earn a living because jobs are scarce." The former two can be thought of as more opportunity driven, while the third is more complex as this could be both due to opportunity or necessity. The final one can be thought of as more necessity driven. However, the fundamental point is that these options are now not mutually exclusive and entrepreneurs can report more than one motivation and the degree to which they identify with them.

Note that these motivations do not include autonomy or independence; this is because pre-tests showed that this was a universal motivation for entrepreneurs and does not distinguish between types of entrepreneurs.

Figure 3.16 shows a breakdown of these motives by gender as a percentage of early-stage entrepreneurs. There were no significant differences between male and female motives for any category. Around 50% of TEA entrepreneurs agreed they had "to make a difference in the world" and "to build great wealth or a very high income" as motives to start a business, with 57% of male TEA entrepreneurs stating the latter. Just below 50% stated "to earn a living because jobs are scarce" and less than 10% of all TEA entrepreneurs stated family tradition as a motive. "To continue a family tradition" was significantly lower than all the other motives at just below 10%.

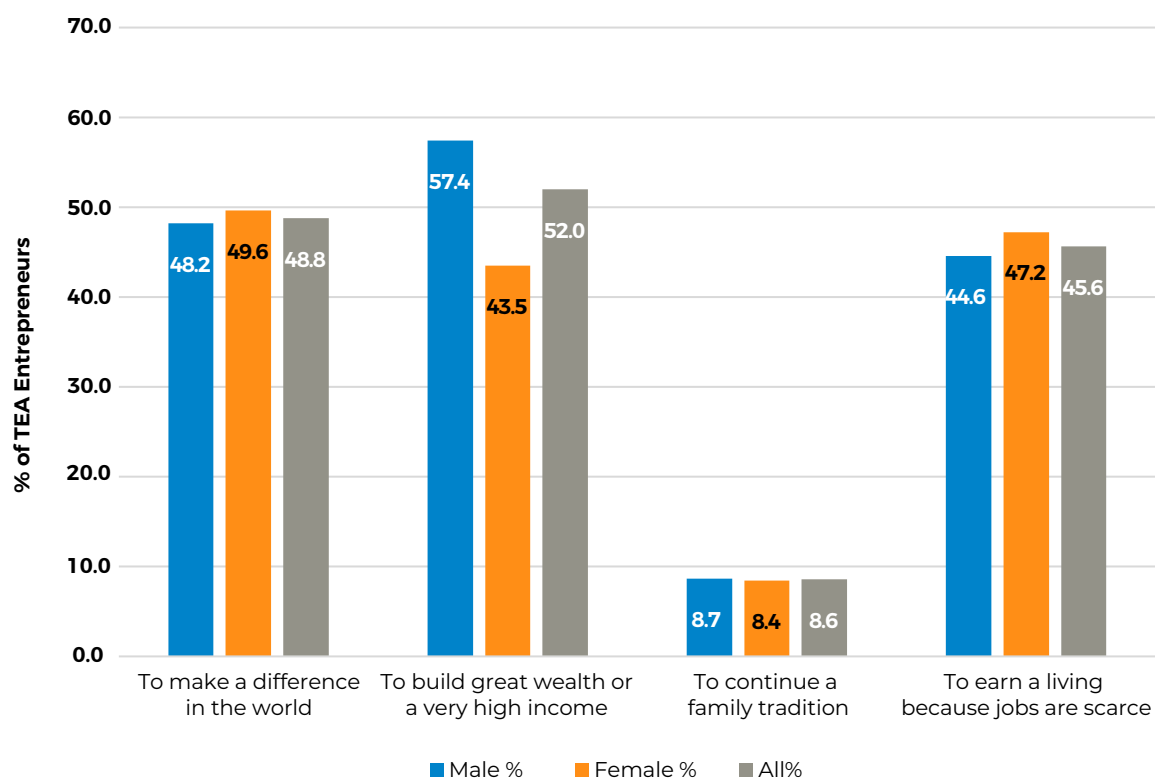


Figure 3.16: Motivations for starting a business in the UK by gender 2019 (percentage of TEA entrepreneurs agreeing somewhat or strongly with the motive)
(Source: GEM UK APS 2019)

3.4 ENTREPRENEURIAL ACTIVITY BY ETHNICITY AND RESIDENT STATUS

To analyse TEA rates by ethnicity and resident status, we focus on 3 years aggregated data due to low sample sizes in 2019.

Following previous trends, the TEA rate of the white ethnic population in the UK in 2017-2019 was significantly lower than that of the non-white population, at 8.1% compared to 13.3% respectively (Figure 3.17). The TEA rates for each ethnic group were not significantly different to their 2016-18 rates.

Entrepreneurial activity by migrant status is shown Figure 3.18. Immigrant TEA is higher than in-migrant and life-long UK resident TEA at 10.2% vs 8.8% and 8.5%, respectively, following previous trends. There has been a small drop in TEA rates among UK-born regional migrants and immigrants in 2017-19 when compared with 2016-18 but this is not significant.

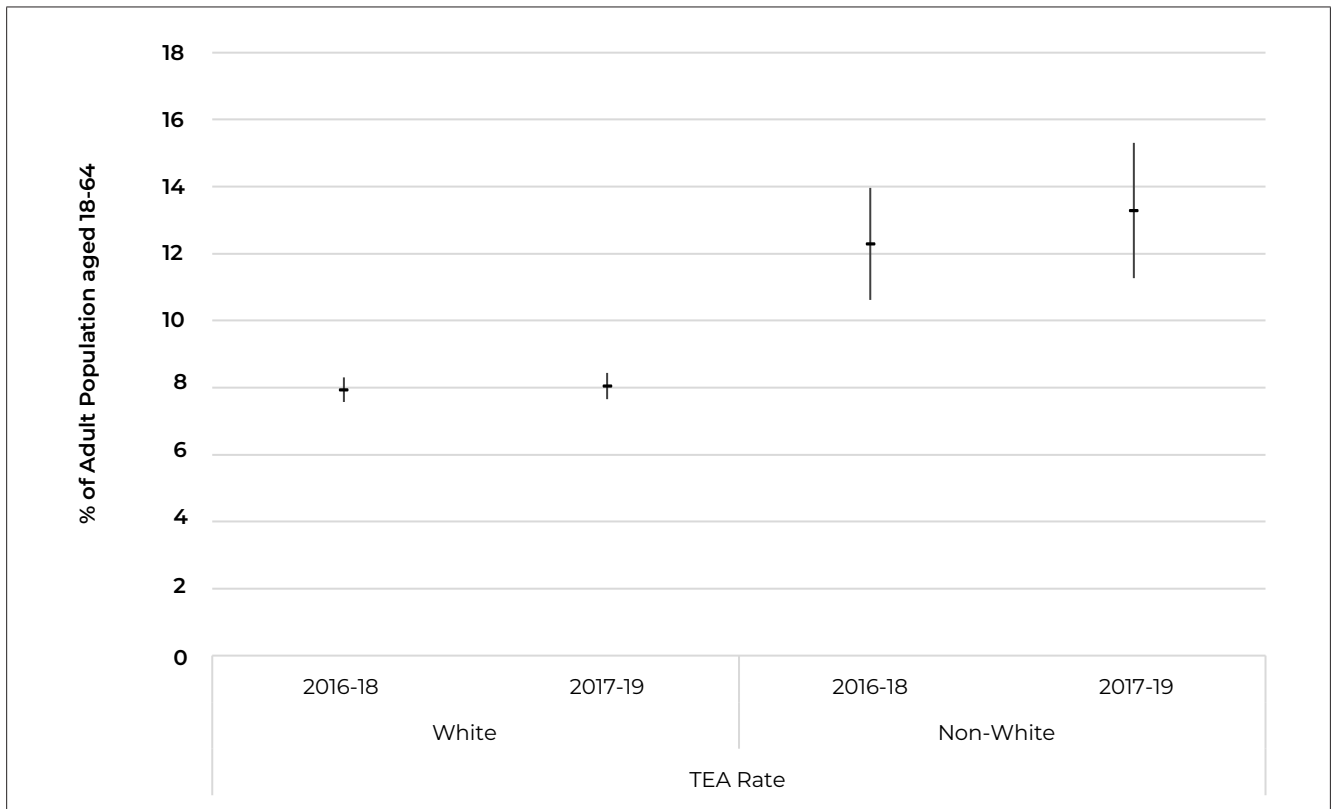


Figure 3.17: Total early-stage Entrepreneurial Activity Rate by White and Non-White Ethnic Status 2018 – 2019
(Source: GEM UK APS 2018, 2019)

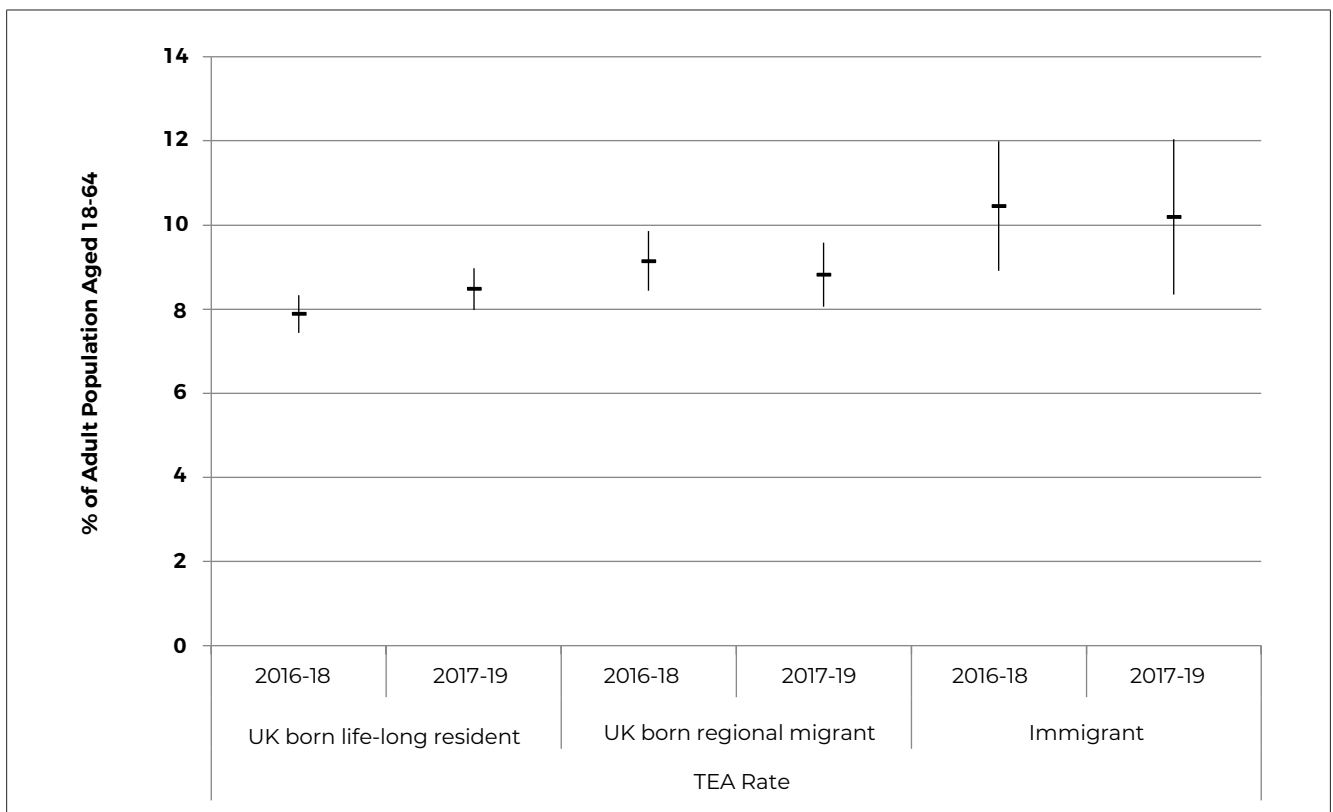


Figure 3.18: Total early stage Entrepreneurial Activity Rate by Migrant Status 2016-18 / 2017 – 2019
(Source: GEM UK APS 2019)

3.5 ENTREPRENEURIAL EMPLOYEE ACTIVITY

The TEA rate measures the extent to which the general population is engaged in the entrepreneurial process, however it says nothing about the activities of employees on behalf of their employers. Instead this is measured by the entrepreneurial employee activity (EEA) rate which is defined as proportion of employees aged 18-64 who play a leading role in the creation and development of new business activities for the organization in which they work, specifically those involved in developing or launching new goods or services or setting up a new business unit, a new establishment or subsidiary. Autonomy is a strong driver for all entrepreneurs to start their business and if this is increasingly provided in the workplace as the employee environment improves then higher levels of EEA should ensue¹².

A recent study¹³ from the World Economic Forum (WEF) and GEM Global found that many European economies do not lack entrepreneurial activity at all. The findings go against the widely-held belief about the dismal state of entrepreneurship in Europe. Indeed, the report finds, what Europe lacks in early-stage entrepreneurship, it makes up for in intrapreneurship. Due to the risk- and opportunity-profiles that European economies offer, entrepreneurial individuals in Europe frequently choose to start new ventures or projects for their employers as employees rather than for themselves. Where this occurs, we observe a shift into intrapreneurship, also known as entrepreneurial employee activity (EEA).

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

The EEA rate in the UK in 2019 was 5.6%, which was higher but not significantly different to the rates in Germany (4.7%) and the US (5.0%) as shown in Figure 3.19.

When taken together, the EEA and TEA rates provide a fuller picture of the extent of entrepreneurial activity being undertaken in a nation as it covers the actions of entrepreneurial individuals as well as entrepreneurial employees within a business; the latter, as noted above are found to be positively correlated with economic competitiveness. Figure 3.20 shows the TEA and EEA rates for the UK in 2018 and 2019. In both years the TEA rate is significantly higher than the EEA rate. The EEA rate in 2019 was not significantly different to the rate in 2018 of 5.7% but the TEA rate is significantly higher in 2019 than 2018.

¹² See Stephan, U *et al.*, (2015) "Understanding Motivations for Entrepreneurship", BIS Research Paper No. 212, March 2015.

¹³ World Economic Forum (WEF) and GEM Global (2016) "Europe's Hidden Entrepreneurs: Entrepreneurial Employee Activity and Competitiveness in Europe". http://www3.weforum.org/docs/WEF_Entrepreneurship_in_Europe.pdf

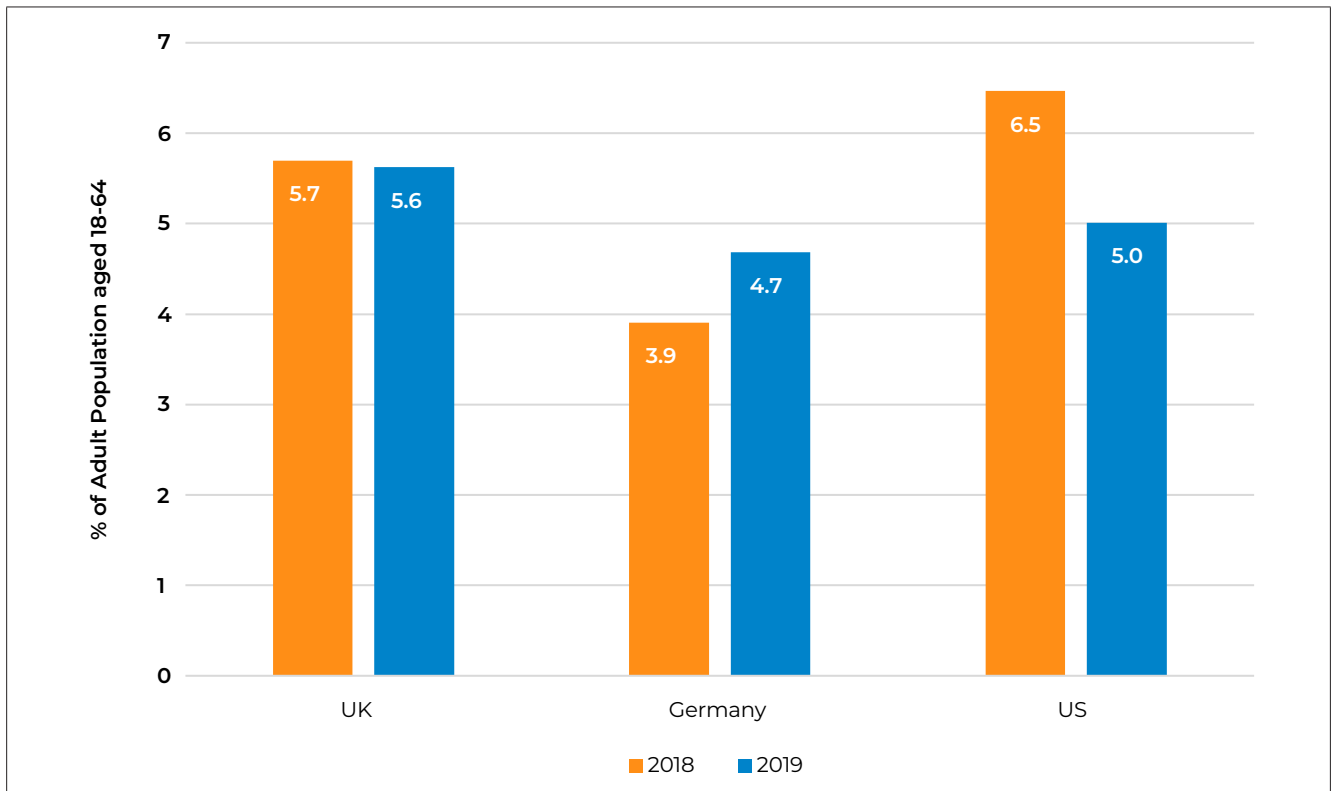


Figure 3.19: Entrepreneurial Employee Activity (EEA) in the UK, France, Germany and the US 2018-2019
(Source: GEM APS 2018, 2019)

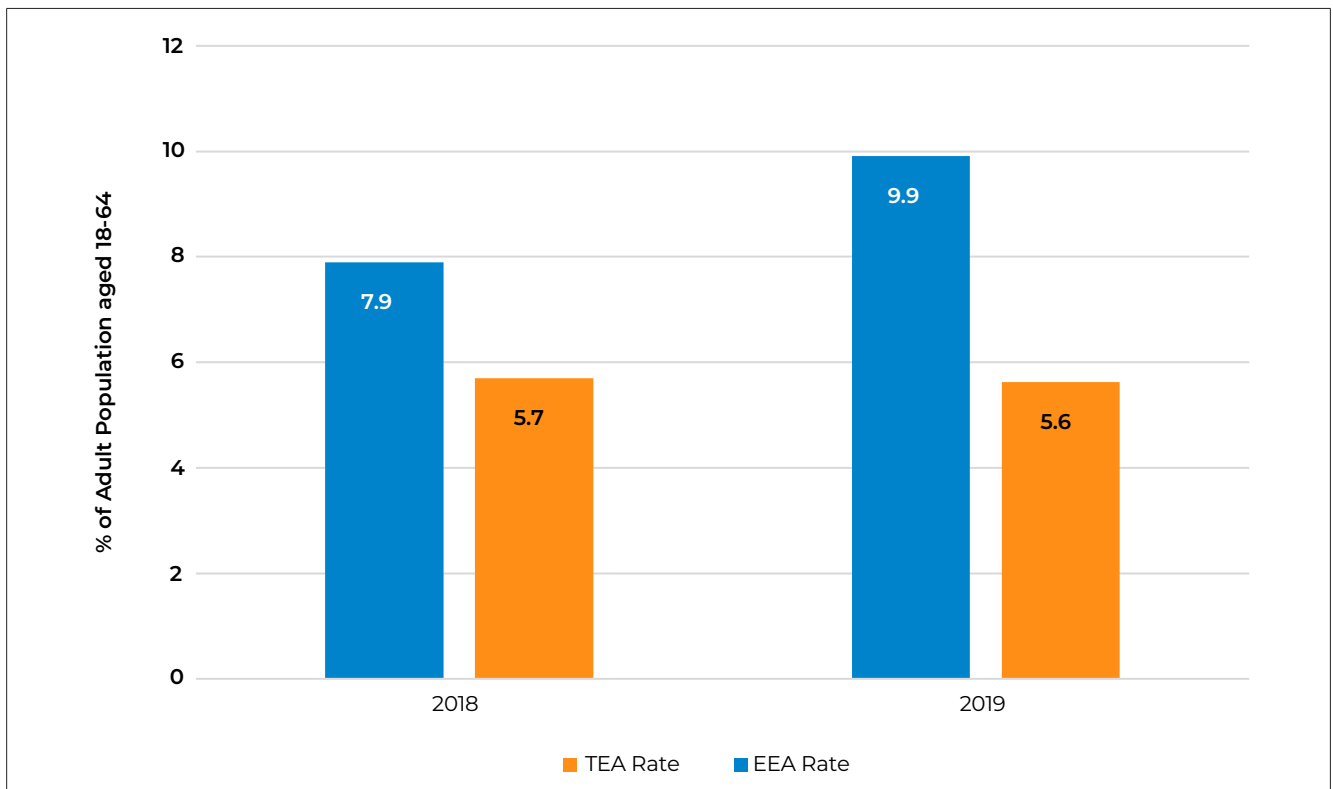


Figure 3.20: Total early-stage Entrepreneurial Activity (TEA) and Entrepreneurial Employee Activity (EEA) in the UK 2018-2019
(Source: GEM APS 2018, 2019)

4. Entrepreneurial Aspiration

The potential of entrepreneurial activity to promote regeneration and growth will reflect the types of business being established. If an entrepreneur expects to create a large number of jobs, or if the product market is new, then his or her potential contribution to growth and regeneration through entrepreneurship may be greater. The complex nature of the contribution of firms of different age and size to job creation in the UK has been highlighted in recent research¹⁴.

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 years¹⁵. The results are illustrated in Table 4.1 for early-stage entrepreneurs (i.e. nascent and new business owners - TEA) and established business owner-managers (EBO). The table also shows the proportion of early-stage entrepreneurs and established business owner-managers who state they operate in “high” or “medium” technology sectors (according to OECD definitions), and sell more than 25% of their revenue outside the country.

The results show considerable variation in the entrepreneurial aspiration metrics across the selected countries, and between early-stage and established business owners. 1 in 4 UK early-stage entrepreneurs had high job expectations which was higher than Germany but lower than the US. In each country the high expectation rates of established business owners are lower than for early-stage entrepreneurs. The UK has a similar rate to the US but both are lower than Germany. Compared with 2018, the TEA high job expectation was significantly higher in 2019.

The UK has the highest percentage of TEA firms in the high or medium tech sectors at 12.1% while the US has the lowest at 6.7%. Less than 10% of established business owners in each country have businesses in the high or medium tech sectors.

This metric shows the smallest difference in the rates between early stage and established business owners. At 16.8% the UK had a similar share of early-stage entrepreneurs involved in exporting as Germany (18.5%). The US had a much lower share at 6.8%. This trend is similar when looking at established business owners, where in the UK 12.7% of firms had more than 25% of customers outside of the country.

Table 4.2 shows new potential impact variables that were added to the 2019 survey to replace previous “new product to market” variables¹⁶. The first set of results show the propensity of early-stage entrepreneurs and established business owner-managers with potential national impact. Around 2% of UK and German early-stage entrepreneurs and 2.6% of the US comprised TEA entrepreneurs with national impact. The percentages of established business owner-managers whose businesses had potential national impact were also similar across these countries at around 1%. When looking at international impact, there was very little variation between countries for both early-stage entrepreneurs (around 1% of the working age population) and established business owner-managers (around 0.5%). Early-stage entrepreneurs in all countries had the highest potential impact nationally.

The trend in the relative frequency of high job expectation TEA entrepreneurs for the UK, Germany and the US, is shown in Figure 4.1. It uses a three-year rolling average presentation that smooths out fluctuations from year to year due to small sample sizes. It demonstrates that the relative frequency of high job expectation among early-stage entrepreneurs in the UK settled at around 16% between the GFC and 2018, but the 2017-19 period pushed the percentage above 20%. In contrast, the US and German rates declined slightly despite a continuous increase since 2014-2016, reducing the gap between the UK and Germany and the US.

¹⁴ 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.

¹⁵ 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.

¹⁶ The first measure identifies individuals whose businesses are at least national in market scope (i.e. larger than local) and either the product or service is nationally or internationally novel or the process underlying it is nationally or internationally novel. The second measure takes the scope and novelty to an international level.

(% of TEA or EBO entrepreneurs)	High Job Expectation:		High or Medium tech sectors		Exporting:	
	More than ten jobs and growth more than 50%				More than 25% of customers outside the country	
	TEA	EBO	TEA	EBO	TEA	EBO
UK	25.0	8.4	12.1	9.3	16.8	12.7
Germany	20.8	13.1	10.3	8.1	18.5	10.2
US	27.0	8.9	6.7	7.6	6.8	5.1

Table 4.1: Measures of entrepreneurial aspiration in the UK, Germany and the US, 2019

(Source: GEM Global APS 2019)

	National impact		International Impact	
	At least national scope for market and at least national scope for new product or new process		At least international scope for market and at least international scope for new product or new process	
	TEA (%)	EB (%)	TEA (%)	EB (%)
UK	1.9	0.9	0.8	0.5
Germany	2.0	0.8	0.9	0.4
US	2.6	1.2	1.0	0.6

Table 4.2: Measures of entrepreneurial potential impact rates in the UK, Germany and US, 2019

(Source: GEM Global APS 2019)

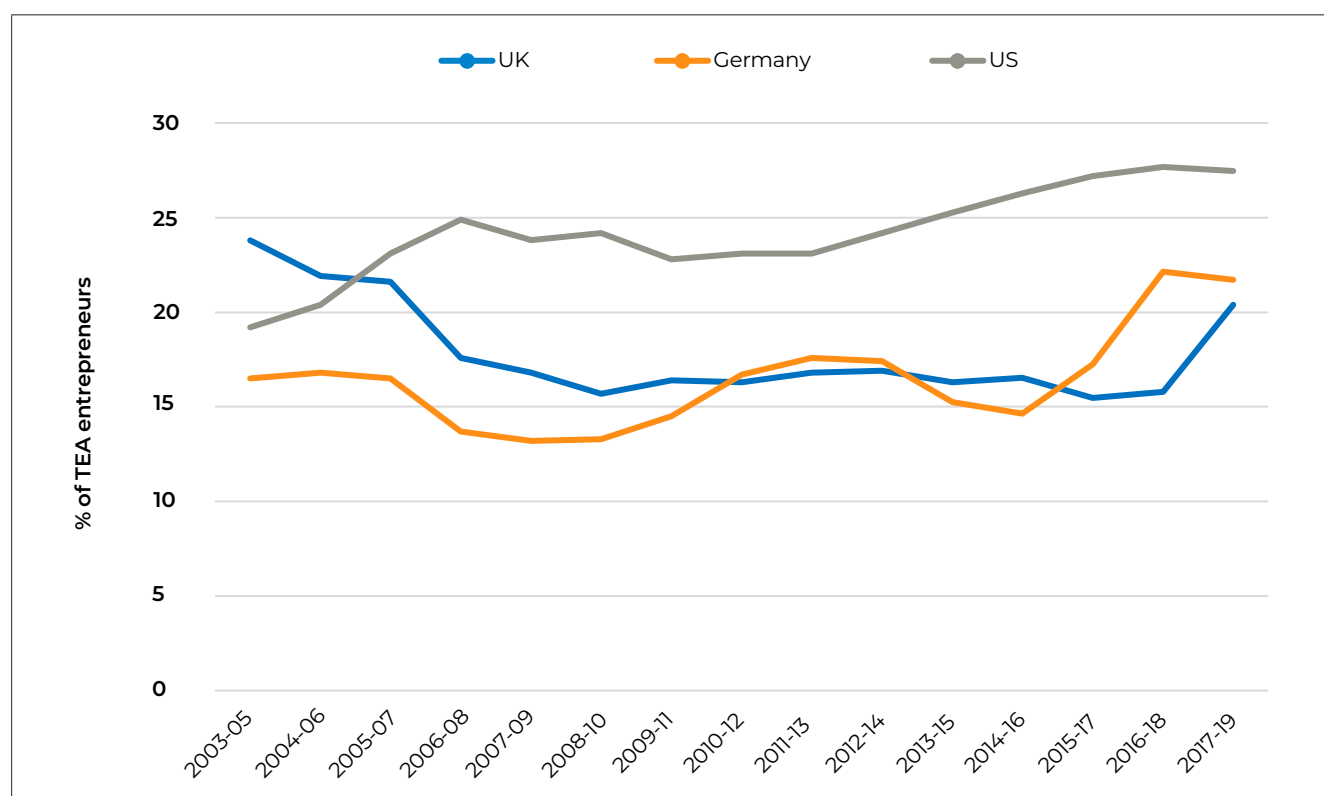


Figure 4.1: Relative frequency of high job expectation early-stage entrepreneurs in the UK, France, Germany and the US, three year rolling averages, 2003-2005 to 2017-2019

(Source: GEM Global APS 2003-2019)

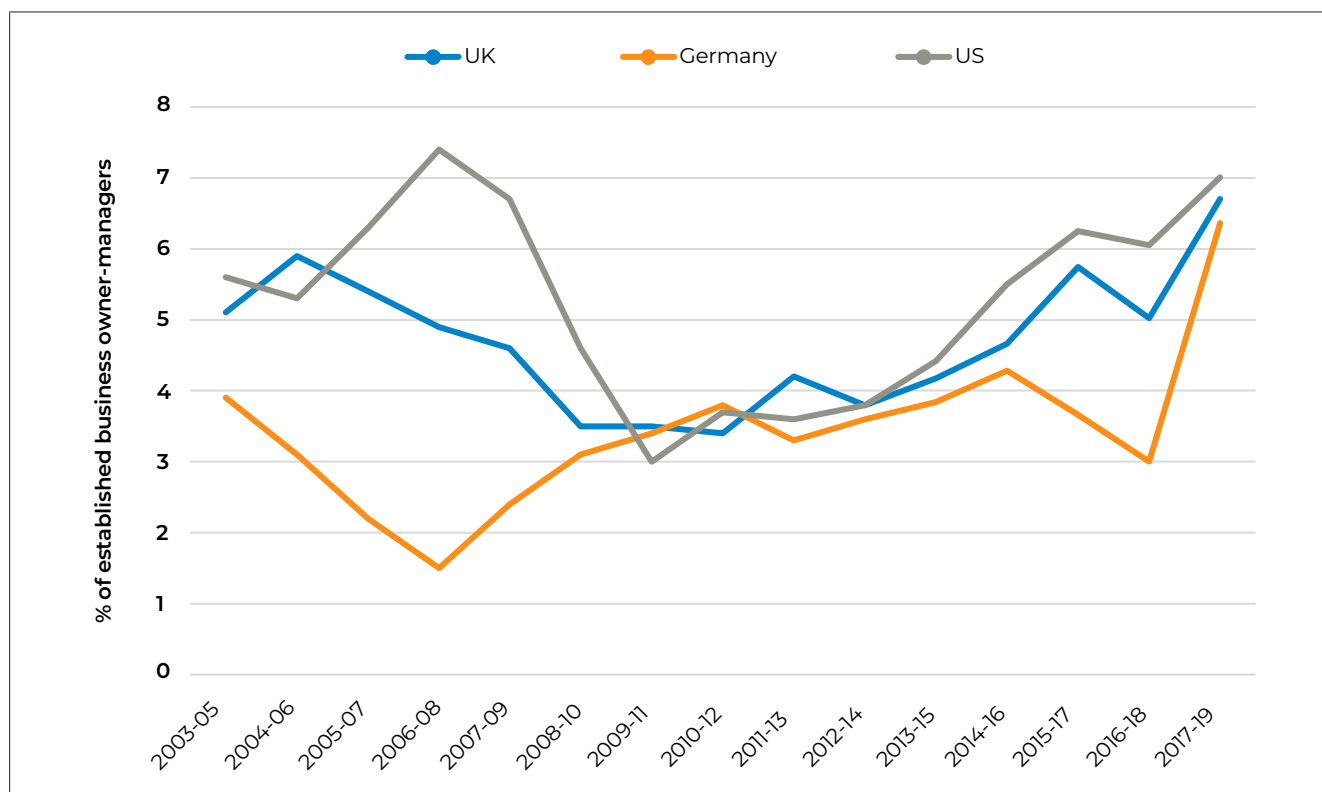


Figure 4.2: Relative frequency of high job expectation among established business owner-managers in the UK, Germany and the US, three year rolling averages, 2003-2005 to 2017-2019

(Source: GEM APS 2003-2019)

The trend in relative frequency of high job expectation among established business owner-managers is shown in Figure 4.2 using the same method as 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 2017-2019 all countries experienced an increase in rates after a drop in 2016-2018. Germany doubled its rate from 3% in 2016-18 to just over 6% in 2017-19. All three countries appear to be converging around 7% in 2019.

Focusing specifically on ‘high value activities’ Table 4.3 reports the share of early-stage and established businesses owners in the UK that are engaged in various combinations of high job expectation, new product markets and exporting activities (using a three-year average).

Just over 70% of established business owners and just under half of early-stage entrepreneurs are not engaged in any high value activities. Around one-third of early-stage entrepreneurs undertake one of these activities compared to one-quarter of established business owners. Just under one-fifth of TEA entrepreneurs and only 5% of established business owners are engaged in two or more activities. The results confirm the hypothesis that the owners of new, young firms are more ambitious and innovative than their incumbent counterparts.

It is noticeable that while the share (i.e. relative prevalence) of ambitious early-stage entrepreneurs has risen in the US since the early 2000’s, it has declined in the UK until very recently. This appears to be because of a growing proportion of solo self-employed in the early-stage entrepreneurial population in the UK and a decline in this group in the US¹⁷. By contrast, the share of ambitious established business owner-managers is similar in the UK and US, and slightly ahead of Germany.

¹⁷ See ERC Conference Video by Jonathan Levie (2015) - <https://youtu.be/CJAuzfUWWnc>

(% of TEA or EBO entrepreneurs)	High Value Activities	
	TEA	EBO
None of these activities	48.8	71.2
1 of these activities	33.5	24.2
2 of these activities	14.2	3.9
3 of these activities	3.6	0.7
Total	100.0	100.0

Table 4.3: Percentage of TEA and EBO entrepreneurs engaged in high value activities (high job expectation, new product markets, exporting), three-year average 2017-19
 (Source: GEM APS 2017-2019)

5. Anticipated Versus Actual Sources of Funding for Start-ups

Obtaining funding remains a major issue for many start-up businesses, with just over half of nascent entrepreneurs reporting that they require external funding. Since 2006, GEM has tracked the mix of funds that nascent entrepreneurs expect to use. Table 5.1 shows these expected funding sources over 2017-2019¹⁸. The results suggest that 5.0% required no funding while 41.0% said that they will fund it themselves, a drop from the previous year where over 50% said they will self-fund, but similar to 2017 levels. This is broadly similar to the proportion (43%) of small businesses reporting that they do not intend to use external finance during 2018¹⁹. There was a large increase in the percentage that stated a close family member as a source of funding, from 16.7% in 2018 to 27.5% in 2019. Similar to previous years, of those expecting funding from elsewhere, close family members and banks are most favoured. The share expecting funding from private investors or venture capital increased from 10.4% in 2018 to 14.7% in 2019, overtaking government programme funding as the third most favoured source. 6.5% expect to raise funds from online crowdfunding, similar to previous years.

These trends in higher rates of finance expected from family, friends and neighbours coincide with recent changes in informal investment, or investment by individuals in other people's new businesses in the last three years, as shown in Table 5.2²⁰. The informal investment rate increased to 5.0% in 2019 from 2.8% in 2018. Investment into companies owned by close family was the most common investment choice, at around 40%. The higher incidence of investing in strangers' businesses, first observed in 2014, dropped from a peak of 22.8% in 2018 to 13.5% in 2019, which is more in line with rates observed between 2014-2017. There was also an increase in investment in a work colleagues' business, which went above 10% for the first time in 2019 to 13.4%.

¹⁸ Note that in 2015 there were changes to several of the categories for expectations in funding. As a result the data is not strictly comparable with previous years; Table 6.1 presents the data for 2016-18, Table 6.1a in the Appendix presents the previous data from 2009-2015.

¹⁹ BRDC Continental - SME Finance Monitor Q4, 2019.

²⁰ For a discussion of the growing business angel market place in the UK see Wright, M., Hart, M and Fu, K (2015) "A Nation of Angels: assessing the impact of angel investing across the UK", Enterprise Research Centre Research Report, a January 2015.

Type of funding expected	2017	2018	2019
No funding needed	6.7	8.4	5.0
All funded by entrepreneur	44.0	53.0	41.0
None funded by entrepreneur	1.5	2.1	2.9
Close family member (spouse, parent, sibling)	15.5	16.7	27.5
Other relatives, kin or blood relations	5.7	7.5	3.7
Employer or work colleagues	2.4	5.1	8.4
Private investor or venture capital	14.6	10.4	14.7
Friends or neighbours	4.4	3.8	3.8
Banks or other financial institutions	23.4	15.1	22.5
Government programmes, donations or grants	20.6	11.6	13.9
Online crowdfunding	6.5	5.8	6.5
Any other source	9.8	6.2	5.5

Table 5.1: Percentage of nascent entrepreneurs expecting funding from different sources 2017-19
(Source: GEM UK APS 2017, 2018, 2019)

Informal investment rate	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
% aged 18-64 who have invested in someone else's new business in the last 3 years	1.2	2.9	2.4	2.6	2.1	1.9	2.3	3.2	2.9	2.8	5.0
Relationship of latest investee (% of latest investments)											
Close family member (spouse, parent, sibling)	41.0	37.0	50.2	57.5	46.8	40.3	38.0	37.3	43.4	36.8	37.3
Other relative, kin or blood relations	4.5	7.5	6.2	2.2	6.6	11.1	0.4	2.1	1.4	2.8	2.1
Work colleague	8.3	2.2	7.4	8.9	3.9	5.1	0.5	4.0	6.7	8.0	13.4
Friend or neighbour	35.5	48.5	28.4	23.4	38.7	25.5	39.2	38.4	28.0	29.6	27.9
A stranger with a good business idea	8.6	4.5	7.9	4.1	4.0	17.9	16.3	15.8	15.6	22.8	13.5
Other	2.1	0.4	0.0	3.8	0.0	0.1	5.7	2.4	4.9	0.0	5.8

Table 5.2: 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 2019
(Source: GEM APS 2010 - 2019)

6. Entrepreneurial Framework Conditions in the UK

There is a growing recognition in entrepreneurship research that context is highly important for understanding when, why and how entrepreneurial activity happens²¹. Any decision to start a new enterprise is taken in a specific context which encompasses a wide range of economic, political, institutional, financial and social conditions. These conditions may encourage and facilitate or discourage and hinder entrepreneurial activity. Each national context is different and evolves with time.

To assess the context in which entrepreneurial activity takes place, GEM created a specific tool which defines *Entrepreneurship Framework Conditions* (EFCs) based on the *GEM National Expert Survey* (NES). At least 36 experts, carefully selected according to their knowledge and experience, participate in the NES each year. These experts, of whom no more than a quarter participated in the survey the previous year (to reduce bias and ensure objectivity), answer questions about how they rate the sufficiency of each framework condition. Each of the nine framework conditions is based on responses of the experts to 5-8 questions²². Three of the EFCs (Government policy, Entrepreneurship education and Ease of entry) were further split into two subsets in order to satisfy the reliability condition²³ bringing the overall number of pillars describing national entrepreneurship context to twelve (Table 6.1).

6.1. NATIONAL ENTREPRENEURSHIP CONTEXT INDEX (NECI)

In order to provide an overall view of how favourable an environment is for entrepreneurial activity across countries, GEM introduced the National Entrepreneurship Context Index (NECI)²⁴ in 2018. It is a composite index which represents the weighted average state of the set of EFCs as set by Table 6.1.

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

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

²¹ See, for example, Ali, A., Kelley, D. and Levie, J. (2020) Market-Driven Entrepreneurship and Institutions. *Journal of Business Research*, 113, 117-128.

²² Each item in the form of a statement is rated by each national expert on a scale from 0 (completely false) to 10 (completely true). GEM then harmonizes and weights the data, calculating a rating for every framework condition by applying a principal component analysis to each section of the questionnaire. See, Bosma, N. et al. (2020). *Global Entrepreneurship Monitor. 2019/2020 Global Report*. London: Global Entrepreneurship Research Association.

²³ To measure the internal consistency or reliability of blocks of items for underlying EFC, GEM uses the Cronbach's Alpha. The coefficients for each of the twelve blocks are significantly higher than the cut value of 0.5.

²⁴ See, Bosma et al. (2020) for details.

1	ACCESS TO ENTREPRENEURIAL FINANCE Are there sufficient funds available to new start-ups, from informal investment and bank loans to government grants and venture capital?
2a	GOVERNMENT POLICY: SUPPORT AND RELEVANCE Do government policies promote entrepreneurship and support those starting a new business venture?
2b	GOVERNMENT POLICY: TAXES AND BUREAUCRACY Are business taxes and fees affordable for the new enterprise? Are rules and regulations easy to manage, or an undue burden on the new business?
3	GOVERNMENT ENTREPRENEURSHIP PROGRAMMES Are quality support programmes available to the new entrepreneur at local, regional and national levels?
4a	ENTREPRENEURSHIP EDUCATION AT SCHOOL Are schools introducing ideas of entrepreneurship, and instilling students with entrepreneurial values such as enquiry, opportunity recognition and creativity?
4b	ENTREPRENEURSHIP EDUCATION POST-SCHOOL Do colleges, universities and business schools offer effective courses in entrepreneurial subjects, alongside practical training in how to start a business?
5	RESEARCH AND DEVELOPMENT TRANSFERS To what extent can research findings, including from universities and research centres, be translated into commercial ventures?
6	COMMERCIAL AND PROFESSIONAL INFRASTRUCTURE Does access to affordable professional services such as lawyers and accountants support the new venture, within a framework of property rights?
7a	EASE OF ENTRY: MARKET DYNAMICS Are there free, open and growing markets where no large businesses control entry or prices?
7b	EASE OF ENTRY: MARKET BURDENS AND REGULATIONS Do regulations facilitate, rather than restrict, entry?
8	PHYSICAL INFRASTRUCTURE To what extent are physical infrastructures, such as roads, Internet access and speed, the cost and availability of physical spaces and such like, adequate and accessible to entrepreneurs?
9	SOCIAL AND CULTURAL NORMS Does national culture stifle or encourage and celebrate entrepreneurship, including through the provision of role models and mentors, as well as social support for risk-taking?

Table 6.1: Entrepreneurship Framework Conditions

(Source: Bosma et al. (2020), p.69)

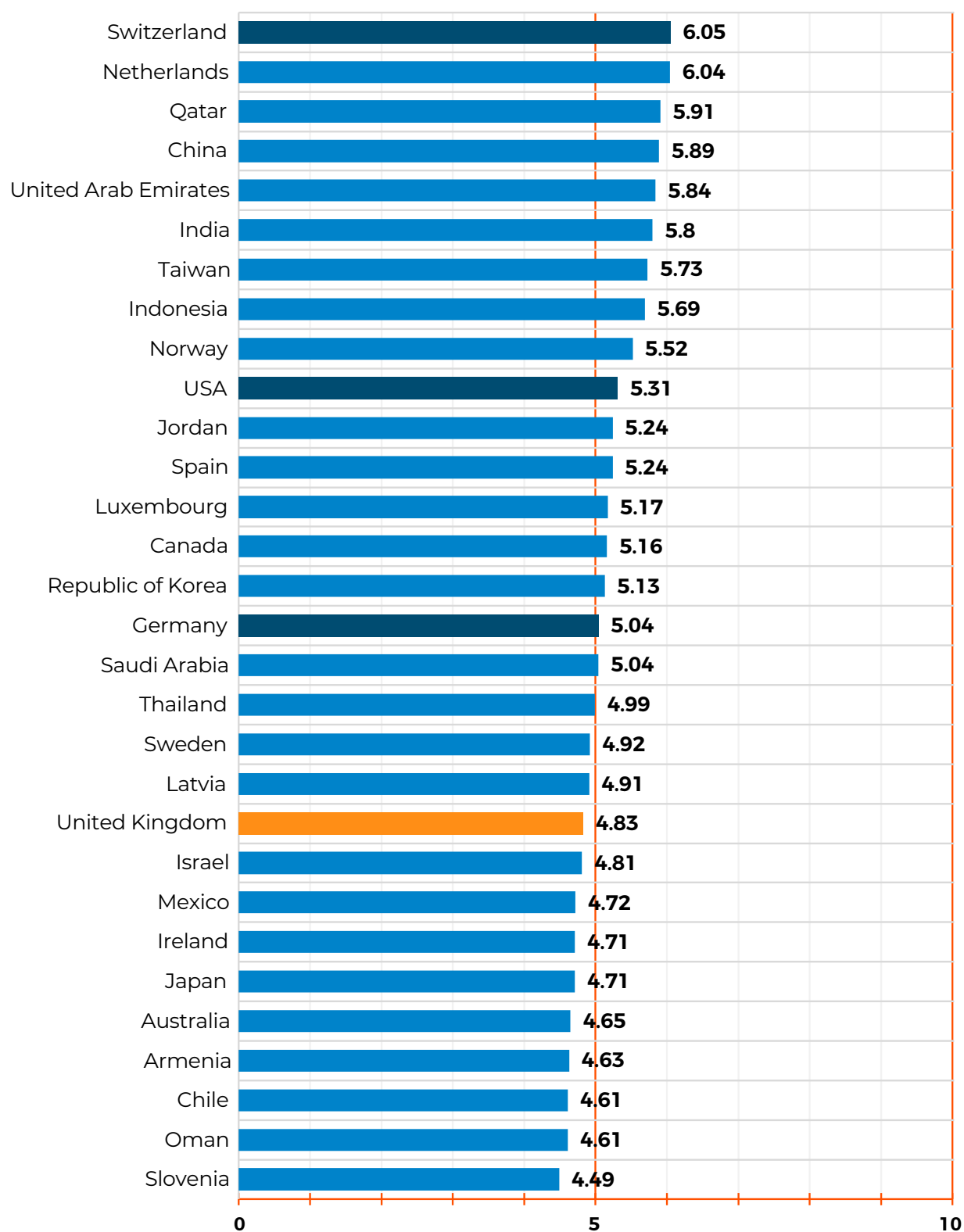


Figure 6.1: National Entrepreneurship Context Index (NECI) in 2019, first 30 out of 54 countries
 (Source: GEM Global NES 2019)

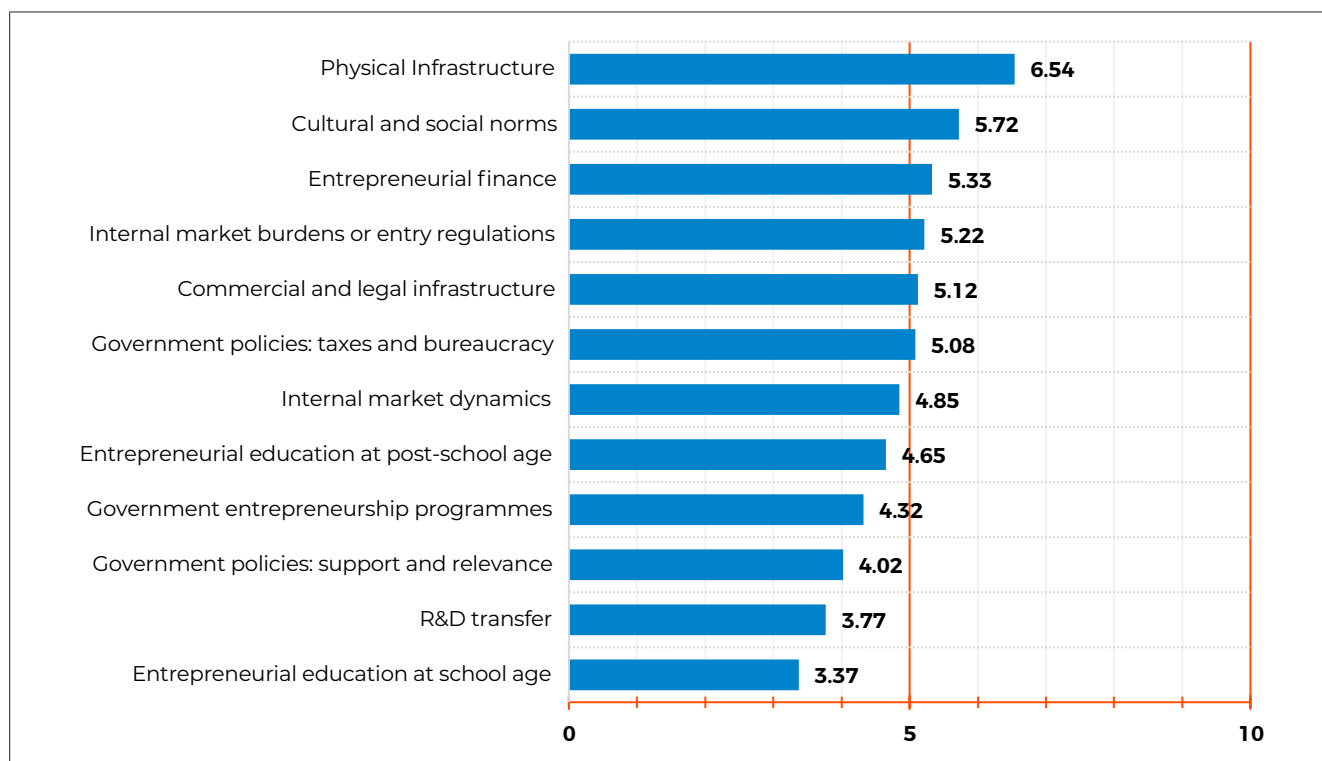


Figure 6.2: Entrepreneurial Framework Conditions in the UK in 2019

(Source: GEM UK National Expert Survey (NES) 2019)

In 2019, the UK with a total score of 4.83 ranked 21st among 54 countries (Figure 6.1). A score below 5 out of 10 (neutral point) indicates that experts regard the conditions for entrepreneurship to have room for improvement. The UK overall index of entrepreneurship context is slightly lower than NECI scores of benchmark countries, Germany (5.04) and USA (5.31), and much lower than NECI scores of top-ranked countries including Switzerland (6.05) and Netherlands (6.04).

On the contrary, the other six conditions scored below 5 points are areas for particular attention: internal market dynamics (4.85), entrepreneurial education at post-school age (4.65) and at school age (3.37), government entrepreneurship programmes (4.32), government policies regarding business support (4.02) and R&D transfer (3.77).

Figure 6.2 reports the values for each of the twelve pillars describing the entrepreneurial context. Among these twelve pillars, six have values above 5 (out of 10) meaning that, according to the national experts, physical infrastructure (6.54), cultural and social norms (5.72), entrepreneurial finance (5.33), internal market burdens (5.22), commercial and professional infrastructure (5.12) and government policies in relation to taxes and bureaucracy (5.08) are relatively satisfactory.

6.2. DYNAMICS OF NECI and EFCs IN THE UK IN 2018-2019

Compared to 2018, there was a decrease in perception of the overall state of the entrepreneurial context in 2019: NECI dropped by 0.1 from 4.94 to 4.83²⁵. This dynamic is driven by both the individual score for each framework condition and by the importance that experts attribute to them in terms of their current influence on entrepreneurial activity²⁶.

Table 6.2 shows the dynamic of value and importance of each EFC in 2018 and 2019. In this table, framework conditions are organised by order of importance/influence for the entrepreneurial context in 2019.

Although experts estimate that all factors are important (all importance weights are above 5), some EFCs stand out as the most relevant. Although the ranking of importance changes from 2018 to 2019, entrepreneurial finance, government policies to support businesses and internal market dynamics are consistently at the top of the list.

On the left-hand side of the table, the cells are in coloured in blue when the average EFCs are sufficient (the score is above 5) and in orange when the condition is insufficient (the score is below 5). Orange and blue arrows indicate if there has been an improvement in EFC (score and importance) from 2018 to 2019.

Score			EFCs	Importance		
2018		2019		2018		2019
5.53	↘	5.33	Entrepreneurial finance	7.73	↗	8.03
3.77	↗	4.02	Government policies: support and relevance	7.92	↘	7.20
5.74	↘	5.12	Commercial and legal infrastructure	6.79	↗	7.00
5.46	↘	4.85	Internal market dynamics	8.47	↘	6.97
5.43	↘	5.08	Government policies: taxes and bureaucracy	6.54	↗	6.94
4.93	↗	5.22	Internal market burdens or entry regulations	7.09	↘	6.89
4.64	↘	3.77	R&D transfer	6.54	↗	6.75
4.84	↘	4.65	Entrepreneurial education at post-school age	7.23	↘	6.69
5.36	↗	5.72	Cultural and social norms	7.00	↘	6.67
6.22	↗	6.54	Physical infrastructure	7.46	↘	6.58
3.27	↗	3.37	Entrepreneurial education at school age	7.33	↘	6.56
4.46	↘	4.32	Government entrepreneurship programmes	6.73	↘	5.86

Table 6.2: Entrepreneurial Framework Conditions in the UK in 2018 and 2019: values and importance
(Source: GEM UK National Expert Survey (NES) 2018 and 2019)

²⁵ In 2019, GEM improved the methodology of calculation of NECI. However, 2018 and 2019 levels are still comparable: when 2018 methodology is applied to 2019 data, the obtained NECI score is 4.84 which is very close to the NECI calculated using the new refined methodology (4.83).

²⁶ Each national expert rate the importance of each EFC to the current state of the entrepreneurship environment where entrepreneurial activity is taking place on a scale from 0 (not at all important) to 10 (extremely important). For example, experts are asked to assign a weight of 10 to entrepreneurial finance component, if they think that the availability of financing for entrepreneurs is currently the biggest factor contributing to the (good or bad) state of the entrepreneurial framework.

There was an improvement in EFC scores for government business support policies and entrepreneurial education at school age (they remain however insufficient according to experts). Typically, high scores of cultural and social norms and physical infrastructure has also increased, though their importance weight decreased in the light of current priorities. The score for internal market burdens and entry regulations increased and passed from insufficient status to sufficient.

On the contrary, the entrepreneurial finance framework condition has seen a decrease of the score while experts' perceptions of its importance for entrepreneurial context increased. It is also the case for commercial, professional and legal infrastructure, government policies concerning taxes and regulations and R&D transfer.

The most striking change between 2018 and 2019 concerned internal market dynamics: it dropped from 5.46 to 4.85. This is most likely to be driven by the effect of Brexit and the uncertain political and investment climate, which were much more of a concern for experts in 2019.

6.3. EFCs IN THE UK AND BENCHMARK COUNTRIES IN 2019

Typically, the UK framework conditions mirror relatively closely the US EFCs, except for lower scores for Physical infrastructure and Cultural and social norms in terms of support of new and growing firms as shown in Figure 6.3. Entrepreneurial education at school, post-school age and access to entrepreneurial finance are also generally evaluated by the US experts higher than by their UK peers, and this is again the case in 2019. One dimension for which the UK shows consistently higher score than the US is ease of market entry for new and growing firms and internal market burdens and regulations – the UK ranked 7th for this framework condition among 54 countries which participated in NES in 2019.

Compared to Germany, the UK framework conditions evaluated by experts in 2019 are less favourable in terms of Government entrepreneurship programmes, commercial and professional infrastructure, R&D transfer and internal market dynamics. In contrast, the EFCs scores indicate more favourable cultural and social norms (5.72 vs 4.78) and more favourable context in terms of taxes and bureaucracy (5.08 vs 4.15) in the UK than in Germany.

Compared to Switzerland, the country with the highest NECI in 2019, the UK had a higher score for internal market dynamics (4.85 vs 4.49) and close scores for entrepreneurial finance (5.33 vs 5.5) and internal market burdens and entry regulations (5.22 vs 5.54). For all other entrepreneurial framework conditions, Switzerland showed higher scores. The gap is particularly important for R&D transfer (3.77 vs 6.35) and physical infrastructure (6.54 vs 8.58).

The entrepreneurial finance framework condition describes the availability of financial resources to new and growing firms across different types of finance (debt, equity, subsidies, and alternative sources of finance).

Overall, access to entrepreneurial finance was one of the UK's strongest framework conditions compared to other countries in 2019: with a total score of 5.33, the UK ranked 10th among 54 countries for this EFC. The highest scores are attributed by experts to traditional sources of finance – debt and equity – but also to alternative sources of finance, such as crowdfunding, where the UK is known to be at the forefront of financial innovation.

There is only one dimension of this pillar that experts evaluate as insufficient - government subsidies. There is a significant difference for this score particularly when compared with Germany and Switzerland (Figure 6.4).

Government policies are evaluated along two dimensions: public support to new and growing firms at national and local levels and taxation policy and regulations for enterprises. The taxes, regulations and bureaucracy framework condition is evaluated as sufficient: on average experts find that taxes and regulations are applied to new and growing firms in a consistent and predictable way, that taxes are not a burden and that regulations are not unduly difficult to cope with.

Figure 6.5 shows that for this condition the UK compares positively with benchmark countries: the UK has higher scores for all components than Germany and for two out of four components than the US. The speed of obtaining permits and licences is the only component of this EFC which has a score below 5. However, it is also the case for all other participating countries, including Switzerland.

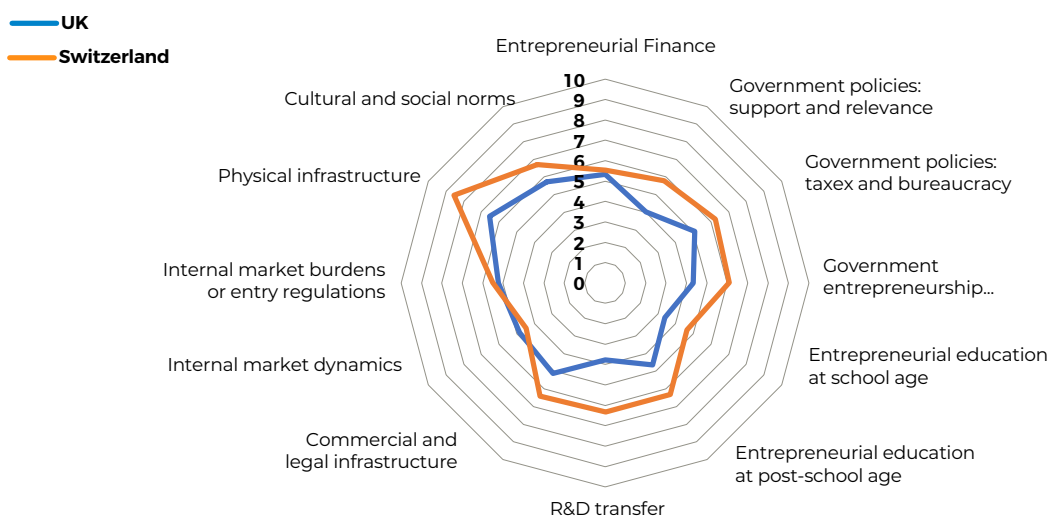
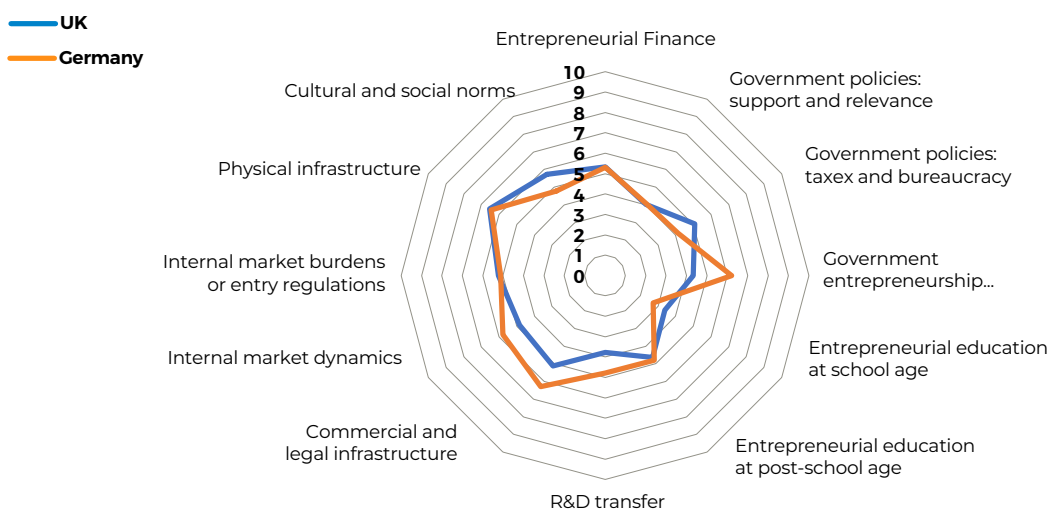
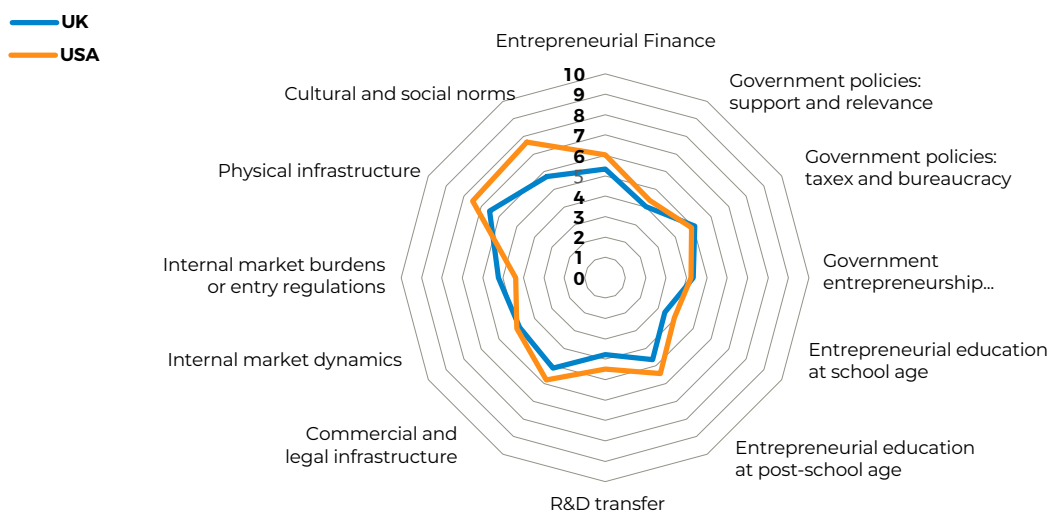


Figure 6.3: EFCs in the UK and benchmark countries in 2019

(Source: GEM UK NES 2019, GEM Global NES 2019)

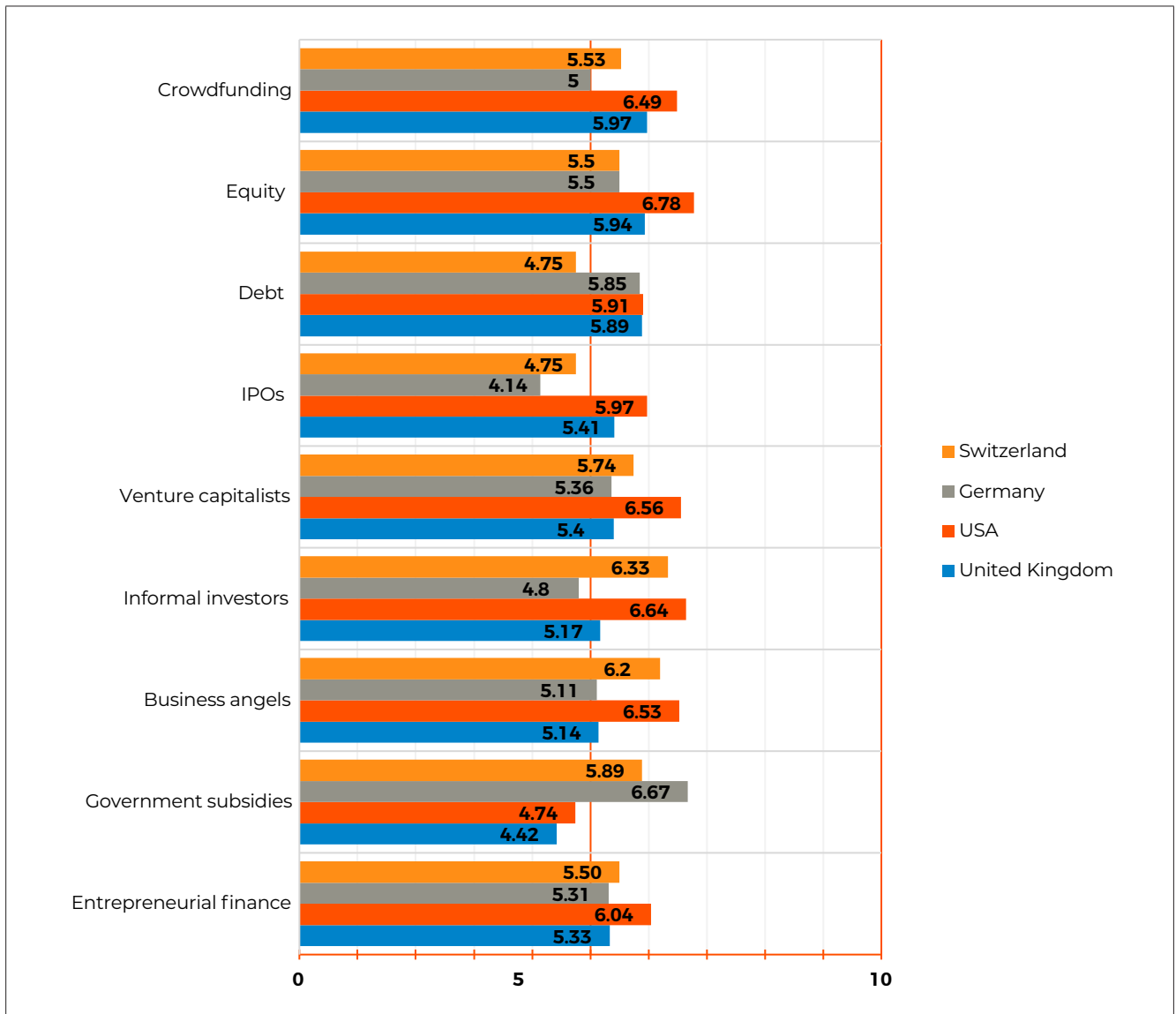


Figure 6.4: Entrepreneurial Finance in the UK and benchmark countries in 2019
 (Source: GEM UK NES 2019, GEM Global NES 2019)

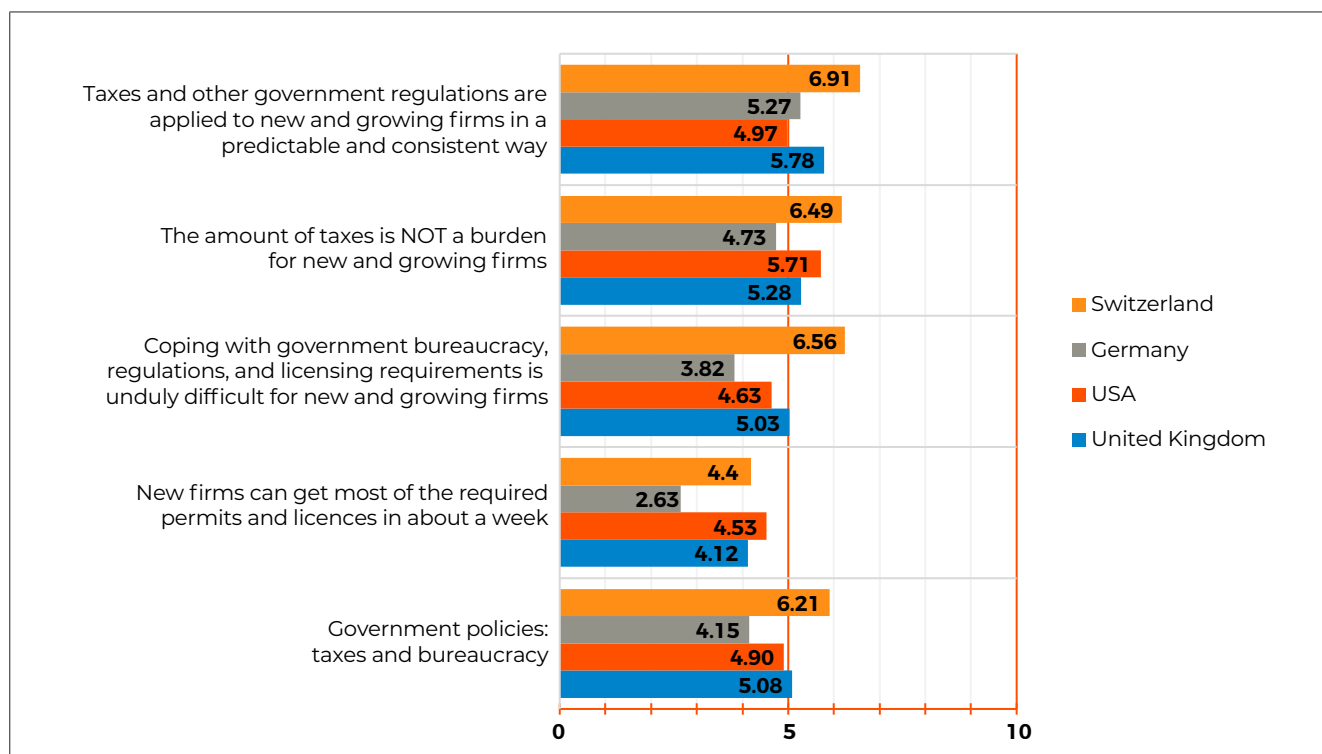


Figure 6.5: Government policies: taxes and bureaucracy in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

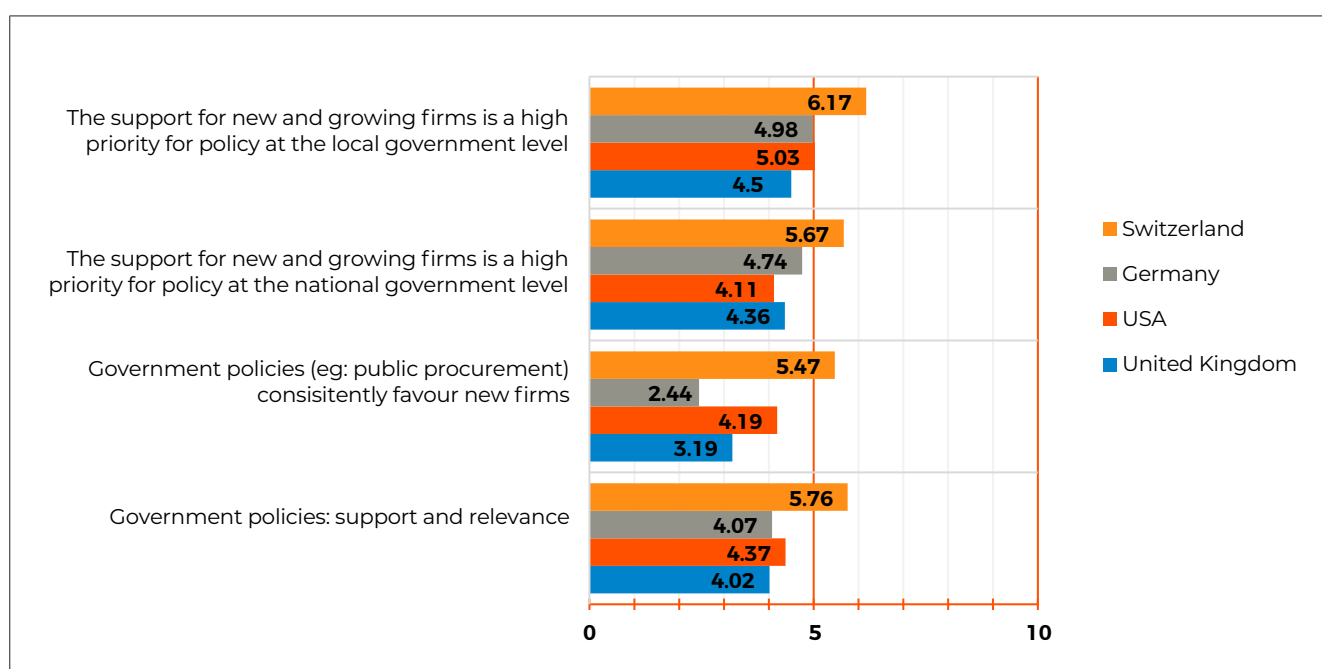


Figure 6.6: Government policies: support and relevance in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

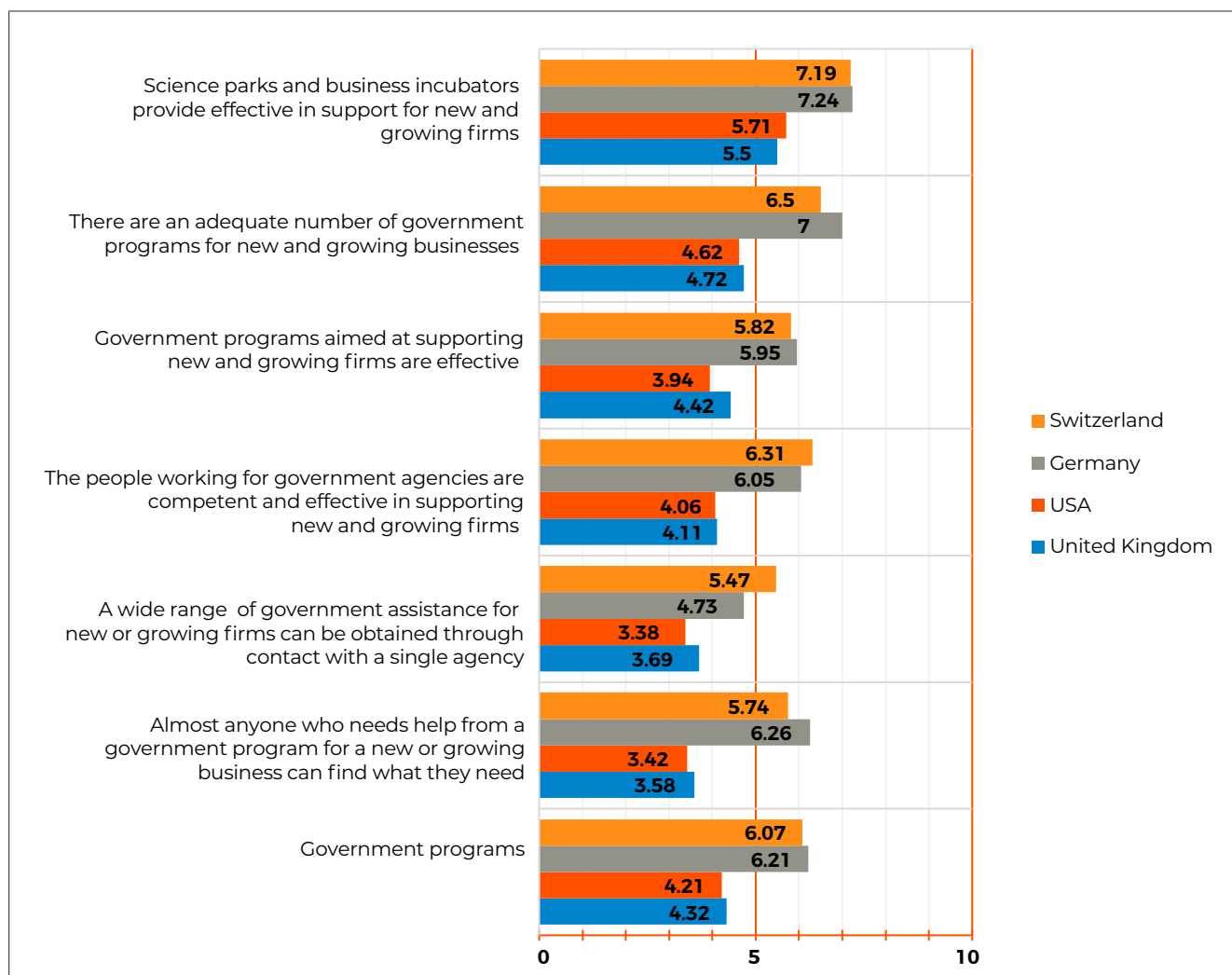


Figure 6.7: Government entrepreneurship programmes in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

In contrast, experts on average disagree that the support for new and growing firms is a high priority at the local government and national levels and even less so that government policies consistently favour new firms (Figure 6.6).

The government entrepreneurship programmes framework condition is identified as one of the potential areas for improvement. As Figure 6.7 shows, while experts evaluate positively the effectiveness of support provided to firms by science parks and incubators, they do not find the government programmes to support start-ups and growing firms either adequate in numbers or sufficiently effective. The question “almost everyone who needs help from a government programme for a new or growing business can find what they need” has received the lowest average score (3.58/10) among all the components of this EFC.

The UK compares favourably with the US except for the science parks and business incubators component. However, German and Swiss experts evaluated significantly higher across all the dimensions of the government entrepreneurship programmes EFC in their respective countries than the experts in the UK. The entrepreneurial education framework condition describes the extent to which entrepreneurial qualities are encouraged and developed at schools, vocational education institutions and universities. Entrepreneurial education at school age, especially in the early years of schooling, is increasingly seen as one of the keys to successfully develop entrepreneurial capabilities and encourage innovative entrepreneurship at later stages (Figure 6.8).

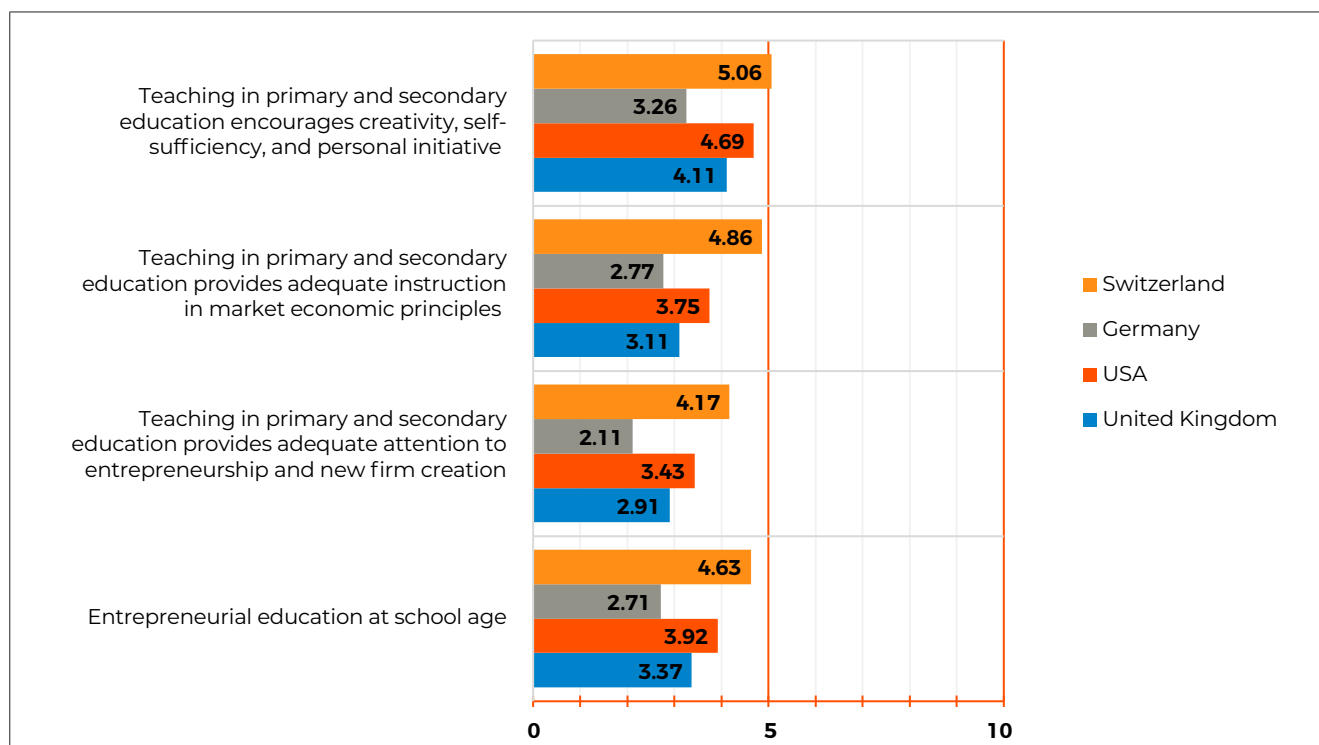


Figure 6.8: Entrepreneurial education at school age in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

In 2019 with a total score of 3.37/10 the UK ranked 20th among 54 countries for this EFC. However, low scores for this condition are not uncommon: experts from many high-income countries recognise that there is insufficient attention to entrepreneurial education at primary and secondary school level in their countries. Only five countries have scores higher than 5 and the Netherlands is the leading country for entrepreneurial education at school level with the score 5.45.

Entrepreneurial education at post-school age in the UK received relatively high scores for all three components (vocational, professional and continuing education, business and management education, colleges and universities), which are comparable to the scores in Germany but lower when compared to the US and Switzerland (Figure 6.9). Experts see the need to improve entrepreneurial education while recognising the overall quality of education at post-school level in the UK. Creativity, self-sufficiency, and personal initiative component of this EFC received a higher average score from the UK experts (4.11) when compared to instruction in market economic principles (3.11) and in entrepreneurship and new firm creation (2.91).

The R&D transfer condition describes to what extent scientific research findings can create new commercial opportunities and be transferred from universities and research centres to new and growing firms. With a total score of 3.77 the UK ranked 31st among 54 countries for this EFC. In Figure 6.10, experts underline particularly that new and growing firms often cannot afford the latest technology (2.78/10) and that smaller firms do not have as good access to technology and research findings as large firms.

The commercial, professional and legal infrastructure framework condition, as shown in Figure 6.11, refers to the availability and affordability for businesses of banking, accounting, legal, consulting services, as well as to the presence of subcontractors and suppliers.

While the availability of banking, professional legal and accounting services is evaluated as globally satisfactory, experts underline the difficulty for new and growing firms to get good subcontractors, suppliers and consultants (4.35/10) and to afford the costs of their services (3.59/10). The UK is behind leading benchmark countries for this EFC with the total score of 5.12 (25th out of 54 countries).

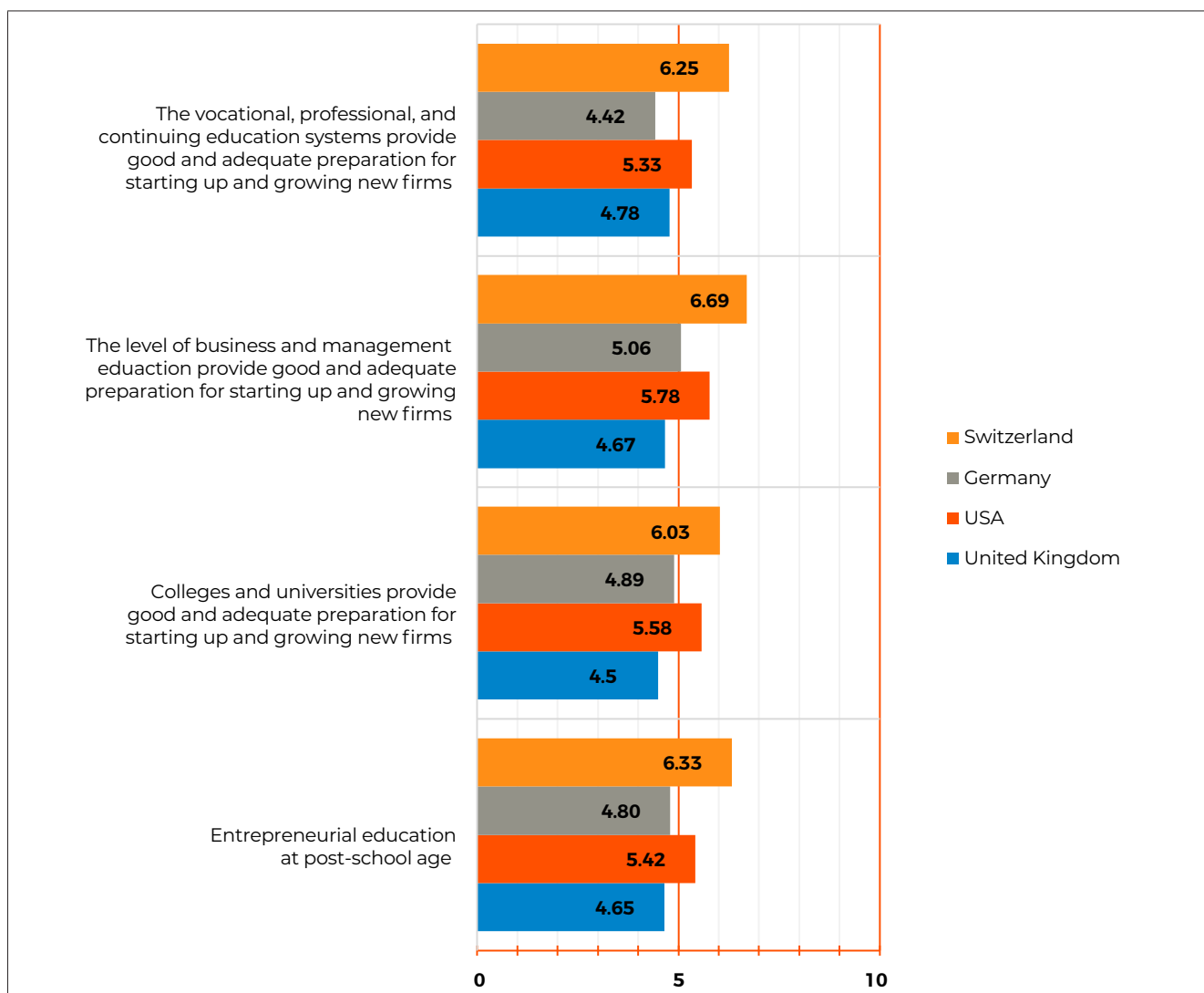


Figure 6.9: Entrepreneurial education at post-school age in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

The internal market dynamics framework condition describes the level of change in both consumer and business-to-business markets from year to year. As Figure 6.12 shows, in 2019, experts evaluated both components of the condition just below 5 (ranking 35/54) which represents a considerable decline compared to 2018. South Korea leads the ranking for this condition (7.49), while China has a score of 6.88 (3rd out of 54 countries). Among European countries, the highest scores for market dynamics are demonstrated by Poland (6.53), Sweden (6.07) and Germany (5.79).

In contrast, the UK compares well to other countries in terms market openness: internal market burdens and entry regulations were evaluated at 5.22 by the experts (7th highest score of 54 countries). Figure 6.13 shows that the UK demonstrates higher scores for each item of this EFC compared to the US and Germany (with the exception of anti-trust legislation which was scored higher by German experts).

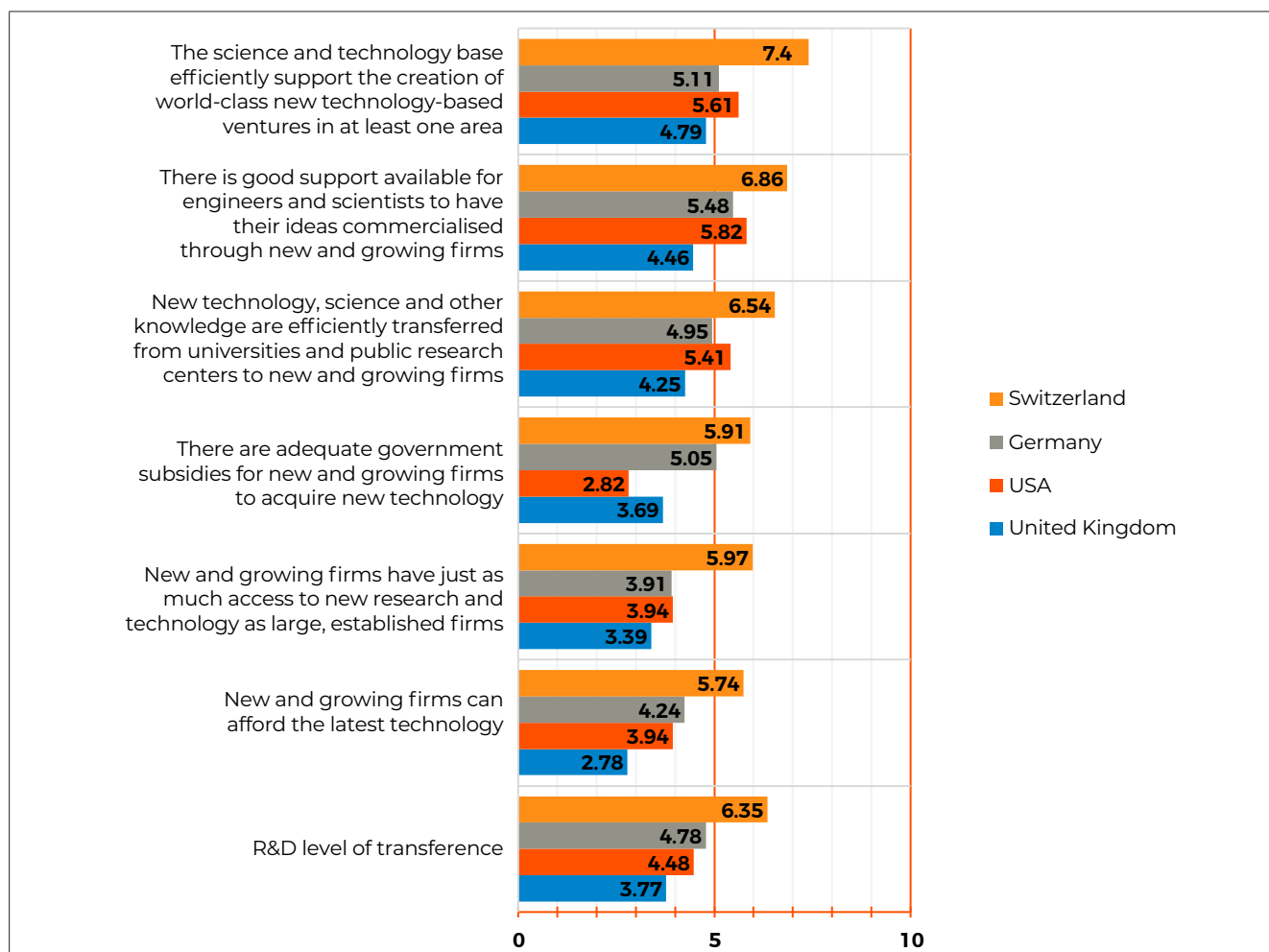


Figure 6.10: R&D transfer in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

The physical infrastructure framework condition describes the availability and the cost of basic utilities, transport and communication networks to new and growing businesses. While experts evaluated the access to physical infrastructure for businesses as globally satisfactory and this EFC had the highest score (6.54) among all twelve pillars, it put the UK only on 34th place out of 54 countries which participated in NES in 2019.

Figure 6.14 shows that benchmark countries often showed higher scores for each of the dimensions of this EFC. Particular attention should be taken to make physical infrastructure (roads, utilities, communications, water disposal) more supportive to business development and growth.

Cultural and social norms play an important role in encouraging and supporting entrepreneurship and vary a lot across countries (Figure 6.15). Unsurprisingly, the US is the leading country for this framework condition (7.68). The UK with the overall score of 5.72 comes at 19th position among 54 countries.

Experts evaluated very positively the extent to which the national culture supports individual success (6.19) and encourages innovativeness (6.08), emphasizes individual responsibility as opposed to collective (5.86), self-efficacy and personal initiative (5.53). The extent to which the national culture in the UK encourages entrepreneurial risk-taking received the lowest score compared to other components (4.97).

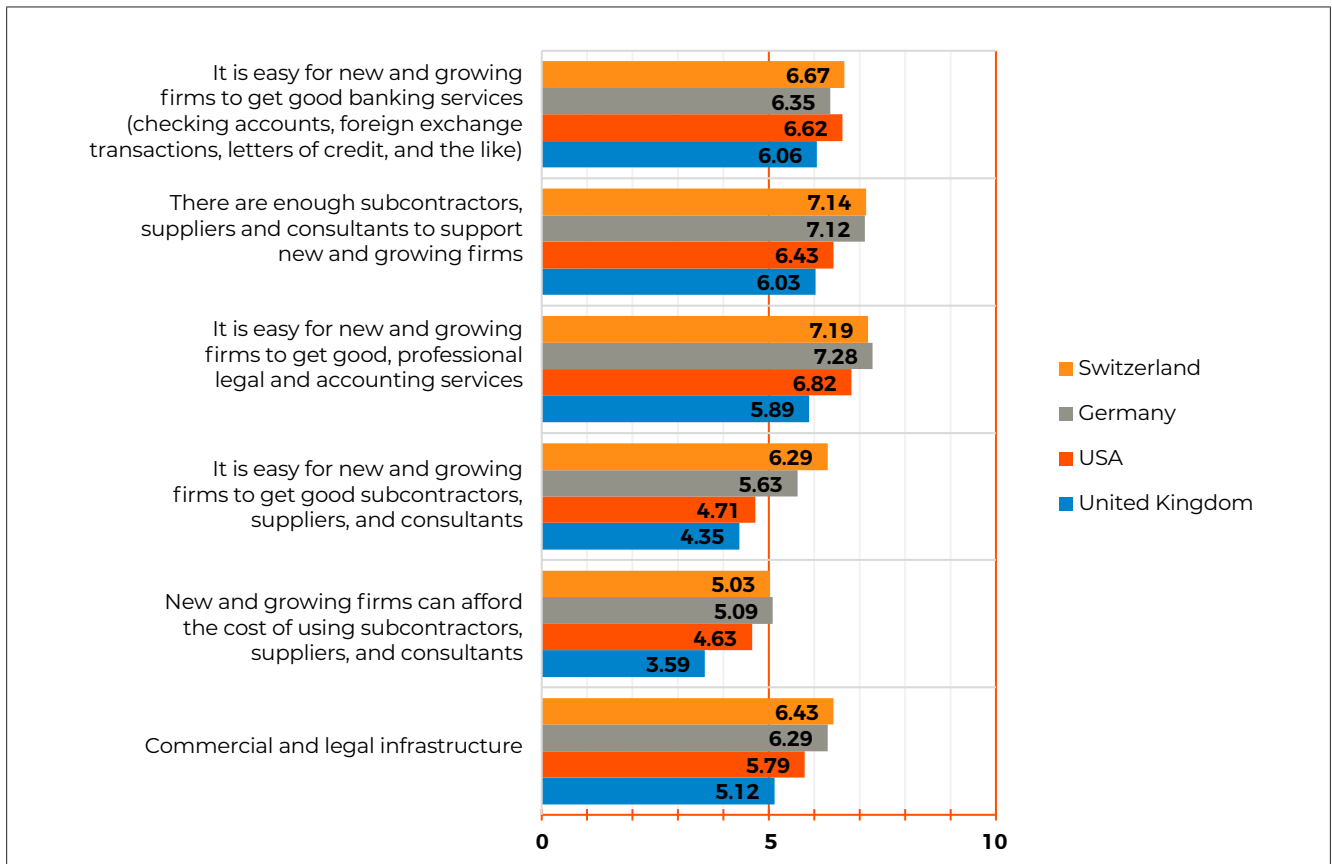


Figure 6.11: Commercial, professional and legal infrastructure in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

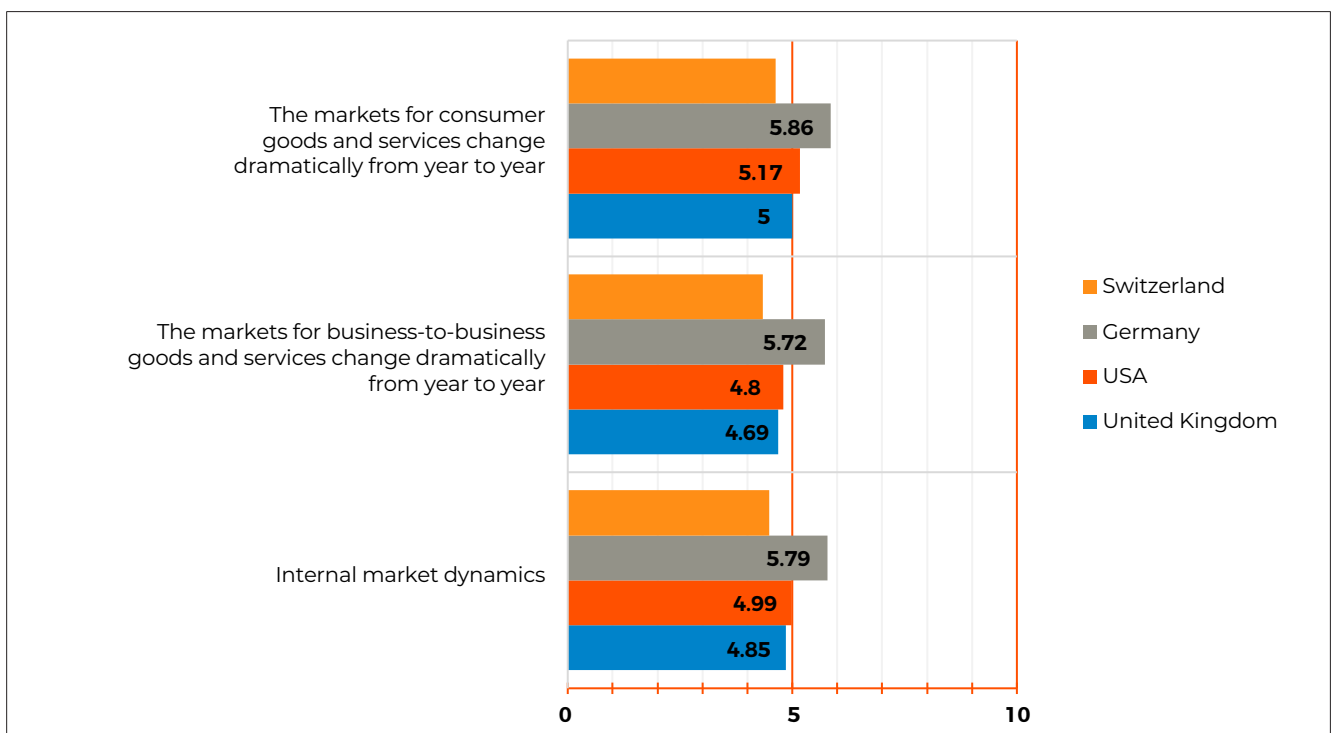


Figure 6.12: Internal market dynamics in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

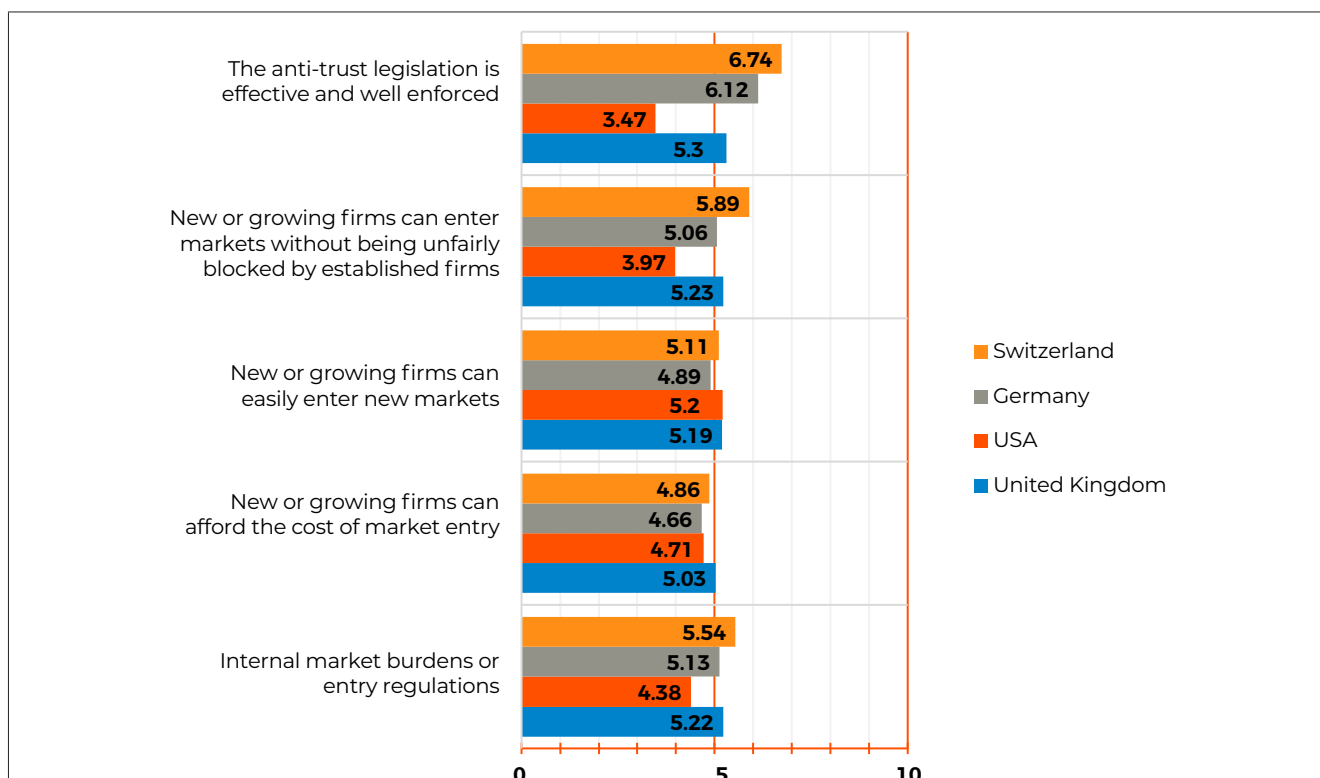


Figure 6.13: Internal markets burdens or entry regulations in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

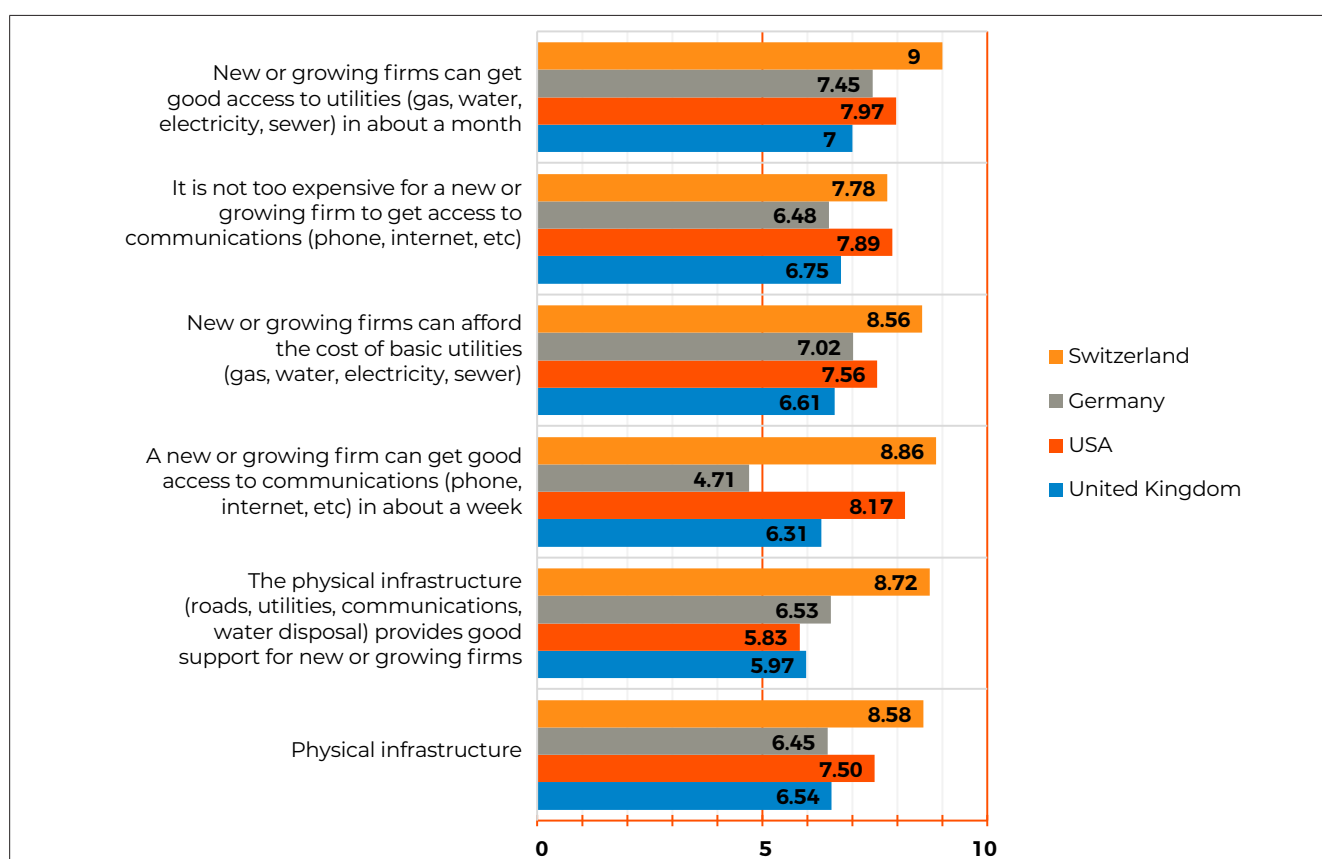


Figure 6.14: Physical infrastructure in the UK and benchmark countries in 2019
(Source: GEM UK NES 2019, GEM Global NES 2019)

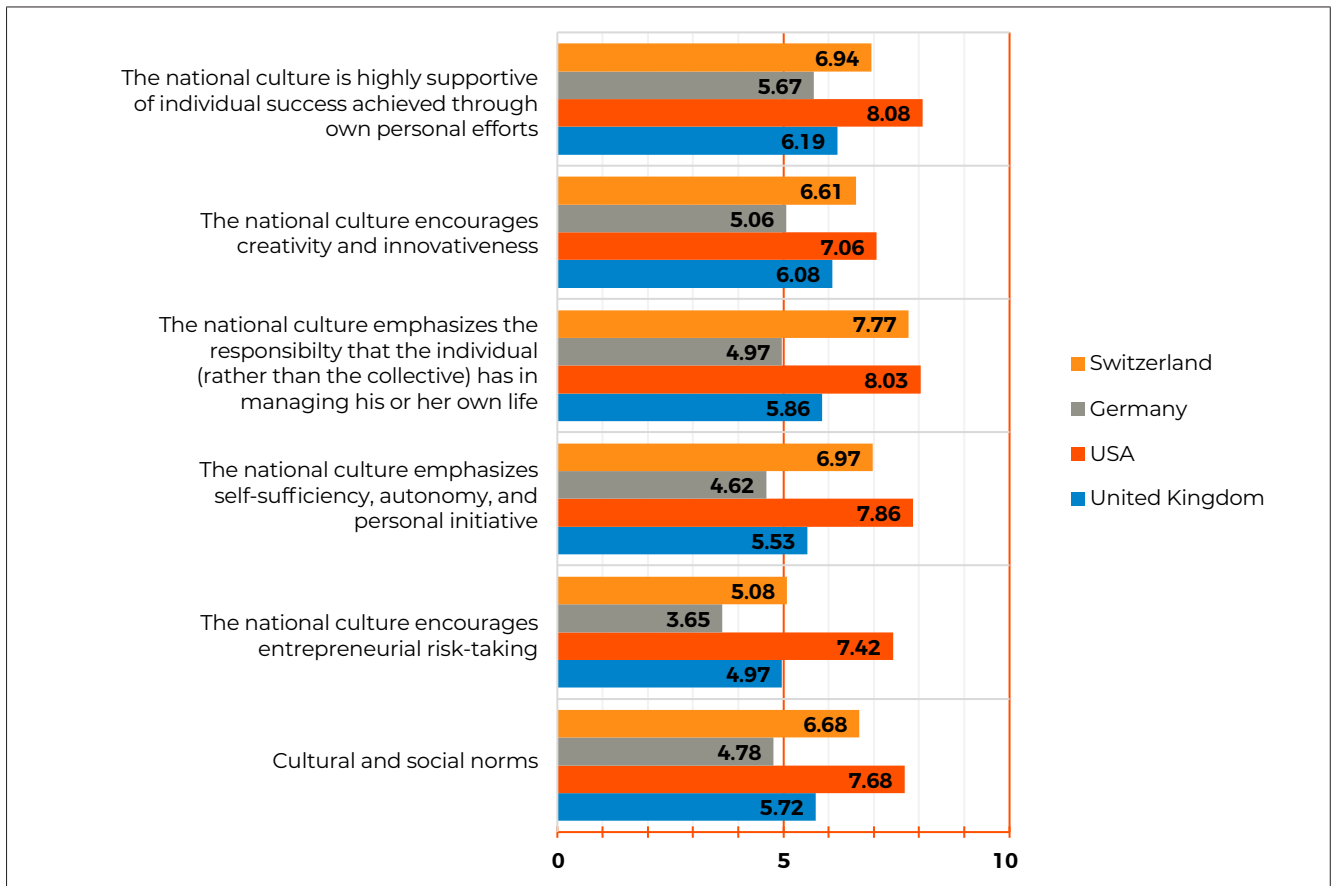


Figure 6.15: Cultural and social norms in the UK and benchmark countries in 2019
 (Source: GEM UK NES 2019, GEM Global NES 2019)

6.4. OBSTACLES TO ENTREPRENEURSHIP AND RECOMMENDATIONS

To better understand driving forces and barriers to entrepreneurship in the UK, experts were asked to state areas that, in their view, are constraining or, on the contrary, are fostering entrepreneurial activity. They were also asked to provide recommendations to improve the entrepreneurial context in the UK.

The analysis of these responses shows that access to finance remains one of the major obstacles to entrepreneurial activity in the UK: 47% of experts in 2019 and 58% in 2018 cite financial support to entrepreneurship as a constraint. This contrasts with the fact that entrepreneurial finance was evaluated as one of the strongest EFCs in the UK. The explanation to this contradiction lies in regional disparities in terms of access to finance in the UK, that is, in regions outside London and the South East, and in mismatches between offer and demand. Experts emphasize the necessity to improve access to finance for start-ups and early-stage businesses.

The second most cited constraint to entrepreneurial activity in 2019 was the economic climate/crisis driven by Brexit uncertainty: 42% of experts mentioned it as a major concern compared to 19% in 2018.

Education and training were the third most cited obstacle to entrepreneurial activity (28% in 2019 and 25% in 2018). Experts particularly emphasised the necessity to improve entrepreneurial education at school level with the focus on innovation and financial literacy. Other often cited constraining factors were labour costs and government policies and programmes as summarised by Table 6.3.

To summarise, the main recommendations of experts consulted in 2019 concerned:

- improved access to finance particularly for early-stage businesses and in the regions outside London and the South East;
- improved entrepreneurial education, especially at school age;
- better government support for entrepreneurship at national, and more importantly at local levels, especially during times of great uncertainty and crisis;
- better co-ordination of support programmes through different stages of the business lifecycle in order to simplify and clarify the offer;
- enhanced and more flexible funding of innovation activity.

One of the key messages of experts is that more clarity is needed to encourage entrepreneurial activity in the post-Brexit context.

		2019	2018
1	Financial support for entrepreneurship	47	58
2	Economic Climate / Crisis	42	19
3	Education and training	28	25
4	Labour costs, access and regulation	28	22
5	Government policies	22	42
6	Government programs	22	6
7	Capacity for entrepreneurship	22	11
8	Cultural and social norms	14	36
9	Physical and services infrastructures	11	8
10	Commercial and professional infrastructure	8	8
11	Internal Market openness	8	3
12	Different performing of small, medium and large companies	6	0
13	Internationalisation	6	0
14	R&D transfer	3	3
15	Perceived population composition	3	8
16	Work force features	0	6
17	Political, institutional and social context	0	0
18	Corruption	0	0
19	Information	0	3

Table 6.3: Constraints to entrepreneurial activity, % of citations by experts
 (Source: GEM UK NES 2019, 2018)

7. Conclusion

In 2019 the prevalence of early-stage entrepreneurial activity in the UK was higher than in recent years mostly driven by nascent entrepreneurial activity. Whilst annual trends have fluctuated in recent times, the higher TEA rate first observed in 2011 has prevailed. Indeed, the rate of 9.9% in 2019 maintains the trend of significantly higher rates of early-stage entrepreneurial activity observed after the previous long run stable rate of 6% (2002-2009). It is important to note, however, that this increase was largely in low job expectation entrepreneurial activity, with the relative prevalence of high expectation activity dropping by around one quarter since the early 2000s. More recently, an increase in the relative prevalence of high expectation activity has begun to reverse this trend.

In 2019 one-quarter of working age individuals in the UK either intended to start a business within the next three years; were actively trying to start a business; or were running their own business. This proportion represents an increase on the previous long-run rate of 16%, or 1 in 6 working age individuals.

Individuals from a non-white ethnic background remain significantly more likely to be engaged in early-stage entrepreneurial activity. Similar to previous years, immigrant early-stage entrepreneurial activity was above that of UK born life-long residents but not statistically significant. Immigrants are crucial to the entrepreneurial stock of the UK as they tend to be more ambitious and innovative so this will be an important metric to monitor going forward especially once the new immigration regime comes into force in 2021.

For the first time in the annual report we include the results of the National Expert Survey (NES) which has been conducted each year as part of the GEM UK project. A number of key points emerge from the analysis when we compare directly with the US. First, we note that the UK Entrepreneurship Framework Conditions (EFCs) mirror relatively closely those of the US demonstrating consistent significantly lower scores for Physical infrastructure and Cultural and social norms in terms of support of new and growing firms. Second, entrepreneurial education at school, post-school age and access to entrepreneurial finance are also generally evaluated by the US experts higher than by their UK peers, and this is again the case in 2019. Third, one dimension for which the UK shows

consistently higher scores than the US is ease of market entry for new and growing firms and internal market burdens and regulations – the UK ranked 7th for this framework condition among 54 countries which participated in the NES in 2019.

Finally, a number of issues have arisen from the NES in 2019 which confirm some well-known problems with the UK's EFCs and point to some new ones emerging. The main recommendations of the experts in 2019 sought the following improvements:

- improved access to finance particularly for early-stage businesses and in the regions outside London and the South East;
- improved entrepreneurial education, especially at school age;
- better government support for entrepreneurship at national, and more importantly at local levels, especially during times of great uncertainty and crisis;
- better co-ordination of support programmes through different stages of the business lifecycle in order to simplify and clarify the offer;
- enhanced and more flexible funding of innovation activity.

8. Appendices

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 2019, 6,787 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, Welsh Assembly Government, and the Northern Ireland Department for the Economy chose to boost sampling in their region in order to have more detail about entrepreneurship in their area.

The raw sample of 6,787 was distributed across 12 geographic areas within which representative sub-samples of the population aged 18-80 were taken. These areas and the sample sizes are: South West: 304; South East: 380; East of England: 377; London: 349; West Midlands: 360; East Midlands: 169; Yorkshire & Humberside: 335; North East: 219; North West: 329; Wales: 1,446; Scotland: 1,932; Northern Ireland: 587.

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 21% in Q1 of 2019²⁷. In 2019, 19% of the unweighted GEM sample across the UK consisted of mobile-only households. Whatever the true figure, it is clear that fixed line surveys are not fully representative of UK households, that the distribution of mobile-only households is different to that of fixed line households, and that these differences are not fixed but change over time. In 2010, sampling methods for mobile only households had advanced to a stage where it was felt that inclusion of this group was not only desirable but feasible (though at greater cost).

Every attempt is made to ensure that the results reported are as reliable and robust as possible.

To do this, four sets of weights were calculated for the UK data:

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

²⁷ <https://www.statista.com/statistics/386778/share-of-calls-enabled-landlines-in-uk-hoseholds/> accessed 12/07/20

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