



Global Entrepreneurship Monitor 2020 / 2021



HAUTE ÉCOLE DE GESTION
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The report is available online at www.gemconsortium.org and at www.heg-fr.ch/GEM. All data used in this report are collected and processed centrally by the GEM consortium. The authors have exclusive responsibility for evaluating and interpreting the data.



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..... Management Summary / Key Results

The Global Entrepreneurship Monitor (GEM) has been actively and consistently measuring and evaluating levels of entrepreneurial activity since 1999. During that time, over 120 economies have been involved in the research and over three million individuals have been interviewed. The GEM illustrates national differences in entrepreneurial activity¹ between economies, revealing the factors that determine the nature and level of national entrepreneurial activity and identifying policy implications.

In the 2020/21 census, 140'000 people (ages 18-64) in 43 economies took part in the survey. The School of Management Fribourg (HEG-FR), member of the University of Applied Sciences and Arts Western Switzerland (HES-SO), collected data in Switzerland: 2,008 interviews (telephone and online) and 36 talks with experts revealed entrepreneurial attitudes, activities and aspirations and identified the factors influenc-

ing the type and extent of their entrepreneurial activities.

In mid-March 2020, the Federal Council declared an “extraordinary situation” due to the increasing number of people in Switzerland suffering from the coronavirus. When the lockdown was lifted in mid-June and the borders were fully open again, all publicly accessible places and businesses were required to have protective concepts in place. Large events remained prohibited. The negative consequences for the economy were already being felt. During the period of nationwide easing from mid-June to mid-July 2020, the population and expert surveys on entrepreneurial behavior were conducted in Switzerland for the thirteenth time in a row as part of the Global Entrepreneurship Monitor (GEM; www.gemconsortium.org). Among other things, the survey examined the extent to which the first Covid-19 wave and the shutdown affected start-up behavior.

¹ Entrepreneurship isn't only about focusing on the start-up phase, but also about being seen as a mindset in young, growing, mature companies, or companies going through change.



Impact of the Covid-19 Pandemic

As a research organization, the GEM responded rapidly to the COVID-19 pandemic in March 2020 by including new questions concerning barriers and opportunities related to the pandemic, as well as about the effects of the pandemic on household income. The impact of the Spring/Summer 2020 shutdown on startup behavior was noticeable in that founders were less likely to identify business opportunities and less likely to implement entrepreneurial ventures. This was accompanied by an increased fear of failure overall. In addition, existing startups are pursuing less ambitious growth targets compared with the previous year.

However, it is also evident that the crisis was perceived as an opportunity. The start-up rate, the “*Total Entrepreneurial Activity*” (TEA), was only slightly lower at 9.24% compared to 2019 (9.77%). The experts gave top marks to entrepreneurs for adapt-

ability. Moreover, cooperation between new and growing companies with established companies stands out just as positively in an international comparison²: the government measures are rated as good in comparison with other countries, with the latter scoring even better when focusing on individual aspects.

Opportunity recognition, i.e., the view of whether the individuals surveyed perceive a good business opportunity in their locality and could implement it in the next six months, decreased from 40.6% in 2019 to 26.7% in 2020. This should be seen as all the more dramatic, given that this figure is typically between 35% and just below 50%. Since 2011, *Opportunity Recognition* had never fallen below 40%. This decrease is mainly due to the surveyed individuals in German-speaking Switzerland. In the French- and Italian-speaking parts of the country, the change from the previous year was not significant.

² High Income economies: Austria, Canada, Chile, Croatia, Cyprus, Germany, Greece, Israel, Italy, Japan, Kuwait, Latvia, Luxembourg, Netherlands, Norway, Oman, Panama, Poland, Puerto Rico, Qatar, Republic of Korea, Saudi Arabia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, United Arab Emirates, United Kingdom, United States, Uruguay.



Around one-third (33.5%) of those who reported recognizing business opportunities are prevented from actually implementing these opportunities by the *fear of failure*. Although the fear of failure fluctuates greatly from year to year, it was still at an all-time low of 23.8% in the previous year.

The *entrepreneurial intentions* of Swiss inhabitants (7.3%) are lower than in 2019 (10.7%), and undoubtedly below the average of high-income economies (20.4%), contrasting sharply with people in the Republic of Korea, Israel or the Netherlands. Compared to past years, we have significantly fewer entrepreneurial intentions among the well-educated and middle- to high-income strata. Perceptions and intentions are combined, with the challenge being to see

entrepreneurship as a good career choice. Only 49.3% view entrepreneurship as an interesting pathway for one's professional future, compared to 71.8% in Canada or 69.6% in the UK. Combined with the higher level of fear of failure than in 2019, entrepreneurial behavior seems to be negative. On the other hand, the status of a successful entrepreneur and media attention for entrepreneurship is close to the average for high income economies.

Perception of capabilities is lower than in 2019 at 44.5%, but higher than in the previous years (2018: 36.3%; 2017: 42.1%). Switzerland's perception of capabilities is below the European benchmark and clearly behind the very strong belief of Americans in their own capacity to start a business (64.0%).



••• **Gender Equality: fewer differences between men and women**

A greater proportion of men than women typically engage in Total Entrepreneurial Activity (TEA) overall. In 2018, the female to male

entrepreneurship ratio was 5 to 10. The gender gap has narrowed in Switzerland in the last two year. In 2020, there are 9 women entrepreneurs for every 10 male entrepreneurs.

Table 1: Gender differences regarding activity

	% Adults	Rank/50	% Female	% Male
Total early-stage Entrepreneurial Activity	9.2	25	8.7	9.8
Established Business Ownership rate	6.7	20	5.3	8.2
Entrepreneurial Employee Activity	5.2	12	4.2	6.1

The motivation profile is slightly different for female founders compared to that of male founders. This is especially true in relation to the motivation “to earn a living”: 60.9% of

men involved in the early stages of an entrepreneurial activity are motivated “to earn a living”. In contrast, only 41.9% of the women entrepreneurs mentioned this motivation.

Table 2: Gender differences regarding motivation

	% TEA	% Female TEA	% Male TEA
To make a difference	42.5	44.2	41.1
To build great wealth/high income	32.5	29.9	34.7
To continue the family tradition	20.1	16.9	22.9
To earn a living	52.0	41.9	60.9





The Effects of Entrepreneurial Activity

Job growth expectations. High job growth expectations are indicated through an expected job creation of 6 or more new jobs in the next five years. Young companies that have already been founded have naturally felt the effects of the Corona crisis. In particular, the proportion of young companies with fast and high growth prospects has decreased drastically. In the 2019 survey, one fifth of startups (21.98%) whose companies were no older than 42 months still expected to create more than 10 jobs and to generate over 50% of turnover from foreign countries within five years. In the early summer of 2020, one out of 12 startups alone (i.e. 8%) assumes that this would be the case.

In Switzerland, the percentage of those involved in TEA who expect to create 6 or more jobs in the next five years amounts to 12.21%. Therefore, Switzerland ranks second last among the comparison countries, just before Austria (3.37%), but behind the Netherlands (15.25%) and Spain (13.62%), and well behind countries such as the United States (30.50%) and South Korea (37.39%), who ranks first.

Informal investment. Investment by friends, family, neighbor, etc., plays an important role in Switzerland. In 2020, 82 individuals from the APS reported having provided funds in order to support entrepreneurial projects. In many cases, the investment amount is not disclosed. Across the last three years, the GEM APS study counted 66 individuals who reported having invested an average of 46'860 USD in entrepreneurial projects. Switzerland is one of the countries with the highest informal investments, just behind the United States (56'553 USD on average), and Luxembourg (49'542 USD on average).

International orientation. Swiss early-stage firms appear to have a very strong international orientation. Two-thirds of the newly founded startups in Switzerland expect to generate revenues from foreign customers and thus belong to early internationalizing SMEs. Together with Switzerland, the Netherlands (33.82%), Sweden (34.82%) and Slovenia (41.2%) all rank at the top of the list of robust export-oriented start-up nations. In general, export-oriented entrepreneurs are more prevalent in small economies, in particular, European ones. The only exception is Canada (35.59%),

- which reports a correspondingly high export activity among start-ups due to its proximity to the US.

Entrepreneurial Framework Conditions

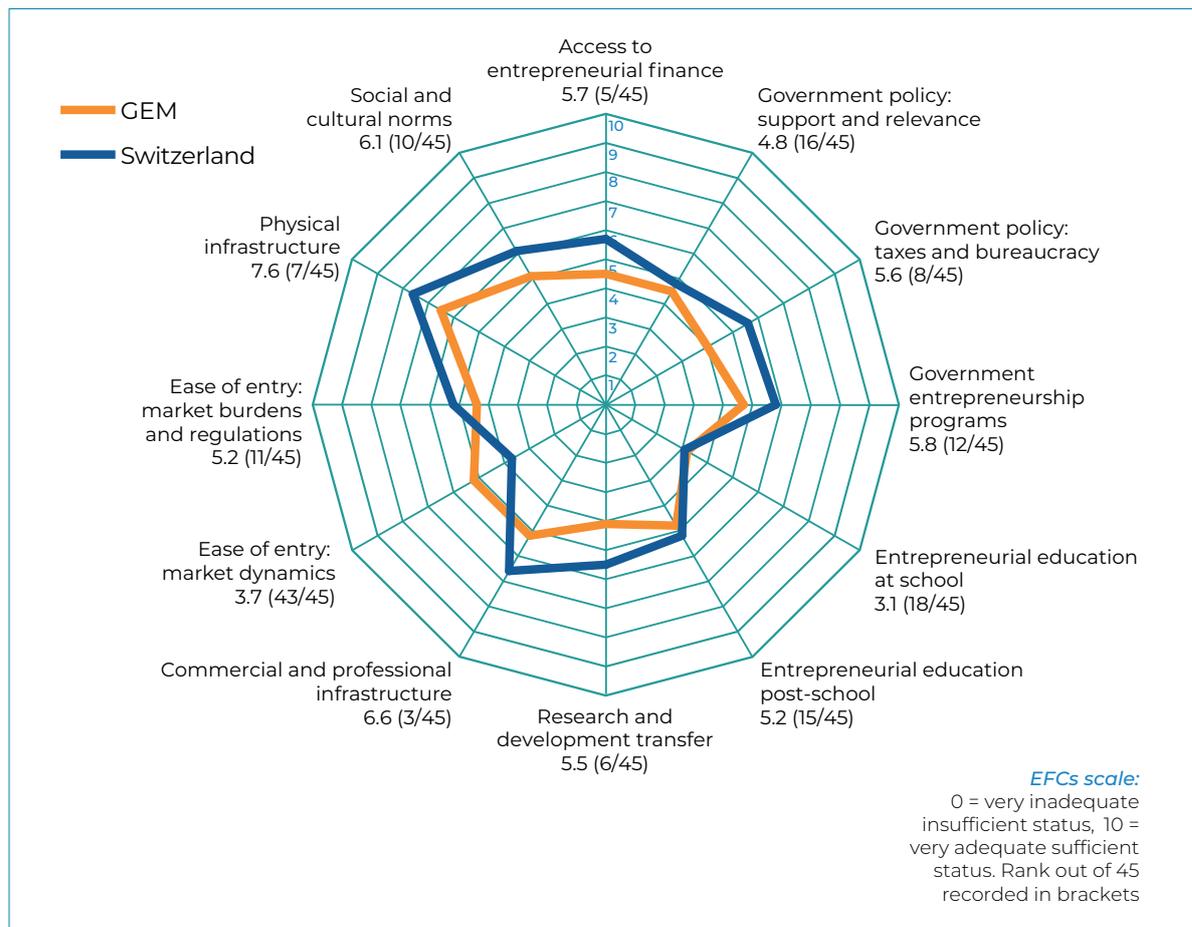
The National Entrepreneurship Context Index (NECI), a measure of the ease of starting and developing a business, was derived from the 2020 GEM National Expert Survey (NES) in which national experts are asked to assess the national environment for entrepreneurship in terms of 12 GEM-defined framework conditions. Physical Infrastructure is universally rated the most well-developed of the framework conditions that support entrepreneurship. Entrepreneurship education at the school level is universally regarded as the weakest, least developed condition.

This is testament to the investment made by Swiss cities and cantons, positive media coverage of entrepreneurship in the country, and an increase in corporate entrepreneurship. Many companies are investing in start-ups and this is making a difference. We also have a high level of diversity – culture, languages and disciplines, etc. – and this has been an important factor driving entrepreneurship.

The NECI consists of twelve framework conditions selected from the expert survey. For the compilation of the index, the framework conditions were weighted according to their assigned importance, based on the experts' judgements. The higher the index value, the better the assessment of the startup-related framework conditions in the respective country. The aim of the NECI is to inform interested supporters and stakeholders at a glance about the overall picture of the environment and framework conditions of Switzerland as a location for start-ups.



Figure 1: Expert ratings of the entrepreneurial framework conditions in Switzerland



The overall entrepreneurial framework conditions in Switzerland are high compared to other high-income economies included in the study. Switzerland achieves outstanding results in finance, commercial infrastructure, tertiary education, and

knowledge and technology transfer, as well as in government programs. However, although the experts see the entrepreneurial framework conditions in a fairly positive light, several points for improvement are mentioned in the report.

... 1 Recommendations for Policy and Practice

Over the last years, and particularly after the global financial crisis, the realization that people could no longer depend on large organizations or government as job creators is especially important for Switzerland with its SME dominance. We are convinced that this trend will follow due to the impacts of COVID-19 in the future. Globalization, technological advances, and the digital economy have also had a radical effect on the world of work. The traditional career path of a stable job with steady hours, a regular paycheck and a solid pension – a job for life – is no longer an option for many people. New organizational concepts and career perspectives of young talents are influencing the entrepreneurial ecosystem. Furthermore, the impacts of COVID-19 will be observed over the next few months and the entrepreneurial ecosystem is to be fostered in rural and semi-rural areas by integrating, decentralizing and coordinating efforts, and by regarding the SMEs as the back-bone for policies.

SMEs, family tradition, and succession as the new venture creation. Digitalization, entrepreneurial behavior in large organizations and

public institutions play a major role, supported by an entrepreneurial ecosystem with start-ups and dynamic SMEs. The number of career transitions experienced by individuals is already on the increase, and technology is disrupting the traditional patterns in many industries. While the changing world environment presents challenges of varying natures and magnitudes, it is clear that it also presents opportunities – in particular, for innovative and dynamic entrepreneurs.

Women entrepreneurship. The support of entrepreneurial activities in Switzerland rests strongly on the support of technology-based (often also high-tech) start-ups and projects. The probability of having women entrepreneurs in these sectors is obviously lower, and it is quite normal that women entrepreneurial projects receive less support. The entrepreneurial ecosystem in Switzerland has had an impressive development in the last years. The added value to an entrepreneurial ecosystem of women entrepreneurs, with their higher motivation to make a difference in the world, is shown in the new report.

••••• Thus, if purpose-driven activities in, e.g. the health or social sector, the special support of a circular economy project, or even the fashion industry, could lend support to women entrepreneurs for the future. The impact of the entrepreneurial activity should be at the center!

Informal investment, pension funds and business angels. Informal investments and investments of family offices are an important factor in the financial entrepreneurial ecosystem in Switzerland and are an ad-on to the pension funds investing in private equity and venture capital. The focus of their investment should be to allow and enhance their internationalization for the growing stage of the company in order to create a greater impact for the local economy and society. Switzerland has the technological potential and the financial resources to finance promising projects. **Pension funds** have accumulated around CHF 100 billion in investable capital. Promoting venture capital from pension funds with a professional VC system would be an important step.

Several initiatives should be fostered to enhance the entrepreneurial eco-

system in Switzerland in order to have more high ambition start-ups and growing SMEs. The government has to focus on high-growth entrepreneurs in order to build a generation of robust, engaged entrepreneurs. **Innovation-based businesses and Gazelles** still create the majority of net new jobs in an economy. Government should create special dispensation for these two categories of enterprise, for example, by providing special funding vehicles and funding for business development services.

Strengthening SME succession as a start-up option in family businesses. In principle, stronger SME networking within the start-up world is essential. It creates personal relationships and new networks over a longer period of time and entrepreneurs can fall back on these in a handover situation. In the case of family businesses, digitization is currently a core issue with a great need for action in the context of business succession. Many companies have not yet taken full advantage of the opportunities offered by digitization (Since the next generation is regarded to be „digitally savvy“, development processes are also expected here in the next few years.)

••• **Serial entrepreneurs, failure and resilience.** In fact, the feeling is that if you never experience failure, you are not being innovative enough. In order to spur entrepreneurial activity, corporates, investors, and government also need to be disruptive and adopt a new approach to investing in and funding new businesses. They need to back entrepreneurs and encourage them to experiment, even if they fail the first time. The Swiss ecosystem should accept that there is a high chance that a first venture will fail but recognize that this is a necessary part of the entrepreneurial journey.

Go out of the classroom. GEM research has confirmed a positive link between training in starting a business and entrepreneurial behavior, which is not always visible in the short run. Practical and interactive business and entrepreneurship training programs at secondary school are an important factor in encouraging effective youth entrepreneurship. A lifecycle-based approach of Entrepreneurship should be the backbone of support programs. Understanding the specific needs along startup development, growth and change is key.

Education in entrepreneurship at school level should equip learners with key business skills. It is imperative, however, that teachers in these courses are well trained. Schools also need to actively promote entrepreneurship as a career path – inviting successful young entrepreneurs to participate in the educational program. **Internships**, especially inside start-ups and SMEs, should be provided for young adults interested in entrepreneurship. A culture of experiential learning provides young people with the opportunity to learn from the professional world while still students.



..... 2 Entrepreneurial Attitudes and Perception

This section examines the rate of individual participation in the various phases of entrepreneurship for Switzerland as compared with other high-income economies. We discuss potential entrepreneurs, individuals with the intention of starting businesses, people starting and running new businesses (early-stage entrepreneurs), established businesses, and those after the discontinuation of businesses.

The GEM data collection for Switzerland yields entrepreneurial profiles along three important dimensions. Entrepreneurial attitudes, perceptions, and intentions reflect the degree to which individuals tend to appreciate entrepreneurship, both in terms of general attitudes and self-perceptions: how many individuals recognize business opportunities? How many believe they have the skills and knowledge to exploit such opportunities, and how many would be prevented from exploiting such opportunities due to fear of failure? Entrepreneurial activity measures the observed involvement in several phases of entrepreneurial activity. It

also tracks the degree to which entrepreneurial activities are driven by opportunity and/or necessity. Moreover, estimations of discontinuations of entrepreneurial activity (and the reasons for doing so) are based on the GEM Adult Population Surveys. Finally, entrepreneurial aspirations are of key importance in addressing the socio-economic impact of entrepreneurial behavior. Of particular interest are those entrepreneurs who expect to create jobs, to be involved in international trade, and/or to contribute to society by offering new products and services.

2.1 Entrepreneurial Attitudes

Fostering entrepreneurial awareness and positive attitudes toward entrepreneurship is high on Switzerland's policy agenda. The idea is that evolving attitudes and perceptions toward entrepreneurship could affect those individuals wishing to venture into entrepreneurship. However, the key factor that determines whether someone will progress to entrepreneurship is not the perception of opportunities for start-ups or of (matching) personal capabilities: context

• • • also plays a role. Factors, such as the availability of (good) job alternatives in an economy, can make a difference for those who perceive market opportunities and have confidence in their own entrepreneurial capabilities. These factors can also help to determine whether individuals engage in independent entrepreneurial activity or not. So, while in some societies, positive attitudes and perceptions toward entrepreneurship may be instrumental in achieving new (high value) entrepreneurial activities, in many others they are certainly not, on their own, sufficient reason for people to choose to engage in entrepreneurial activity. For example, there may be other excellent options available to individuals. Bearing this in mind, we can see in Table 3 how, in terms of entrepreneurial perceptions and attitudes, Switzerland compares to other high-income economies in general and to the comparison group in particular.

Table 3 reflects the percentage of individuals who believe there are opportunities to start a business in the area they live. Perceived capabilities reflect the percentages of individuals who believe they have the required skills and knowledge to start a new business. The measure of fear of fail-

ure (when it comes to starting your own business) applies only to those individuals who want to start a business. Entrepreneurial intentions are defined by the percentage of individuals who expect to start a business within the next three years (those who are currently already entrepreneurially active are excluded from this calculation). For all four measures, cultural differences and business-cycle patterns are an important explanation for the differences in perceptions across countries.

Table 3: Percentage of people with specific entrepreneurial perceptions, intentions and societal attitudes in selected high-income economies, 2020

Selected High Income Economies	Perceived opportunities	Perceived capabilities	Fear of failure*	Entrepreneurial intentions**	Entrepreneurship as a good career choice	High status to successful entrepreneurs	Media attention for entrepreneurship
Austria	31.2	53.3	36.8	4.1	44.5	79.8	70.0
Canada	49.1	55.6	52.0	11.1	71.8	81.3	77.0
Germany	36.0	47.6	31.0	10.8	54.9	81.8	53.7
Israel	25.0	37.7	45.0	19.8	60.7	83.7	53.1
Italy	62.2	60.8	28.4	4.5			
Netherlands	48.8	43.6	38.3	13.1			
Norway	57.0	41.6	27.4	5.6			
Republic of Korea	44.6	53.0	13.9	25.9	56.6	87.7	70.6
Slovenia	42.0	59.4	43.8	12.0	68.7	85.1	81.3
Spain	16.5	51.9	53.6	6.8	56.7	61.1	50.2
Sweden	62.5	52.1	42.8	8.3			
Switzerland	26.7	44.5	33.5	7.3	49.3	71.9	67.9
United Kingdom	27.3	54.5	48.3	8.2	69.6	77.1	69.2
USA	48.6	64.0	41.2	12.6	70.3	78.3	71.8
Average (High Income Economies)	46.6	57.2	42.4	20.4	64.7	74.5	67.9

* fear of failure assessed among those seeing opportunities.

** Respondent expects to start a business within three years; acurrently not involved in entrepreneurial activity.

••• In the 2020 census, the **perceived opportunities** in Switzerland to start a business are, with 26.7%, at a lower level compared to the average for high income economies (46.6%). This is also true for 2019 (40.7%). Sweden, Italy, Norway, Canada, the United States, and the Netherlands remain at the top when it comes to available opportunities.

Switzerland shows a lower **perception of capabilities** (44.5%) in 2020 than in 2019 (49.2%) but still higher compared to 2018 (36.3%) and 2017 (42.1%). Switzerland's perception of capabilities is under the average of high-income economies, and clearly behind the very strong belief of Americans in their own capacity to start a business (64.0%). The same is true of people in Italy, Slovenia, Canada, the Korean Republic, and Austria.

The 33.5% **fear of failure** in Switzerland (2019: 23.9%) is lower than the average when comparing high income economies (42.4%). The impact of fear of failure tends to be more common in developed economies, where the greater prevalence

of alternative career options can create the impression that people have more to lose by foregoing these other opportunities. However, the impact of the experience of fear on individual cognition and behavior can be beneficial as well as detrimental. Despite this dualistic nature, fear is negatively regarded, i.e., as a barrier to entrepreneurial behavior. Thus, low fear of failure is not always directly linked to the creation of new ventures (Cacciotti & Hayton, 2015).

The entrepreneurial intentions of Swiss inhabitants are lower (7.3%) than in 2019 (10.7%) and on the same level as in 2018 (6.9%) but clearly under the average for high-income economies (20.4%). Most remarkable are the differences between Switzerland, the Korean Republic and Israel.

In the low- and middle-income economies, two-thirds of adults, on average, think entrepreneurship is a good career choice. The number of people to see entrepreneurship as a good career choice in Switzerland (49.3%) decreased last year. It is on the same level as in 2018 and 2017 and is un-

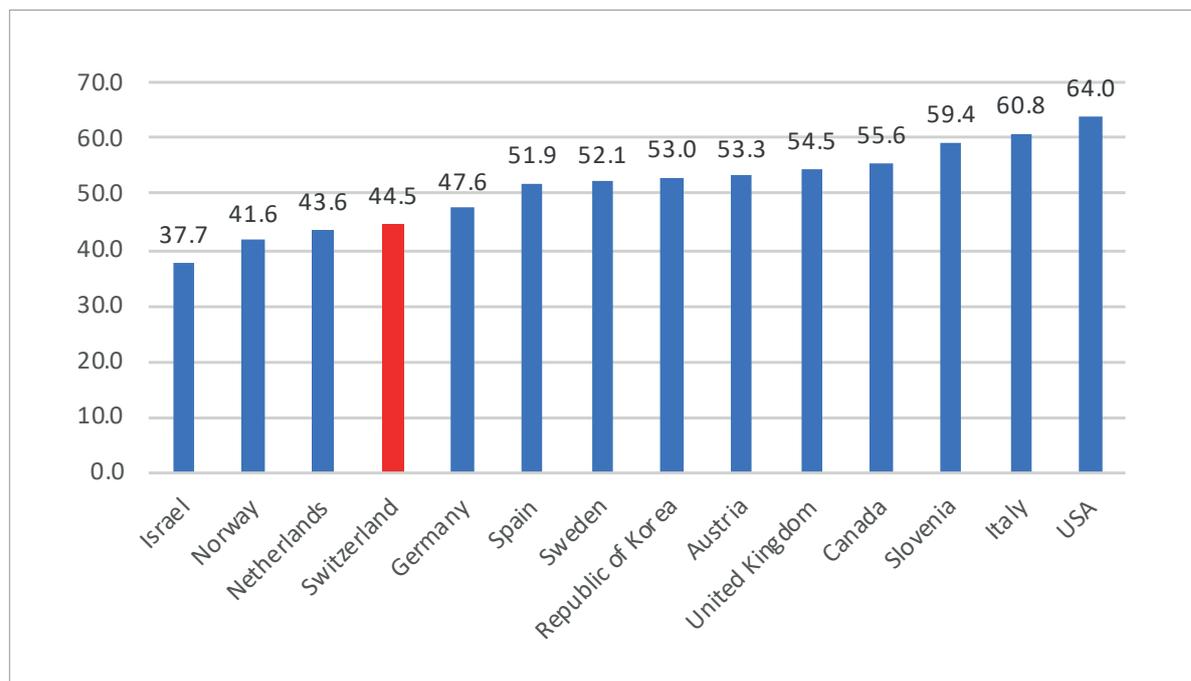
der the average of high-income economies (64.7%). Compared to 71.8% in Canada, 70.3% in the United States, 69.6% in the UK, 68.7% in Slovenia and 60.7% in Israel, it seems that an entrepreneurial career is less attractive in Switzerland.

The high status of successful entrepreneurs (71.9%) is only slightly down, as is media attention for entrepreneurship on the average for high-income economies. Reports of entrepreneurs in the media are increasingly more important in Norway, the US, Canada, Sweden, the UK, Austria and the Republic of Korea than in Switzerland.

2.2 Self-perception and entrepreneurial talent

One important determinant of whether or not to start a business, and a significant influence on the success and longevity of that business, may be whether and to what extent individuals see themselves as potential entrepreneurs. The question is if the person has the knowledge, skills and experience to start a new business, and whether they see good opportunities but would not start a business for fear it might fail, with results shown in Figure 2 and Figure 3.

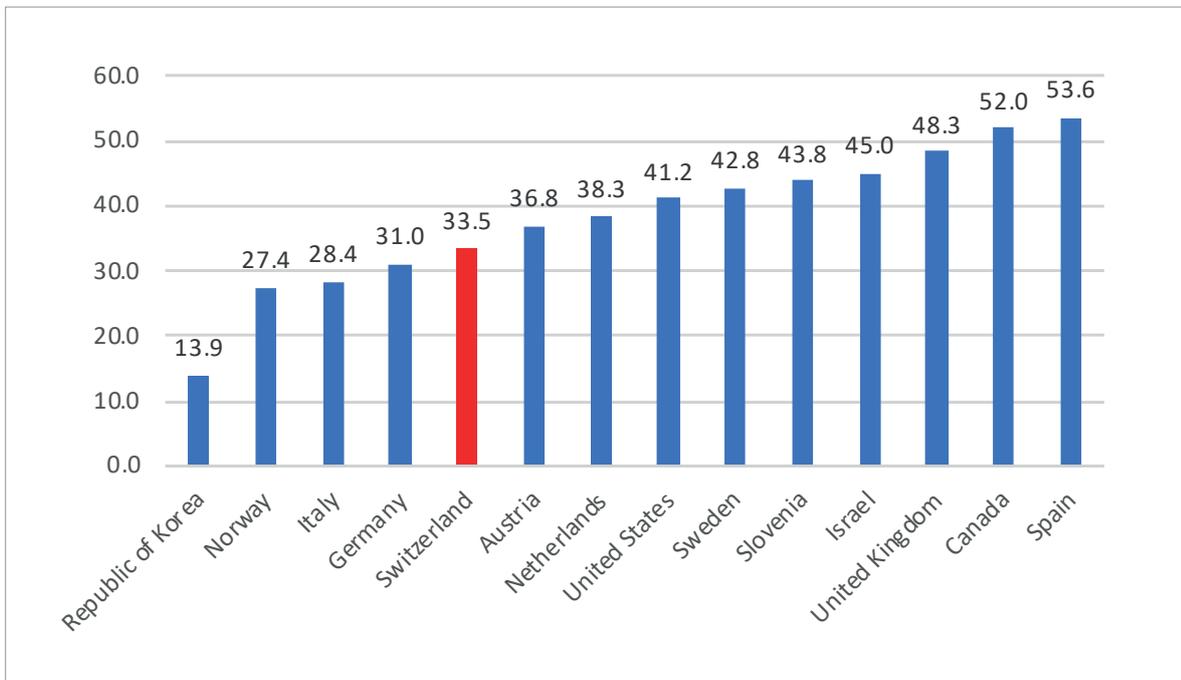
Figure 2: You personally have the knowledge, skills and experience to start a new business (% adults)



••• The proportion of adults who agree that they see good opportunities, but would not start a business for fear that it might fail, is by far the lowest in the Republic of Korea at 13.9% (2019: 7.1%), while the next lowest percentages are in three European countries: Norway (27.4%), Italy (28.4%) and Germany (31.0%).

One third of the people in Switzerland would not start a business because of fear of failure 33.5% (2019: 23.9%): that is on higher level than the years before. However, more than half of those who see good opportunities to start a business in Spain and Canada would not do so because of fear of failure.

Figure 3: There are good opportunities, but would not start a business for fear of failure (% adults)



Entrepreneurship can be defined as the process undertaken by individuals who identify, evaluate and exploit new, entrepreneurial opportunities. As suggested by Shane and Venkataraman (2000), this process-oriented view of entrepreneurship as a research area

contains the following sub-areas: the search for the origin of entrepreneurial opportunities, the process of the discovery, evaluation and exploitation of opportunities, and the individuals that discover, evaluate and exploit opportunities.

..... 3 Why Do People Start or Run a Business?

There are as many reasons for starting a business as there are people willing to start them. These can include striving to make a difference, seeking higher income and wealth, the desire for independence and autonomy, continuing a family tradition, or simply the lack of alternative job options. These reasons matter and illustrate the overall socio-economic conditions in which individuals operate, for example, if there is a strong desire for independence or if jobs are seen as scarce. Similarly, the expectations and aspirations of those starting a business are important, including how many people they expect to employ, the anticipated scope of the customer base (e.g. the local area, the rest of the country, abroad), the proportion of revenue expected from international sales and, finally, the novelty of the business's products or services and the technology and processes it uses. Those actively engaged in starting

or running a business were asked to assess the following questions³: To make a difference in the world, to build great wealth or a very high income, to continue a family tradition, and to earn a living because jobs are scarce.

The proportion of those engaged in TEA who agree with the motive "To make a difference in the world" is highly variable. There is substantial variation in motivations across economies, sometimes between neighbors, and some commonalities between vastly different economies. For example, consider Canada compared to Italy and the Republic of Korea. In the Republic of Korea just one in 10 entrepreneurs agree they started the business to make a difference, compared to two out of three in Canada. Switzerland's results are at the same level as in Germany or Sweden and near the average for high-income economies.

³ Autonomy and independence were not included as a motive, because pre-testing showed that this was a universal motivation common to virtually all early-stage entrepreneurs.

• • • **Table 4:** Motivation in selected high-income countries, 2020

Country	Make a difference in the world	Build great wealth or very high income	Continue a family tradition	Earn a living because jobs are scarce
Austria	39.0%	33.4%	21.1%	49.3%
Canada	66.5%	64.2%	39.5%	66.1%
Germany	39.8%	52.2%	62.0%	45.1%
Israel	35.6%	71.2%	17.5%	53.6%
Italy	26.6%	95.3%	26.5%	82.2%
Netherlands	46.6%	40.9%	24.6%	47.8%
Norway	36.7%	30.1%	11.8%	23.1%
Republic of Korea	10.0%	68.6%	5.0%	32.9%
Slovenia	44.6%	39.7%	21.6%	72.2%
Spain	32.3%	34.9%	17.4%	72.3%
Sweden	41.5%	42.8%	24.2%	28.9%
Switzerland	42.5%	32.5%	20.1%	52.0%
United Kingdom	57.6%	59.4%	20.7%	54.4%
USA	68.2%	66.0%	28.6%	50.2%
Average (High Income Economies)	42.8%	56.4%	28.8%	61.6%

“To build great wealth or a very high income” is still a very common motivation, agreed with by more than nine out of 10 of those starting or running a new business in Italy, but by three in 10 in Norway. In Switzerland (32.5 %) this motive is clearly under average of the high-income economies (56.4%).

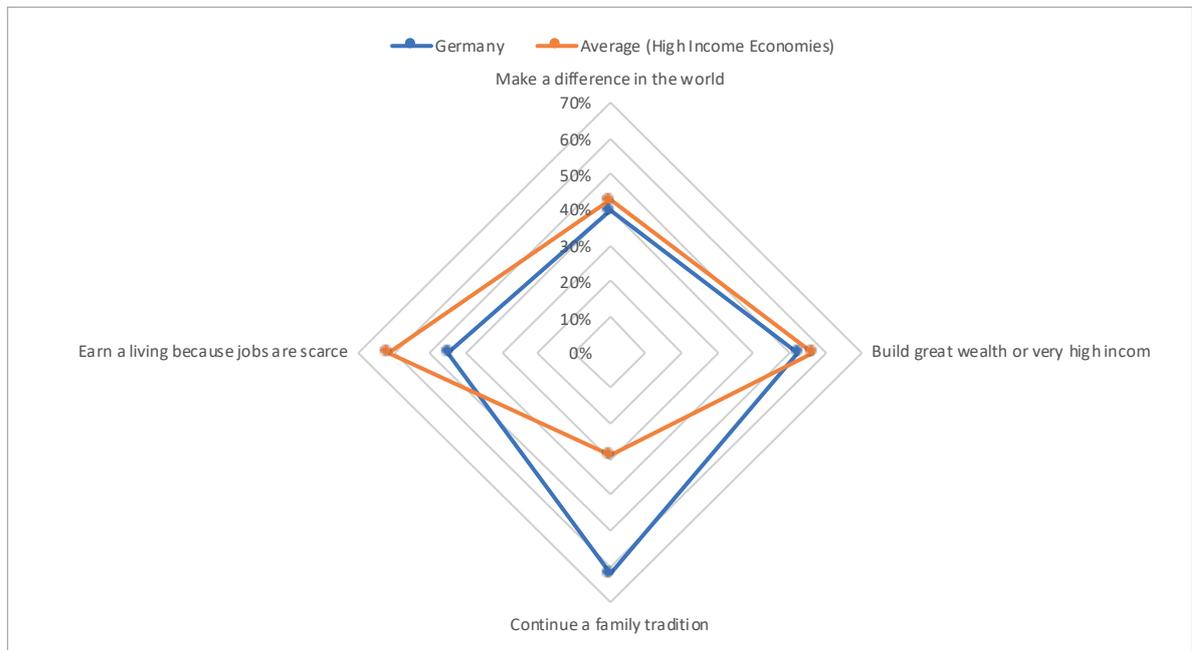
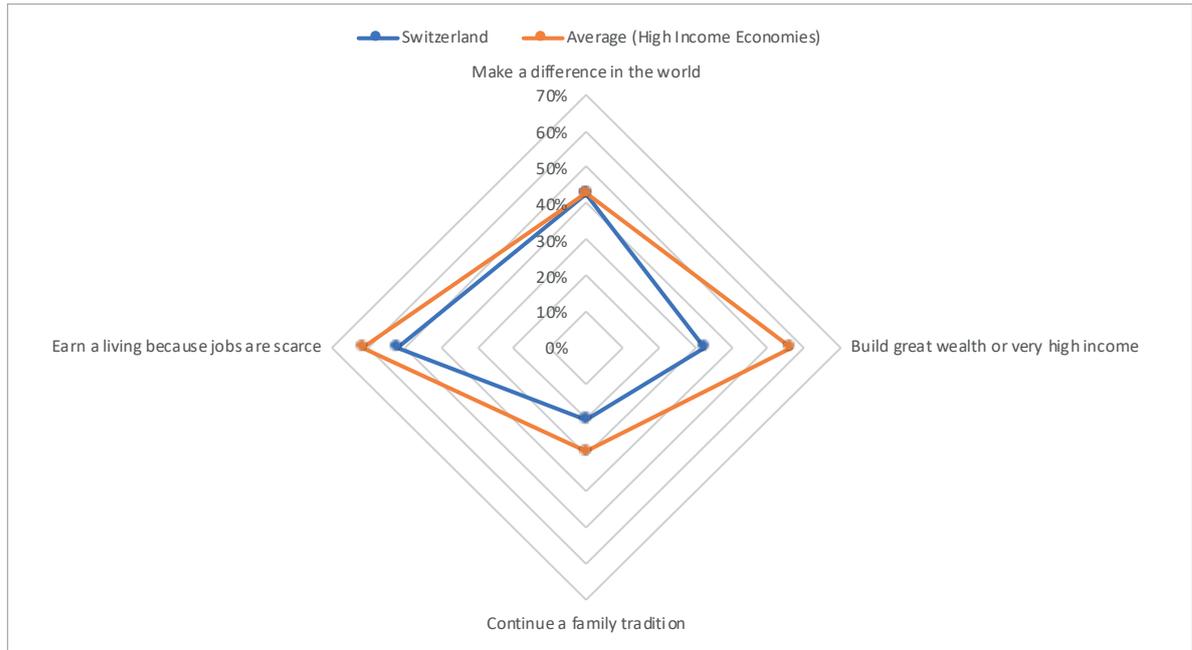
Responses to the motive “To continue a family tradition” also vary considerably, with the proportion of entrepreneurs agreeing with this motive at less than one in 10 in the Republic of Korea, and only 20.1% (2019: 17.1%) in Switzerland. This motive has the highest share in TEA in three economies: Germany, Canada and the USA.

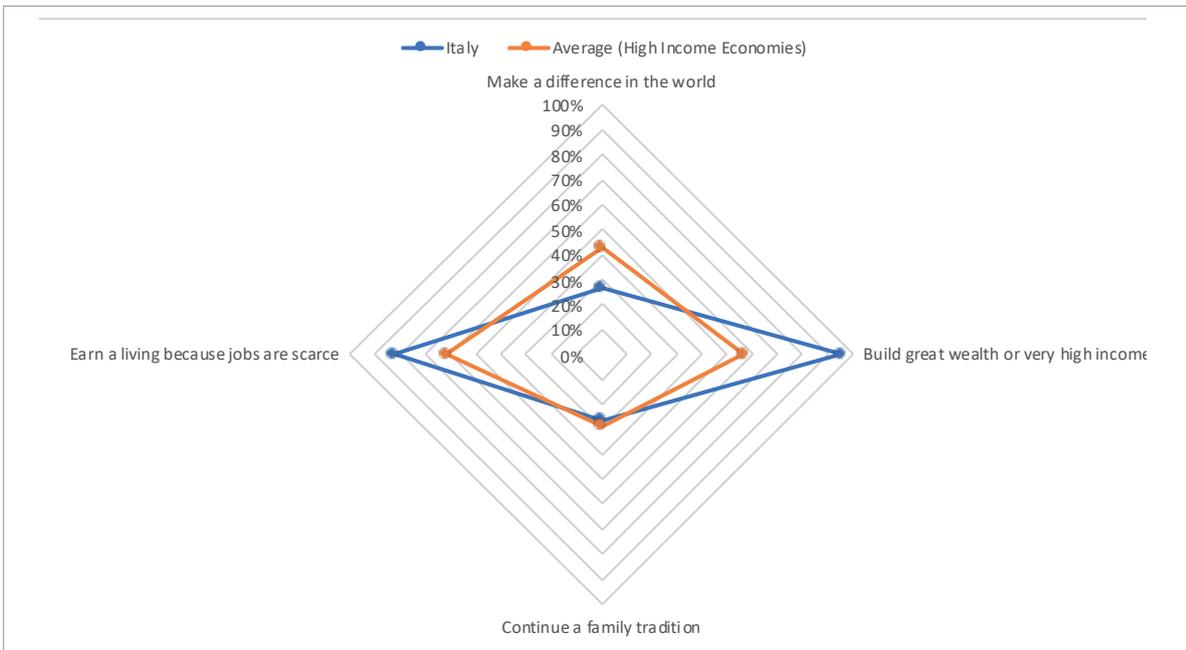
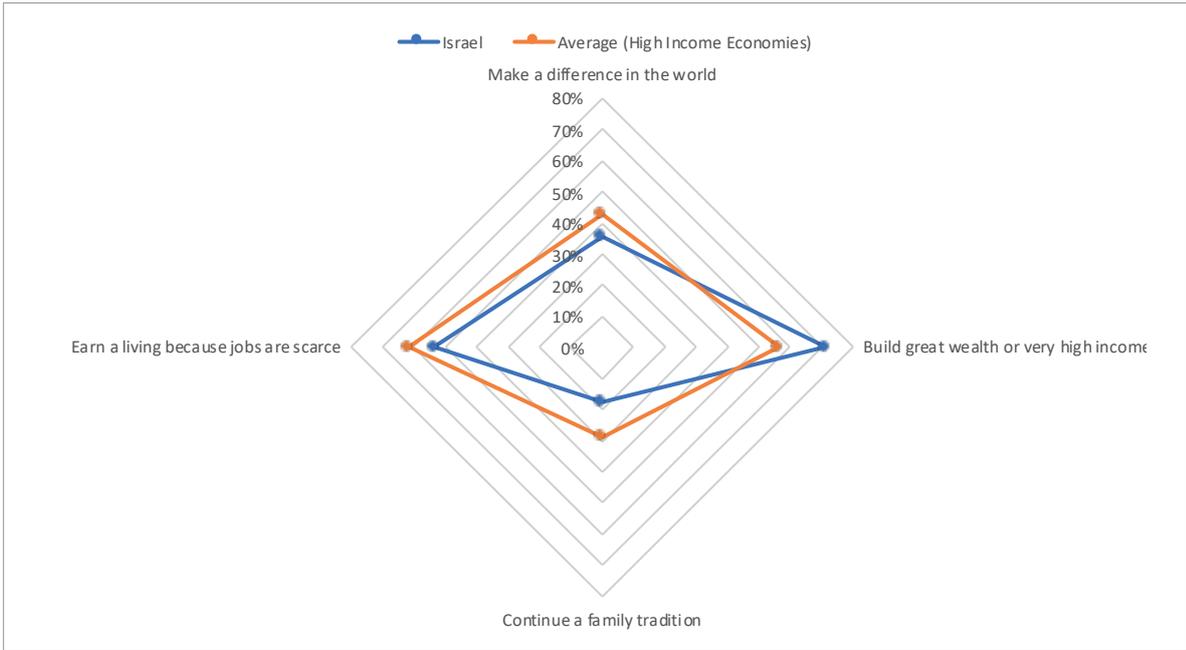


The motive, “To earn a living because jobs are scarce”, is important for those engaged in TEA in Italy, followed by Spain and Slovenia. In Nor-

way and Sweden, this motive is less important compared to the results in Switzerland: for 5 of 10 people this motive is vital.

Figure 4: Motivation in Switzerland, Germany, Israel and Italy







4 Entrepreneurial Activities

GEM conceptualizes entrepreneurship as a continuous process that includes nascent entrepreneurs involved in setting up a business, entrepreneurs who own and manage a new business, and entrepreneurs who own and manage an established business. In addition, GEM assesses the rate and nature of business discontinuations. As a result, indicators for several phases of the entrepreneurial process are available.

Table 5 illustrates the entrepreneurial activity by phases of the organizational lifecycle, on the one hand (nascent, newly established and discontinued), and on the other hand, by sectors of entrepreneurial activities (early-stage entrepreneurial activity, entrepreneurial employee activity, established business own-

ership). In this section, we elaborate on these phases of entrepreneurial activity. The most attention is paid to the situation in Switzerland, its development over the last years and the comparison with high-income economies.

Table 5 shows a low rate of discontinuation of businesses (1.2%) in Switzerland and an established business ownership rate (6.7%) on the average of high-income economies. Furthermore, entrepreneurial employee activity is above average. Thus, we are quite positive about the situation in the more mature stage of the entrepreneurial process in Switzerland. However, what is the setting regarding early entrepreneurial activity in Switzerland?



• • • **Table 5:** Percentages of entrepreneurial activity in selected high-income economies, 2020

Selected High Income Economies	Early-stage entrepreneurial activity (TEA)	Entrepreneurial Employee Activity (EEA)	Established business ownership rate	Discontinuation of businesses
Austria	6.2	5.4	7.8	2.1
Canada	15.6	5.3	7.3	5.6
Germany	4.8	6.4	6.2	1.4
Israel	8.5	6.1	4.2	3.0
Italy	1.9	0.7	2.2	0.3
Netherlands	11.5	1.7	7.0	3.5
Norway	7.6	5.8	4.1	1.3
Republic of Korea	13.0	1.5	16.1	2.4
Slovenia	6.0	5.2	7.0	1.1
Spain	5.2	0.8	6.7	1.0
Sweden	7.3	6.2	6.0	2.3
Switzerland	9.2	5.2	6.7	1.2
United Kingdom	7.8	5.4	6.5	2.3
USA	15.4	4.8	9.9	4.4
Average (High Income Economies)	12.1	3.7	6.9	3.6



4.1 Total Early-Stage Entrepreneurial Activity (TEA)

The Total Early-Stage Entrepreneurial Activity (TEA) rate is defined as the prevalence rate of individuals in the working-age population who are actively involved in business start-ups, either in the phase in advance of the birth of the firm (nascent entrepreneurs), or the phase spanning 42 months after the birth of the firm (owner-managers of new firms). As such, GEM takes the payment of any wages for more than three months as the “birth event” of the firm.

Table 5 presents the TEA rates for high-income economies. The 95% confidence intervals help to interpret the differences between countries. Although the Swiss TEA rate tends to be higher than in European countries such as Austria, Italy or Germany, only the Netherlands’s TEA rate is higher than in Switzerland with regard to adopting a 95% certainty. Among the comparison group, Canada (15.6%), the United States (15.4%) and the Republic of Korea (13.0%) differ considerably. After the 2010 cycle, which was strongly influenced by the aftermath of the

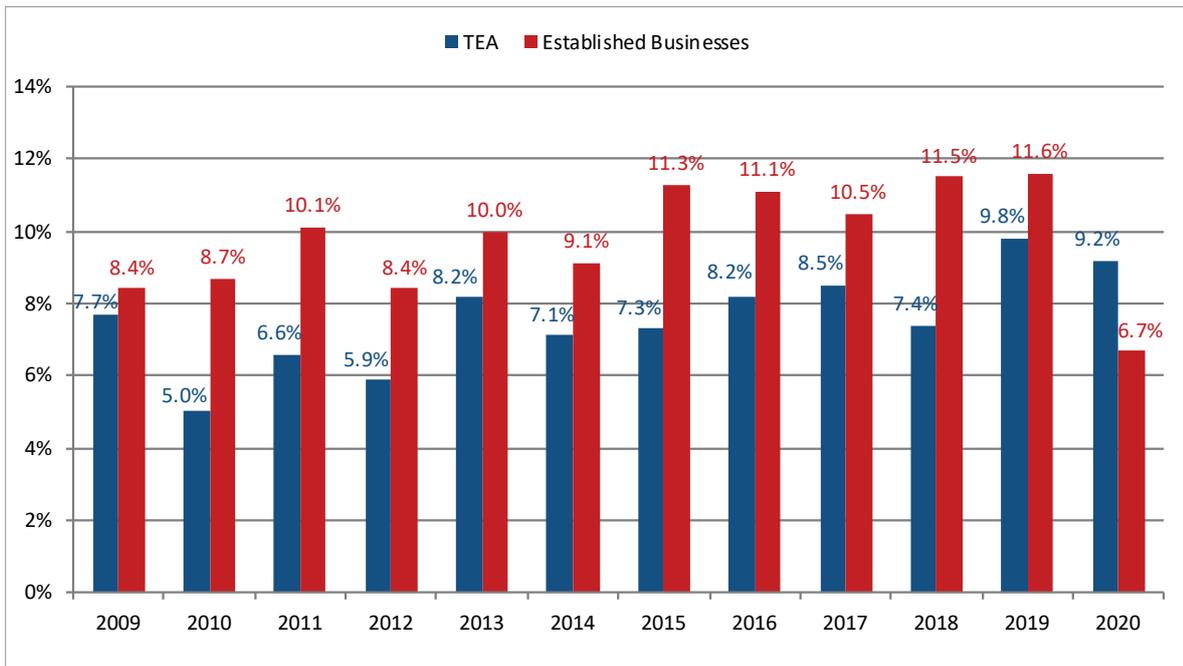
financial crisis, many Swiss entrepreneurship activity indicators for 2011 and 2012 turned upward again, with the total entrepreneurial activity (TEA) being one of them. After the all-time low of a Swiss TEA rate of only 5% in 2010, the most important indicator for entrepreneurial activity has once more reached a normal level (9.2%) but is below average for high-income economies (12.1%). Even the Covid-pandemic influenced the TEA-rate in a drastic way.

4.2 Established Business Ownership

While it is important to have early-stage entrepreneurs generate dynamism in an economy, established businesses and their owner-managers ensure an important degree of stability for the private sector. Owner-managers in established firms provide stable employment, can avail themselves of the knowledge accumulated in past experiences and, as such, may contribute greatly to their societies – even if they are small or solo entrepreneurs. A healthy set of business owners provide some indication of the sustainability of entrepreneurship in a society.



• • • **Figure 5:** TEA rates and established business rates from 2009-2020 in Switzerland



The Swiss rate for established business (6.7%) decreased compared to the last few years (Figure 5), with Switzerland losing its unique posi-

tion within the comparison group. Countries like Austria, Slovenia, and Spain increased their established business rate.



4.3 Industry Sector Participation

A look into the industry profile across the individual economies illustrates the diversity of entrepreneurship

around the world. The emphasis on knowledge and service-based industries in Europe and North America is obvious.

Table 6: Sector distribution of new entrepreneurial activity in selected high-income economies, 2020 (% of TEA)

Country	Business services	Consumer services	Extractive sector	Transforming sector
Austria	36.6	48.6	4.7	10.1
Canada	26.4	52.5	2.8	18.3
Germany	29.8	55.4	1.7	13.1
Israel	34.3	47.2	1.2	17.3
Italy	23.4	39.4	21.7	15.5
Netherlands	41.2	45.8	1.5	11.5
Norway	41.8	36.6	5.3	16.3
Republic of Korea	19.7	60.6	1.9	17.8
Slovenia	22.7	40.5	5.9	31.0
Spain	30.8	46.5	5.1	17.6
Sweden	34.4	39.8	12.2	13.6
Switzerland	33.6	42.6	1.6	22.2
United Kingdom	26.4	49.2	1.3	23.2
USA	34.3	42.9	3.1	19.7
Average (High Income Economies)	25.6	49.4	4.2	20.7

••• In Switzerland and the high income economies, three of four early entrepreneurial projects are in the consumer services and business services. **Consumer services**⁴ are the most important sector in high-income economies (49.4%), and 42.6% of the TEA are based on this sector in Switzerland. In the Republic of Korea, Germany and Canada, more than half of the new venture projects are consumer service based. Naturally, **business services**⁵ (33.6%) are important in Switzerland, and more important than the average for high income economies. In third position in Switzerland are new ventures in the **transforming sector**⁶ (22.2 %), where only Slovenia and UK have a higher percentage.

4.4 Discontinuance

As new businesses emerge, others close. Individuals selling or closing their businesses may once again benefit their societies by re-entering the entrepreneurship process. Recognizing the importance of this measure, GEM tracks the number of individuals who have discontinued a business in the last 12 months. Along with TEA and established businesses, discontinuance may be considered a component of entrepreneurial dynamism in an economy. GEM Survey respondents who had discontinued a business in the previous 12 months were asked to give the main reason for doing so. First of all, it must be highlighted that in Switzerland the percentage rate of

⁴ Customer service refers to hospitality, retail and wholesale services, personal services, education services, health and social services or leisure and hospitality.

⁵ Business services cover from technical services, such as engineering, architecture and IT, to other professional services, such as legal services, employment services and facility management.

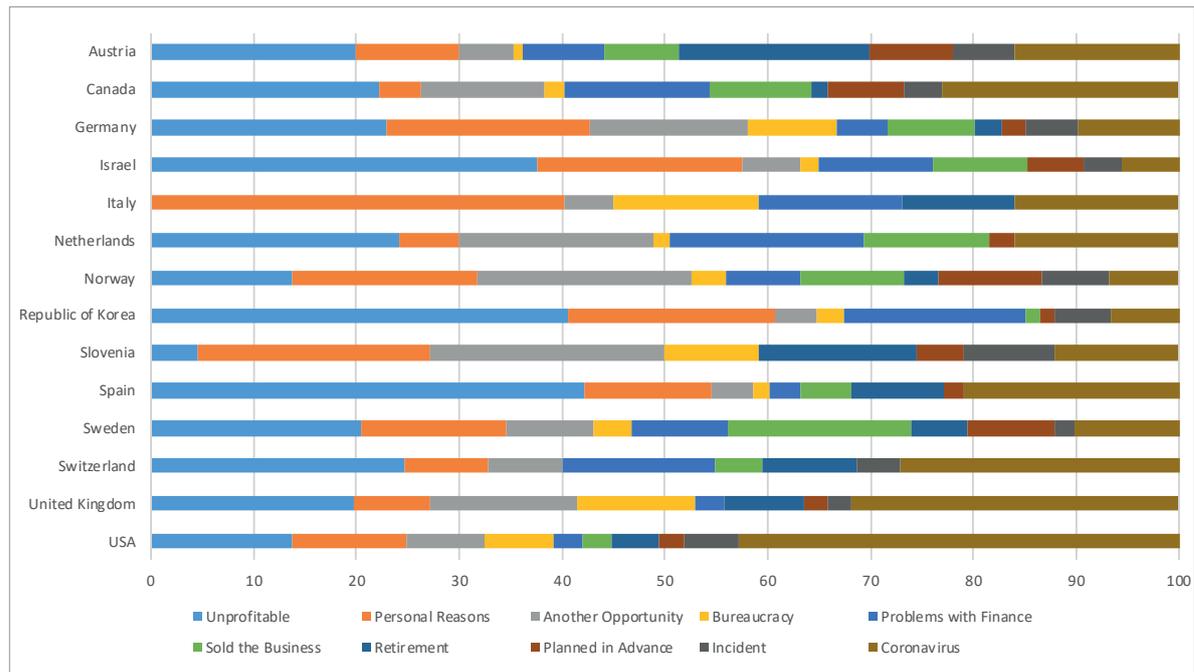
⁶ The transformation sector comprises the conversion of primary forms of energy to secondary and further transformation (e.g. coking coal to coke, crude oil to petroleum products, and heavy fuel oil to electricity).

people who abandon their business is one of the lowest (1.2%) compared to their peers of high-income economies.

The results regarding Switzerland are special with regard to several points: Bureaucracy is not a reason to stop the business in Switzerland. 7.2% invested their time in another business opportunity, 9.3% stopped the activity due to retirement and 4.5% sold the business. These 'positive' reasons for discontinuing businesses explain

one quarter of all discontinuations in Switzerland (Figure 6). A half of the discountinunance of business is due to an unprofitable situation (24.7%) and the impact of the Covid-19 pandemic. 27.2% of projects have been stopped. In other European countries, the percentage was lower. Only in the US and UK, did the Covid-19 pandemic have a more negative impact. Personal reasons (8.1%), incident (4.2%), and financial problems (14.9%) cover the other reasons for discontinuing.

Figure 6: Reasons for discontinuing a business in selected high-income economies, 2020



... 5 Diversity and Entrepreneurship

In this chapter, we explore diversity among Swiss entrepreneurs in terms of the key demographics of gender and age, and examine the gender gap in attitudes and perceptions towards entrepreneurship. We then compare these means to the global data in general, and with our set of comparison countries in particular.

Entrepreneurship can be considered an individual act taking place in a social setting. As stated in the global report on entrepreneurship, the image of the (male) entrepreneur working alone is a poor representation of modern entrepreneurial practice (Bosma et al., 2021). In the same vein, it would also be wrong to believe that all Swiss entrepreneurs are young graduates working on innovative and new-to-the-world business ideas, ready to conquer global markets.

Switzerland has an ageing population with a balanced gender ratio of 98 men to 100 women (Swiss Statistical Office, 2021a). Slightly more than half of the Swiss population, namely 53.6%, is already more than 40 years old. In half of the 26 Swiss cantons, the share of retired individuals older than 65 is larger than the share of individuals below the age of 20 (Swiss Statistical Office,

2021b). While conducting the GEM adult population survey (APS), we take these data into account and stratify our sample by age group and gender, subdivided proportionally into the different Swiss language regions.

Considering the demographics, it is thus not surprising that older population groups are also more strongly represented in the TEA. Half of the TEA (49.55%) is composed of individuals older than 45 years. By taking the 35-44 age group into account, almost three out of four entrepreneurs (73.46%) belong to that group. In Table 7 below, we indicate the share of early-stage entrepreneurs for each age-group.

In terms of senior-entrepreneurship (55-65 years), Switzerland ranks the second highest, just behind South Korea. Between the ages of 35 and 54, we have a share of 10.1% (for the 35-44 year olds) and 11.5% (in the 45-54 group) that are involved in early-stage entrepreneurial activities. Young entrepreneurs below the age of 25 are rather scarce. These age groups seem to be much more entrepreneurial in North America, Sweden and the Netherlands. Finally, this trend is also reflected among established businesses. 10.5% belonging to the 45-54 age

group and 8.7% belonging to the 55-64 age group own and manage a business that has paid wages or salaries for more than 42 months. These two age groups make up more than half of the population of established-business owners (EBO) in Switzerland: 63.71% of the total sample of owner-managers of established businesses are older than 45 years old. Young adults as EBOs are more common in North America but can also be found in some selected European countries. In the United States, more than three out of 100 individuals below the age of 25 are established-business owners. In Canada, this figure amounts to even more than five per 100 individ-

uals below 25. These figures are exceeded only by Austria, which showed a remarkably high rate of 7.21 EBO in the 18-24 age group. In Switzerland, most established-business owners are in the 45-54 age group, followed by senior entrepreneurs above 55 years. Similar to Germany, Norway, Israel and the United Kingdom, only one per 100 individuals is below 25 as an established business owner. As in previous years, Italy brings up the rear in terms of entrepreneurial behavior among both TEA and EBO. Together with Slovenia, they count only 3% of the population below 25 who are involved in TEA and none in EBO (see Table 7 below).

Table 7: Age groups involved in TEA and EBO

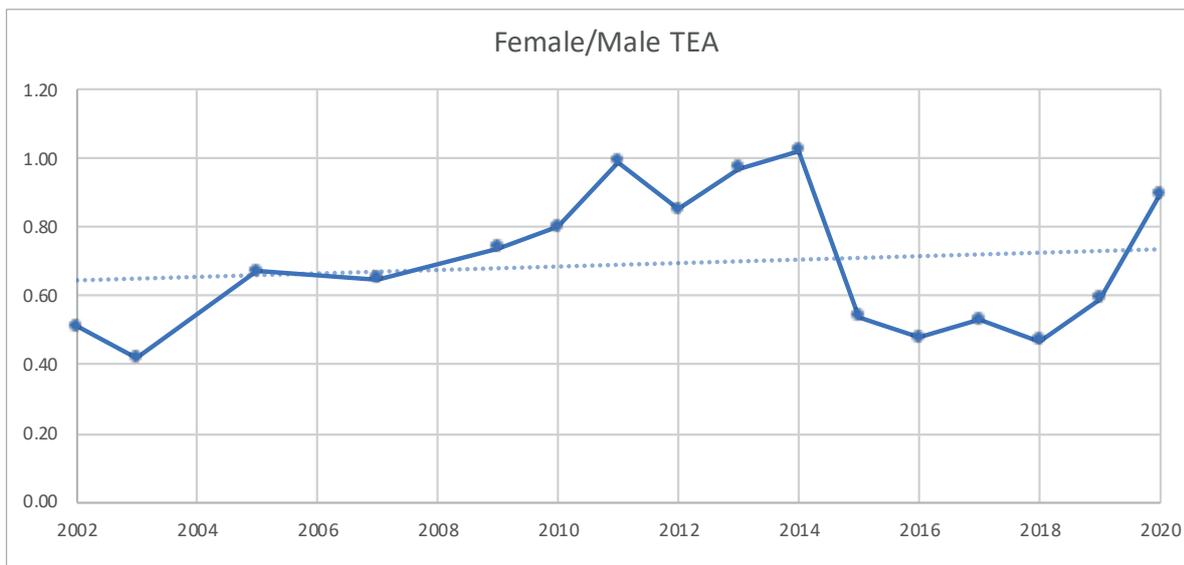
Country	% involved in TEA					% involved in EB				
	18-24	25-34	35-44	45-54	55-64	18-24	25-34	35-44	45-54	55-64
Austria	6.86	9.95	6.85	5.04	2.75	7.21	7.01	9.89	8.23	6.36
Canada	22.43	21.83	18.01	10.67	8.12	5.15	6.84	5.6	9.52	8.26
Germany	6.79	6.52	5.59	4.20	2.37	0.81	4.05	5.29	7.23	10.07
Israel	6.39	9.65	10.27	9.57	5.03	1.59	2.11	5.63	4.90	7.21
Italy	3.59	1.51	3.28	1.09	1.00	0.00	0.53	1.43	3.92	3.58
Netherlands	11.41	16.48	11.35	10.16	8.41	3.78	6.08	8.34	8.48	6.94
Norway	8.10	8.02	7.13	7.67	7.39	0.68	2.43	2.85	7.68	5.70
Slovenia	3.23	11.74	8.36	3.63	2.24	0.00	6.76	10.61	8.85	4.68
South Korea	7.10	12.44	16.36	12.99	13.53	0.40	5.67	13.13	25.53	25.97
Spain	4.52	4.98	6.25	5.27	4.33	2.90	1.66	5.97	8.53	11.93
Sweden	10.04	9.84	5.71	5.74	5.79	3.93	3.81	5.59	7.05	9.52
Switzerland	6.01	7.91	10.11	11.54	8.96	1.13	3.08	7.48	10.51	8.73
UK	9.73	12.58	7.99	6.45	2.68	1.77	1.4	8.25	9.3	10.29
USA	15.05	18.53	19.39	15.16	8.15	3.36	4.68	13.00	14.23	12.58

••• From a global perspective, there is no gender equality in entrepreneurship. The general rate of women entrepreneurs amounts to 10.2%, i.e., approximately three-quarters of that seen for men, whereas 6.2% own and manage an established business, about two thirds of the rate for men (Elam et al., 2019). However, female entrepreneurship rates vary greatly by world region. In sub-Saharan Africa and Latin America, around one out of five women are entrepreneurs. In fact, many sub-Saharan African countries in which entrepreneurship is often confined to small and informal business activities also count more female than male entrepreneurs. In most European countries

female entrepreneurs are underrepresented.

Figure 7 below depicts the female / male TEA ratio since the GEM measurements began in Switzerland 18 years ago. The points connected with a line show the measurements, while the (attenuated) dotted line indicates the trend line. In the years from 2011 to 2014, Switzerland had a balanced gender ratio. From 2015 to 2019, however, the ratio fell to pre- 2010 values, indicating around 2 male entrepreneurs for 1 female entrepreneur on average. In 2020, the ratio again amounted to 0.89. The next few years will show whether this positive trend will continue.

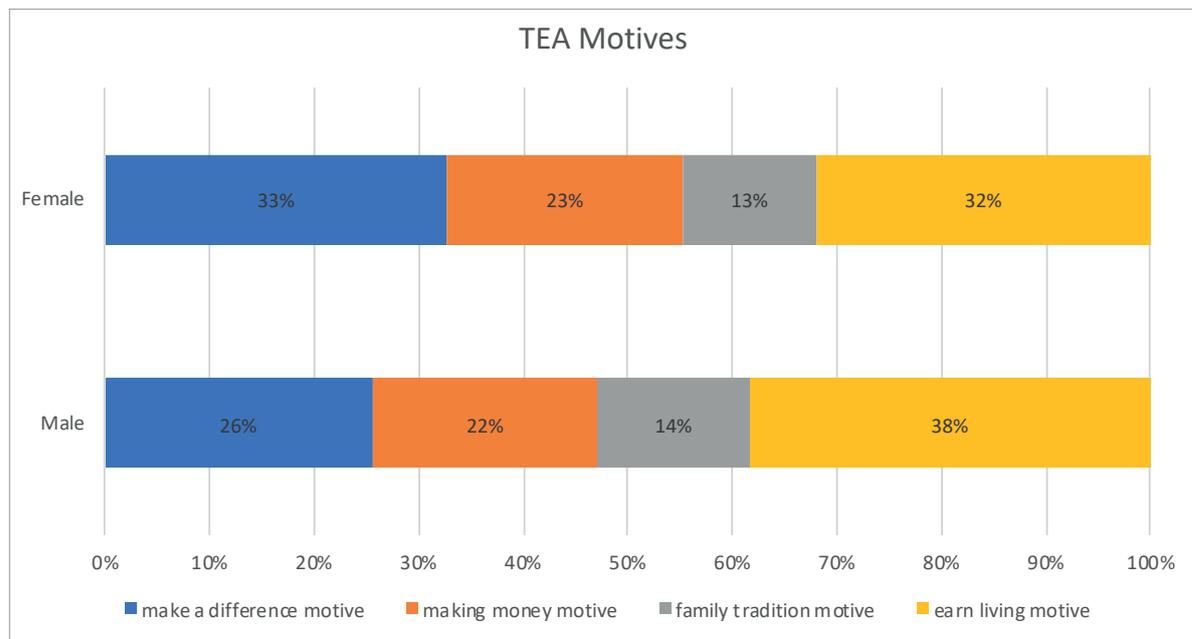
Figure 7: Female / Male TEA ratio since 2002 with trend line



Gender inequalities have also been measured with regard to attitudes and perceptions towards entrepreneurship among individual adults⁷. In the current survey, significantly fewer women reported seeing good opportunities for starting a business in the next 6 months⁸. This disappointing result is corroborated by the low number of women reporting having the knowledge, skill and experience required to start a new business: only 37.8% of women compared to 52% men assess their own abilities as sufficient for entrepreneurship. Together with a significantly higher fear of failure rate (among the total population surveyed and not only

among those seeing opportunities) of 44.3% among women compared to 39.7% among men, these figures also explain the significantly fewer number of women that aim to start a business within the next three years (male: 9.2%, female: 6.4%, $p < 0.05$). Among the various motives that make individuals act as early-stage entrepreneurs (TEA), there are fewer gender differences. When comparing the absolute figures in each category, we can state that women state slightly more often that they want to “make a difference” and thus have an impact on their environment, whereas men more often stated that they simply wanted to “earn a living”.

Figure 8: TEA Motives of male and female entrepreneurs



⁷ Mean differences between genders have been compared with Student's T-Tests. The significance level was set at $p < 5\%$.

⁸ Female opportunity recognition is -5.1% as compared to men ($p < 0.05$).

... 6 Effects of Entrepreneurial Activity

Next to the individual benefits of self-development and fulfilment for many opportunity-driven entrepreneurs, entrepreneurship and entrepreneurial activities in a society are considered to be an important mechanism for a series of collective positive outcomes. Entrepreneurship generates economic growth and development (Acs et al., 2008; Acs & Armington, 2006) and closely related macro-level benefits, such as job growth and improved innovative capacities. In an era of such drastic technological, socio-economic and environmental change, entrepreneurial activities are also meant to meet the needs of society and to generate and ensure its welfare (Bosma & Schutjens, 2011).

GEM measures the effects of entrepreneurship based on a handful of variables related to the activities and aspirations of early-stage entrepreneurs. Among them, we find the geographic scope of entrepreneurial activity, whether they have customers and thus aim to generate income from beyond their local area or even from Switzerland as a whole, and their job growth expectations. Beyond this, we measure the level of innovation within entrepre-

neurial activities by inquiring about the novelty of the new venture's applied technologies and processes, as well as the novelty of its products and services to its customers. All of these variables are highly important because they influence the likely impact of the new business on its long-term sustainability and its potential growth path (Bosma et al., 2021). In the following subchapters, we will look at these variables in comparison to other nations.

6.1 Entrepreneurial employee activity and sponsored entrepreneurship

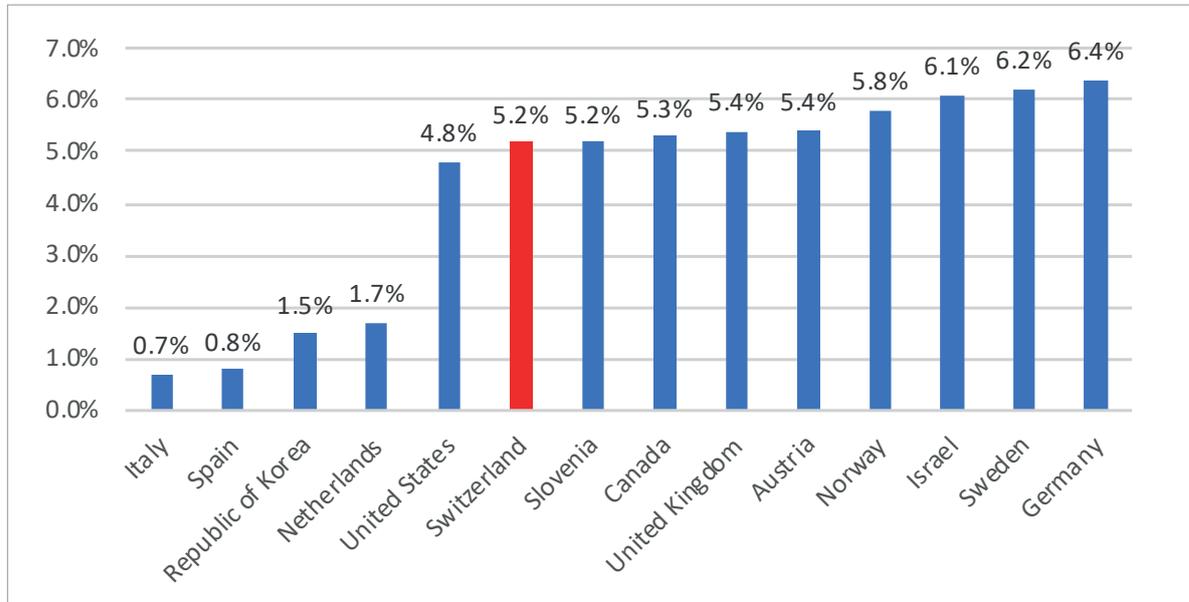
Entrepreneurship is defined as new venture creation and entrepreneurial behavior in SMEs or big companies and public organizations. One example of this is the entrepreneurial employee ("intrapreneur"), who identifies, develops and pursues new business activities as part of their job. The GEM asks whether individuals are developing new activities for their employer, such as developing or launching new goods or services, or setting up a new business unit (Entrepreneurial Employee Activity: EEA). Figure 9 reports the results, with those developing new activities as part of their job ranging



from less than 1% of adults in Italy or Spain, up to around 5% of adults in the US, Switzerland, Slovenia and

Canada. The highest level of employee entrepreneurial activity is shown in Sweden and Germany.

Figure 9: Employee entrepreneurial activity (% adults)



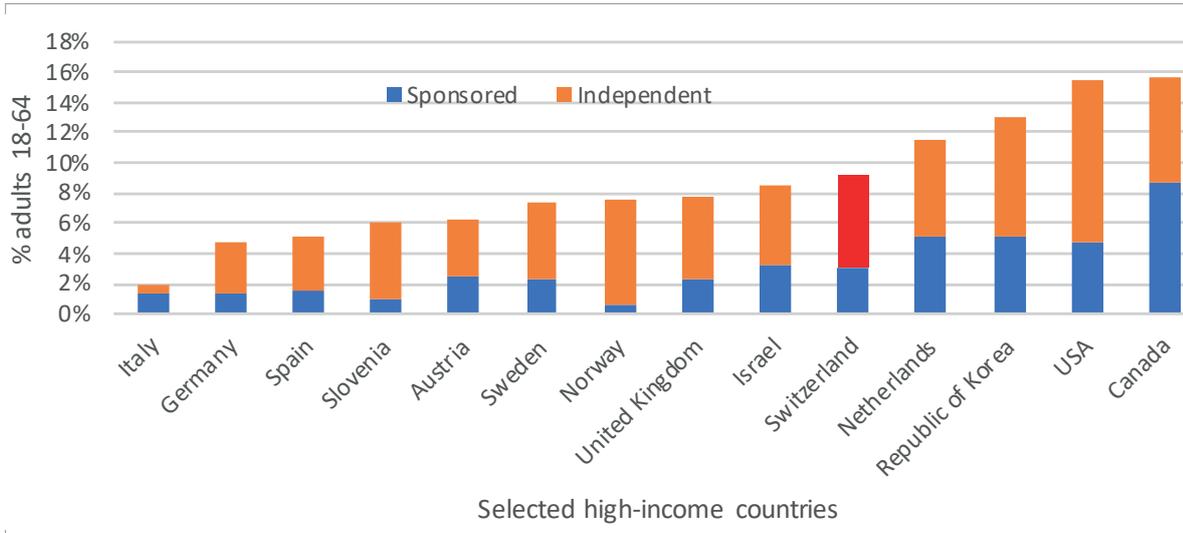
In 2019 a new question was introduced: “Are you – alone or with others – currently the owner of a business you help manage for your employer as part of your main employment?” Combined with existing questions, this one enabled identification of nascent, new and established business owner-managers whose business is autonomous or independent of a larger business, and those whose business is sponsored through shared ownership with the

individual’s employer. One intention of this question was to enable levels of entrepreneurship to be balanced against levels of intrapreneurship in a more informed way. Furthermore, it allows TEA to be divided according to whether sponsored or independent.

Full results for the economies are exhibited in Figure 10, showing both the levels of sponsored TEA and independent TEA in each economy.



••• **Figure 10:** Sponsored and independent TEA (% adults)



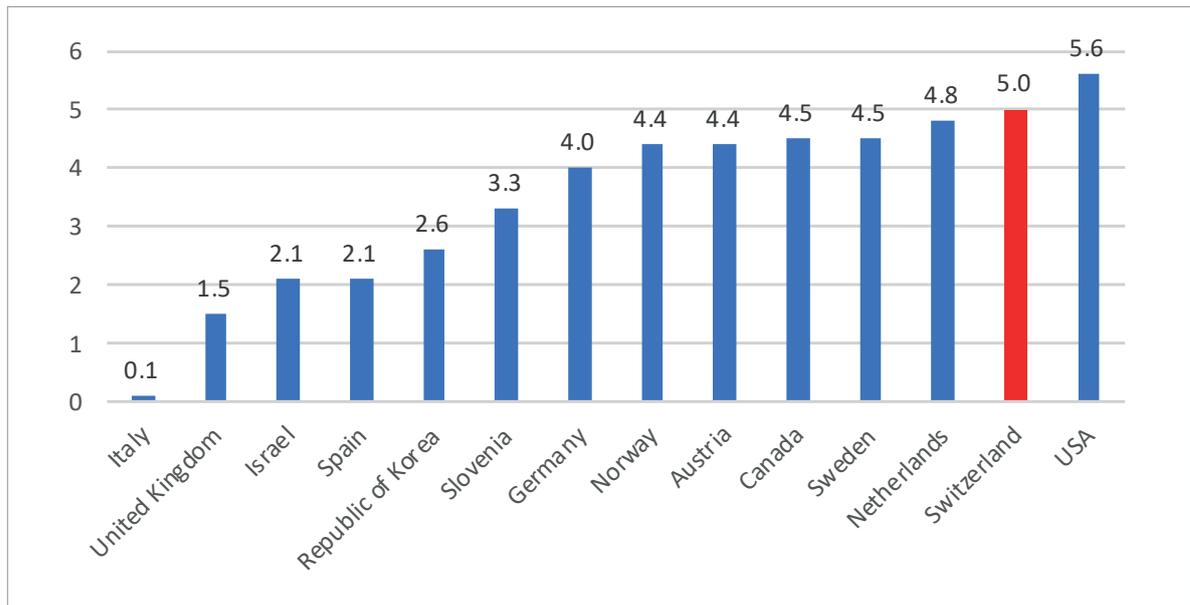
6.2 Informal Investment

Informal investments are funds for a new business started by someone else, and are typically from family, or friends and other acquaintances. In the 2020 survey, individuals were asked if they had invested in a new business started by someone else, and if so, how much they had invested and what their relationship was to that person. The most common relationships were a close relative, friend or neighbor. Figure 11 shows not only the proportion of adults in

each economy who, as of 2020, had invested in someone else’s new business at any time in the past three years, but also how much they had provided.

The rate of informal investment is highest in Latin America & the Caribbean and in the Middle East & Africa. The informal investment rates are lower in 2020 than in 2019. The greatest falls were in Oman (from 10% of adults to 2%) and Switzerland (8.9% to 5.0%).

Figure 11: Informal investment (% adults)



6.3 Job growth expectations

It would be wrong to assume that the creation of new jobs is limited solely to large companies. In Switzerland, as in many other small and open economies (so-called SMOPECs), small and medium-sized enterprises employ two-thirds (67.6%) of the national workforce. Particularly in the tertiary sector, SMEs are considered important employers that provide a large part of the population with good employment opportunities. In recent years, SMEs have also frequently made a more robust contribution to the national development through the creation of new jobs than large and multinational enterprises (Welte, 2019).

Startups, also most often counted among SMEs due to their small number of employees, can be a particularly

important source of new job creation. This is particularly the case if the newly created companies are aiming for a future business model that relies on strong scaling.

In the GEM survey, it is therefore of interest to consider the intended job creation of the young entrepreneurs. Thus, the entrepreneurs in the TEA sample were asked to supply information on their estimated number of new employees in five years' time.

In 2019, we recorded that half of the TEA sample in Switzerland aims to create at least one job within the next five years. This also corresponded to the situation in most of the comparative countries (Baldegger et al., 2020). In the current survey, the expected job creation from early-stage entrepre-

neers has increased slightly. As seen in Table 8 below, we find in almost every comparison country more than half of the TEA sample that aims to create jobs with their startup within the next five years' time. In Switzer-

land, 70.1% of the entrepreneurs in the TEA aim to create any new jobs within five years. With 48.3%, Israel is the single country that has slightly less than half of its sample aiming to create new jobs.

Table 8: TEA rate with % of TEA creating any jobs or with high job creation expectation

	TEA rate	% of TEA any jobs within 5 years	% of TEA high job creation expectation
Italy	1.9%	60.9%	16.9%
Germany	4.8%	69.5%	29.3%
Spain	5.2%	59.9%	13.6%
Slovenia	6.0%	82.9%	30.4%
Austria	6.2%	58.3%	3.4%
Sweden	7.3%	55.9%	20.4%
Norway	7.6%	65.7%	32.5%
United Kingdom	7.8%	61.1%	19.7%
Israel	8.5%	48.3%	20.6%
Switzerland	9.2%	70.1%	12.2%
Netherlands	11.5%	64.4%	15.3%
South Korea	13.0%	91.2%	37.4%
United States	15.4%	74.7%	30.5%
Canada	15.6%	63.2%	24.3%

Despite its rather strong ranking in terms of any job creation within the next five years, Switzerland is relatively weak with regard to expectations of high job creation, which means that the entrepreneurs aim to create 6 or more jobs within 5 years' time, amounting to only 12.2% of the TEA sample.

In comparison to the other countries as shown in Table 8 above, only Austria (3.4%) ranks lower than Switzerland. The large majority of Swiss entrepreneurs thus plan to create less or no job growth at all. The value for Switzerland is among the lowest as measured so far. Such low values were last measured in the years after the financial crisis,

from 2009 to 2012, where expectations of high job creation for Switzerland ranked between 9% and 13%. In the past five years, this value has tended to be in the range of 20% to over 30%.

Israel and Sweden, the two countries with the largest share of those entrepreneurs who do not aim to create jobs at all within the next five years, have fairly high expectation rates of high job creation (20.6%, resp. 20.4%). This means that despite the many young companies with few growth prospects, Israel and Sweden also have a vibrant start-up scene with potentially fast-growing companies.

6.4 Innovative Orientation

Innovation can be considered one of the primary sources of competitive advantages. This is particularly true for newly funded start-ups that often lack resources and which try to make up for this lack of resources by competing with innovative and new market solutions. Innovation is therefore often considered to be a kind of magic bullet that can be used to combat the overpowering incumbent firms and that helps start-ups overcome the first volatile phase of their lifecycle. One can even assume that the entre-

preneurial process must necessarily be characterized by innovation of any kind since it involves the process of launching a new product or service with one's own resources and by applying one's own production methods.⁹

The GEM study monitors the innovative direction of entrepreneurial activities by investigating the innovation orientation of the newly funded firms and other entrepreneurial activities. In the past year, the major variable measuring this was labelled innovation levels of TEA. It indicated whether the entrepreneurs' products and services were new to all or some customers and whether few or no other businesses offered the same product. In this vein, the GEM team Switzerland measured whether the products and services offered by the Swiss entrepreneurs as well as the technologies and procedures applied by them were new to their area, new to the country or even new to the entire world. Switzerland had a fairly high percentage of entrepreneurs who started their business with products or services that were new to the country as well as with technologies and procedures that were novel for Swiss companies as well. Therefore, Switzerland

⁹ Following the creative destruction as famously described by Schumpeter (1934; 1939; 1942) and postmodern definitions of entrepreneurship, such as by Shane (2003) or Sledzik (2013).

- ranked in a top position (4th with regard to novel products or services and 6th with regard to novel procedures and technologies) as compared to our comparison countries in the 2019-2020 report (Baldegger et al., 2020).

In this year’s survey, we want to take a closer look at how large the share of medium- and high-tech start-ups is in our TEA samples. This analysis is based on the question of whether the start-ups are active in sectors that are not moderately or strongly characterized by a technological environment.

Table 9: % of TEA active in medium- or high tech sectors

	% of TEA Active in technology* sectors
Switzerland	12.75 %
Norway	12.58 %
Spain	9.81 %
Israel	9.43 %
South Korea	9.23 %
Sweden	9.14 %
United Kingdom	8.94 %
Austria	8.20 %
Slovenia	8.05 %
Germany	7.80 %
United States	7.17 %
Netherlands	6.33 %
Canada	5.54 %
Italy	0.00 %
*medium or high technology sectors	

The percentage within the TEA sample that is active in high- or medium-level technology sectors in Switzerland amounts to 12.75%. Switzerland ranks first when compared to our comparison group, followed by Norway, Spain, Israel and South Korea. Basically, the countries are not very far apart in this comparison. However, the figures for North America are rather surprising: the USA ranks fourth-last and Canada, second-last in our comparison. Both countries are known for their entrepreneurial spirit. In the USA in particular, a country with its world-leading technology companies, one would expect higher values. Considering the absolute size of the U.S. start-up scene, the current TEA value of 15.4% applies to an adult population between the ages of 18 and 65 of around 174 million individuals (US Census Bureau, 2021), we can state that the absolute share of medium- and high-tech entrepreneurs in the US is still relatively high.

6.5 International Orientation

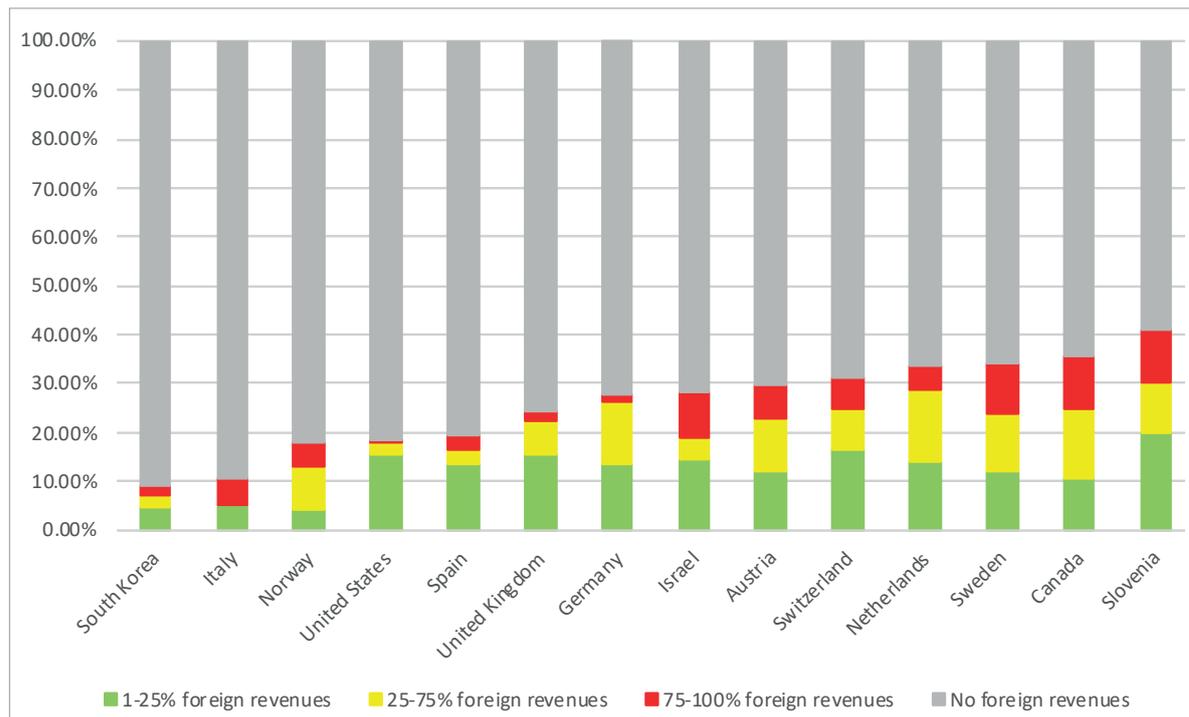
Young firms expanding into foreign markets take great risks in doing so. They expose themselves to a variety of internal and external obstacles, such as a potentially more intense use of resources such as financial, technological and human ones as well as a much more complex busi-

ness environment with different market sizes and demand and regulatory and socio-cultural systems, just to name a few. Then again, we can consider internationalization as an important strategic option for many new firms, in particular in a highly developed but small domestic market such as Switzerland. Not least due to their high degree of specialization into often highly sophisticated niche markets, Swiss start-ups are pulling their business from

very early on into global markets (Baldegger et al., 2019).

In the GEM survey, we measure the degree of internationalization based on the percentage of foreign sales to total sales below, entitled “foreign sales”. In the graph below, all comparative countries are ranked on the basis of their TEA that generates foreign revenues. On the left we find the countries with the fewest foreign revenues and on the right those with the most.

Figure 12: Share of TEA with or without foreign revenues



••• South Korea and Italy bring up the rear here with only about 10% of their TEA sample generating any foreign revenues. In Switzerland, 16.47% of the TEA sample generates between 1-25% of revenues from foreign countries. Medium-exporting firms with between 25-75% foreign sales make up 8.14% of the TEA sample, whereas the actively exporting young firms with more than 75% of foreign revenues are represented with 6.23%. As in previous years, Sweden and Slovenia (ranking 1st and 2nd place in 2019) are among the countries with the most internationally active start-ups among their TEA sample. Here, also like last year, we can observe a strong difference between the North American countries of USA and Canada. Whereas Canada has a strong international orientation among their start-ups, mostly exporting to their economically strong US neighbor country, the start-ups in the United States expect most often by far to remain on their home market only.

From a general perspective, we can state that foreign revenues have dropped drastically as compared to last year. In 2019-20, seven out of the fifteen comparison countries indicated that more than half of their TEA sample firms' revenues were being generated from foreign countries respectively through exports. Among them were countries such as the United Kingdom, Germany and Switzerland (Baldegger et al. 2020). This year, even in first ranked Slovenia, there were less than half of the TEA sample firms that reported generating foreign revenues. As depicted in the graph above, in most countries there were between 20% and 30% of the TEA sample firms that generated foreign revenues.



..... 7 Entrepreneurship Context Switzerland

One exciting component of GEM that has not been addressed so far is the National Expert Survey (NES), which is of interest to policymakers, thanks to the different sets of framework conditions. The conditions that are expected to stimulate and support entrepreneurial activity are captured by the framework conditions as included in the NES (World Economic Forum, 2013). The NES distinguishes between nine areas (Entrepreneurial Framework Conditions, EFCs) that are thought to stimulate or constrain the level and nature of entrepreneurial activity. At least 36 experts have been asked to give their assessments on a wide range of statements that can be classified according to these EFCs. For each EFC, the experts were asked to provide a score on a Likert scale with values from 1 (completely false) to 10 (completely true). A high score for an EFC indicates that the particular condition encourages entrepreneurial activity within a country, whereas a low score means that this area hampers entrepreneurship.

These conditions, taken together, specify a local environment for enterprise that will be supportive in some ways and constrained in others for the person trying to start a new ven-

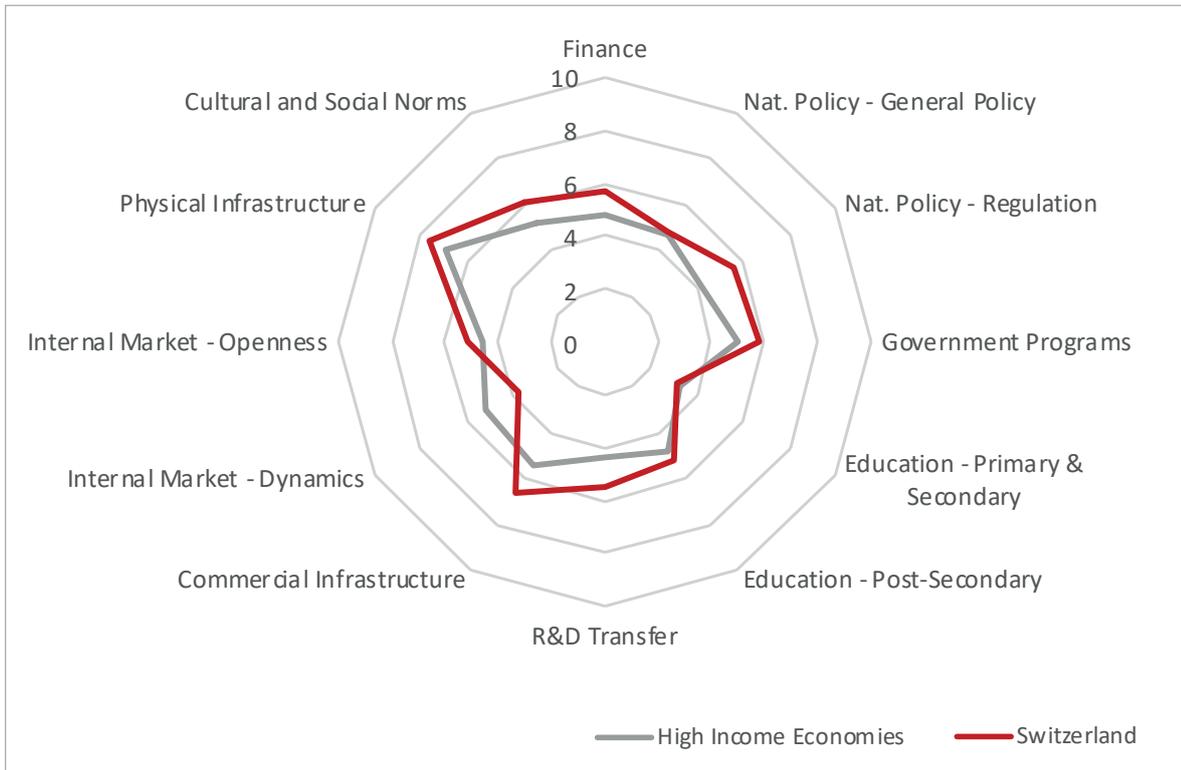
ture. These conditions influence how easy or difficult it can be to start a new business and then develop that new venture into a sustainable established business. In an international comparison of countries, Switzerland lost a few places compared with the previous year. Table 10 shows Switzerland's position within the global ranking for each condition.

The following section shows the results provided by experts concerning the Swiss context of the year 2020.

7.1 Entrepreneurship Framework Conditions – EFC

For the year 2020, Figure 13 presents the twelve national entrepreneurial framework conditions that assess the context for entrepreneurship in Switzerland. Therefore, nearly all EFC ratings are higher than average. The only exceptions below the GEM average are ease of entry: internal market dynamics (ditto last year) with a score of 3.7 and ranking 43rd place and Entrepreneurship education at the school stage, with a score of 3.1 and ranking 18th place. In Switzerland, experts still do not perceive ease of entry: market dynamics where it shall be a free, open, and growing market where no large businesses control access or prices.

••• **Figure 13:** Composite indicators on Entrepreneurial Framework Conditions, by stage of development compared to Switzerland



Further, there is still no particular curriculum for kids and youths at primary and secondary level schools which will assist them in understanding the concept of entrepreneurship.

Entrepreneurial financing, government policies, bureaucracy and taxes, governmental programs, the physical infrastructure, cultural and social norms, entrepreneurial education post-school, commercial infrastructure, R&D transfer, and internal market burdens have generated sufficient scores above average.

The best performing condition in 2020 is the commercial and profes-

sional infrastructure, with a score of 6.6 and ranking 3rd place. This is closely followed by access to entrepreneurial finance, with a score of 5.7 and the 5th rank out of 45 compared GEM countries. Close to the GEM average are the conditions of government policy concerning support and relevance (4.8 - #16) and post-school entrepreneurship education (5.2 - #15).

Among the top ten countries, Switzerland is further recognized in research and development transfer, physical infrastructure, government policy concerning taxes and bureaucracy, and social and cultural norms.



Table 10 below compares Switzerland's position with that of comparator countries (high-income) and allows more in-depth analysis.

The entrepreneurial finance framework condition describes the availability of financial resources—equity and debt—for small and medium enterprises (SMEs). Experts evaluate Switzerland's financial environment (5.7) positively with a slight increase compared to last year (5.5). It occupies 2nd place after the Netherlands.

Government policy conditions have two components which cover public policy priorities and support (4.8), representing a fallback compared to last year (5.8). Bureaucracy, tax regime, labor market regulation, and social security legislation (5.8) represent the 2nd place, again behind the Netherlands, and a very positive sign for Swiss bureaucracy, long time criticized.

Experts in Switzerland rate the presence of programs and other initiatives to support new and growing firms positively (5.8), but with a decrease compared to previous years. Countries like the Netherlands, Norway, Austria, and Germany have surpassed Switzerland.

Entrepreneurial education relates to how entrepreneurship and entrepreneurial qualities receive attention

in all phases of the educational and training system and is divided into two components. Entrepreneurial education at primary and secondary levels in Switzerland (3.1) falls back again and ranks far behind leading countries like, e.g., the Netherlands, Norway, Israel, Republic of Korea, or the USA. Post-secondary education (colleges, universities, and professional education) is evaluated more positively (5.2) but surprisingly, lost the first place and its valuable reputation.

Switzerland's R&D level of transfer (5.5) refers to the extent to which national research and development lead to new commercial opportunities and whether or not these are available for new, small, and growing firms. Led by the Netherlands, Switzerland is once more ranked in 2nd place, especially compared to the benchmark economies.

Access to professional and commercial infrastructure relates to property rights, commercial, accounting, and other legal and assessment services and institutions that support or promote SMEs. Switzerland (6.6) is again on top, together with Norway and Israel.

Entry regulation condition has two components: internal market dy-



- • • dynamics and internal market burdens. The former (3.7) refers to the level of dramatic change in markets from year to year. This has an inverse scaling: hence, smaller values are regarded more positively. On the other hand, internal market burdens (5.2) relate to how new firms are restrained from entering markets.

When talking about access to physical infrastructure and services, e.g., communication, utilities, transportation, land or space, at a price that does not discriminate against new, small or growing firms, Switzerland (7.6) lost its 1st place from last year and fell behind the leading countries the Netherlands, Norway, the Republic of Korea, and Austria.

Cultural and social norms and social support are standards that encourage and/or allow actions leading to new business methods or activities that can increase personal wealth and income. Switzerland (6.1/10) demonstrates that we lack the leading benchmark economies of the USA, Israel, Netherlands, and Norway.



Table 10: Entrepreneurial Framework Conditions (EFC) in selected high-income economies, 2020. Average scores from Likert scales of 10 points (1 = highly insufficient, 10 = highly sufficient)

	Financial environment related with entrepreneurship 1	Government concrete policies, priority and support 2a	Government policies bureaucracy, taxes 2b	Government Programs 3	Entrepreneurial education at Primary and Secondary levels 4a	Entrepreneurial education at Vocational and Professional levels 4b
Austria	4.8	4.5	4.0	6.3	1.9	4.3
Germany	5.3	4.6	4.1	6.2	3.0	4.8
Israel	5.5	3.9	3.4	4.6	3.9	5.4
Italy	4.5	4.3	2.7	3.9	2.8	4.4
Netherlands	6.2	6.1	5.9	6.6	6.0	6.5
Norway	5.6	5.5	5.2	6.3	5.2	5.6
Republic of Korea	5.6	6.2	5.1	5.8	3.9	4.6
Slovenia	4.4	4.1	3.6	4.5	3.3	4.7
Spain	4.4	4.6	3.9	5.7	2.2	5.1
Sweden	5.1	3.5	3.0	3.7	3.9	4.4
Switzerland	5.7	4.8	5.6	5.8	3.1	5.2
United Kingdom	5.6	4.5	5.0	4.7	3.4	4.5
USA	5.6	3.9	4.0	4.3	3.5	5.6
Average of High Income Economies	4.8	4.7	4.2	5.0	3.3	4.8



	R&D level of transfer 5	Access to professional and commercial infras- tructure 6	Internal market dynamics 7a	Internal market burdens 7b	Access to physical in- frastructure and services 8	Cultural and social norms, social support 9
Austria	4.3	5.6	4.2	5.6	7.8	4.2
Germany	4.7	5.7	5.1	4.5	6.3	4.8
Israel	5.1	6.6	5.7	5.3	7.5	7.0
Italy	4.5	5.1	3.9	4.4	5.5	3.7
Netherlands	6.1	6.5	5.1	6.3	8.0	6.8
Norway	5.1	6.6	4.1	5.7	7.9	6.2
Republic of Korea	4.5	4.8	7.9	4.5	7.8	5.2
Slovenia	4.1	5.1	5.6	4.5	6.8	4.5
Spain	4.8	6.5	4.5	4.5	5.9	4.3
Sweden	3.4	5.3	5.6	4.4	6.9	5.1
Switzerland	5.5	6.6	3.7	5.2	7.6	6.1
United Kingdom	4.5	5.6	5.3	5.2	6.3	5.7
USA	4.4	6.0	5.5	4.5	7.0	7.5
Average of High Income Economies	4.4	5.4	5.2	4.6	6.9	5.2





7.2 NECI – National Entrepreneurship Context Index

In 2018 GEM introduced the National Entrepreneurship Context Index or NECI, a composite index representing in one figure the weighted average state of the set of national en-

trepreneurial framework conditions. Figure 14 illustrates the overall NECI ranking and scores out of ten points this new measure of the NECI for the 44 economies completing the 2020 GEM National Expert Survey.





Switzerland holds the 10th position (see Figure 14) of the 2020 ranking after losing several positions compared to last year, where Switzerland was at the top of the list. The NECI index score decreased to 5.4 points, which means that overall the Swiss entrepreneurship context is still considered very supportive for developing entrepreneurial and established business activities. But compared to the two previous years, all of the 12 conditions were rated lower, without exception, by the chosen experts. It is interesting to note that only three economies (Spain, Mexico, and Switzerland) saw their NECI scores fall by 0.5 points or more between 2019 and 2020.

Of the 44 economies evaluated by GEM experts, only 15 reached a satisfactory or higher average score. Overall, this indicates that environmental conditions are not significantly adjusted or oriented to meet

their societies' needs to ensure entrepreneurial participation. The government and policymakers of Switzerland are working hard to build an entrepreneurial ecosystem that can assist at all entrepreneurial development stages. Many entrepreneurship programs have been offered either by the public or private sectors; all focused on different types of hard or soft support. Therefore, entrepreneurship and innovation are critical pillars in job creation to support economic diversification and transformation.

Although the results obtained in the year 2020 for NECI are lower and a bit disappointing, it indicates that Switzerland has a stable entrepreneurial context. Of course, it would be welcome for Switzerland to rank among the top 3 countries regarding the entrepreneurial context, but some pillars of this index have improved again.



... 8 COVID-19

In mid-March 2020, the Federal Council had to declare an „extraordinary situation“ due to the increasing number of people in Switzerland who had contracted the coronavirus. Four months later, when the lockdown was lifted again in mid-June, all publicly accessible places and businesses had to have protective concepts in place and large events remained banned. The negative consequences for the economy were already being felt. During this period of nationwide relaxations from mid-June to mid-July 2020, the APS survey was conducted for the thirteenth consecutive time. Among other things, the GEM project investigated the extent to which the first Covid-19 wave and the shutdown in Switzerland had affected the population's beliefs and attitudes toward entrepreneurship and their entrepreneurial activities.

In the subsequent sections of this chapter, we will first compare the GEM Indicators with previous years in order to determine where there have been significant changes resulting from the Covid pandemic. Subsequently, we will evaluate and discuss the Covid-related variables, such as, among others, the entrepreneurs' assessments of whether the pandem-

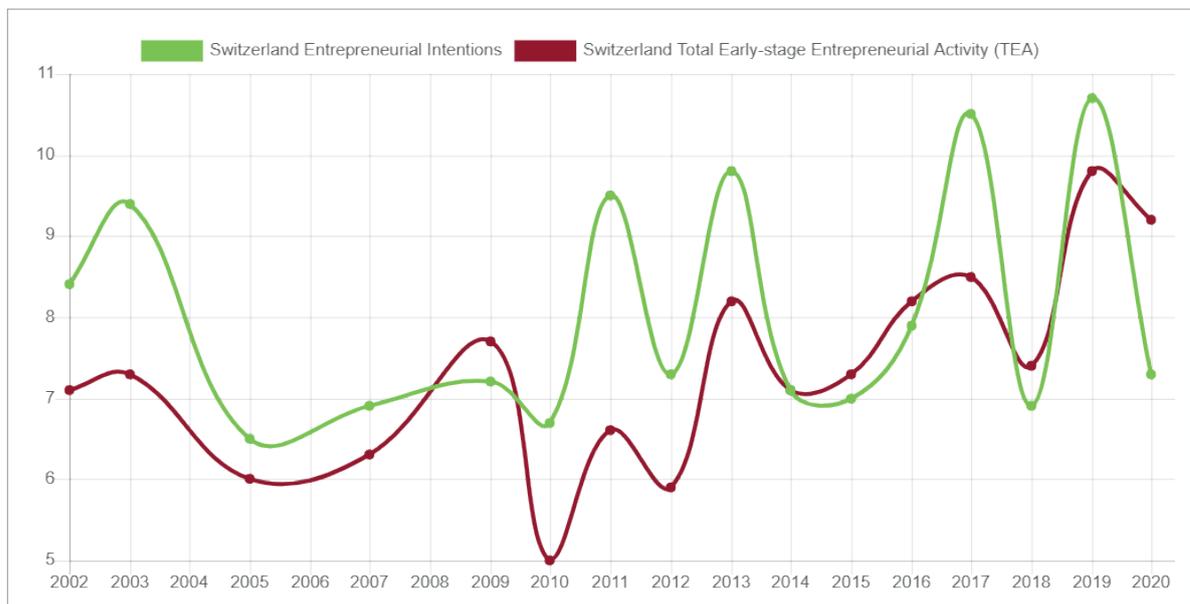
ic has made entrepreneurship more difficult or if it is even creating new business opportunities.

By taking the 95% confidence intervals into account, we can state that the total entrepreneurial activity (TEA) rate of 9.24% in Switzerland did not vary significantly compared to last year's all time high of 9.77%. However, this insignificant change does not necessarily mean that entrepreneurship rates will remain high in future years, if the Covid pandemic is not defeated soon. We recorded a significant decrease in entrepreneurial intentions, i.e., the intentions among those seeing opportunities to start a business within the next three years of -3.5% as compared to 2019. This decrease is also the strongest when held against our comparison countries. In nine out of our thirteen comparison countries, entrepreneurial intention rates have dropped, but only Sweden (-2.6%) and Slovenia (-3.1%) together with Switzerland recorded a decrease of more than 2%. Since entrepreneurial intentions represent the percentage of the population that intends to start a business in the near future, they can also be understood as an indication of future entrepreneurial activities and thus

future TEA rates. However, this decline is not necessarily to be understood as a long-term change: if we consider the entrepreneurial intention rates over the long term, it is noticeable that there have always been strong upward and downward movements. The current value of 7.3% of the adult

population aiming to start a new business within the next three years is still above the values of 2018, 2015 and 2014 and way above the very low values from the years between 2005 and 2010. Nevertheless, TEA rates in Switzerland have increased continuously during the past decade.

Figure 15: Entrepreneurial intentions and TEA in Switzerland, from 2002 to 2020



A rather strong and significant decline, however, was recorded in the perceived opportunity rates. Whereas in 2019, 40.6% of the adult population indicated seeing business opportunities that could be pursued in the area they live, there are only 26.7% in 2020. In most of the comparison countries, perceived opportunity rates have dropped, compared to 2019. In fact, Switzerland is among the countries with the lowest drop-down. Canada and the United States

recorded a drop of about 18%, from 67% in 2019 to slightly less than 50% in 2020. In Spain, where from a historical perspective opportunity recognition is rather low, at around 10-20% in the aftermath of the recession in 2009 and around 25-35% in more recent years, the rate dropped almost 20% from 36.1% in 2019 to 16.5% in 2020.

It can be assumed that starting a business has become much more

••• difficult since the outbreak of the Covid pandemic in 2020. At the same time, one could also speculate whether new business opportunities for both nascent entrepreneurs and owner-managers of established businesses, have indeed arisen as a result of the pandemic and its potentially lasting impact on our life- and consumption-style. Destruction as an essential fact about capitalism is not least the core argument for the concept of creative destruction, made famous by the Austrian-German-American economist Joseph Schumpeter ¹⁰. Although Schumpeter describes an endogenous rather than exogenous destruction that constantly revolutionizes the economic structures “from the inside” in order to create new business realities (Schumpeter, 2005), the Covid pandemic could be such a game changer.

In Switzerland, 24.2% of the TEA and 22.4% of established-business owners and managers (EB) indicated seeing new business opportunities through the coronavirus pandemic that they want to pursue. Switzerland is among the least opportunistic countries among the comparison countries.

In North America (Canada: 49.4% of TEA, 38.7% of EB; USA: 46.7% of TEA, 33.9% of EB) and Israel (70.4% of TEA; 57.58% of EB), the GEM study consortium recorded more than twice the values of Switzerland. In South Korea, on the other hand, only 7.72% of TEA and 0.62% of EB indicated seeing business opportunities arising through the Coronavirus pandemic.

About half of the nascent entrepreneurs in Switzerland (48%) who have run and/or owned a business for no longer than six months, reported having a delay in getting the business operational through the coronavirus pandemic. In Spain and Canada, this figure amounts to around 69.5, respectively 74.7%. In Italy, a country that has been severely affected by the coronavirus, the figure is as high as 91.9%.

Italy is also the country in which most individuals in both the TEA and EB samples, reported that starting a business was becoming much more difficult with the Covid pandemic (78.1% TEA, 81.9% EB). In Switzerland, ranking also in the upper half within our comparison countries, this

¹⁰ Despite the fame of Schumpeter’s creative destruction theory, it must be noted that the term itself enters economic theory through Werner Sombart. The roots of this theory, however, can be traced back to Indian philosophy and philosophical traditions, not least revisited by Nietzsche and others (Reinert & Reinert, 2006).

figure amounts to 60.6% of TEA and 71.1% of EB. Given Sweden's particular strategy of handling the pandemic situation without a specific shutdown, it is not surprising that they recorded the lowest numbers of TEA and EB. They also indicated that the coronavirus made starting a business much

more difficult (24.4% TEA, 20.9% EB) and scored the second lowest values regarding a potential delay in getting the business operational (45.9%) just behind Slovenia (44.9%) and fairly low values of about a third of their TEA sample, indicating that they expect lower growth rates for their business.

Table 11: Covid-19-related variables in Switzerland and the comparison countries

	Starting a business is (much more) difficult	Starting a business is (much more) difficult	Delay in getting the business operational	Expectations for business growth (much) lower	Expectations for business growth (much) lower	New opportunities that you want to pursue with this business	New opportunities that you want to pursue with this business
	TEA	EB	Nascent entrepreneurs	TEA	EB	TEA	EB
Austria	54.61	56.22	65.47	59.50	67.30	36.47	22.70
Canada	63.56	56.09	74.69	41.25	47.59	49.38	38.72
Germany	46.69	53.32	63.36	40.78	53.18	24.92	19.95
Israel	63.26	74.18	62.27	47.05	57.77	70.44	57.58
Italy	78.07	81.89	91.90	26.61	8.44	40.12	10.08
Netherlands	52.52	53.50	53.43	52.00	58.62	41.01	30.33
Slovenia	25.90	24.67	44.94	41.69	48.53	32.33	18.20
South Korea	61.60	66.16	47.97	70.74	79.50	7.72	0.62
Spain	71.38	80.05	69.46	57.27	64.19	25.47	16.84
Sweden	24.40	20.90	45.98	33.31	42.02	34.53	20.68
Switzerland	60.57	71.13	48.05	44.01	52.28	24.22	22.35
United Kingdom	59.95	80.11	60.08	42.30	60.28	49.41	24.60
United States	59.56	62.22	62.53	38.17	42.86	46.71	33.96

At least gratifying for the government is the fact that more than half of the entrepreneurs in the TEA and EB samples state that the government

has so far effectively responded to the economic consequences of the coronavirus pandemic.

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... GEM Framework

The GEM Project

Entrepreneurship has become a term that is increasingly widespread around the world. According to key players in society, including policy-makers, academics, entrepreneurs themselves, and the population at large, entrepreneurship tends to be associated with economic development and social well-being. Since its beginning, one of GEM's core principles has been to explore and assess the role of entrepreneurship in national economic growth. This scope is aligned with the "Schumpeterian" view that entrepreneurs are ambitious and spur innovation, speed up structural changes in the economy, introduce new competition and contribute to productivity, job creation, and national competitiveness. However, entrepreneurship has many faces and includes initiatives that are accompanied by less ambitious business activities leading to limited or no growth. It is important to note that different types of entrepreneurship may all have important implications for socio-economic development.

In 2016, 65 economies participated in the study, collectively representing all regions of the world and a broad range of economic development levels.

GEM contributes to the understanding of the role played by new and small businesses in the economy by focusing on the following objectives (Reynolds et al., 1999, p. 3):

- to allow for comparisons with regard to the level and characteristics of entrepreneurial activity among different economies;
- to determine the extent to which entrepreneurial activity influences economic growth within individual economies;
- to identify factors which encourage and/or hinder entrepreneurial activity;
- to guide the formulation of effective and targeted policies aimed at stimulating entrepreneurship.

GEM provides a comprehensive view of entrepreneurship across the globe by measuring the attitudes of a population and the activities and characteristics of individuals involved in various phases and types of entrepreneurial activity.





How GEM Measures Entrepreneurship

Since its beginning, GEM's focus has been on individuals as units of observation: men and women who are involved in different stages of entrepreneurial dynamics. Entrepreneurship is a process comprising different phases, from intending to start, to just starting, to running new or established enterprises and even discontinuing a business.

Given that the context and conditions that affect entrepreneurship in different economies are diverse and complex, it is not possible to conclude that one phase inevitably leads to the next. The entrepreneurship process and GEM's operational definitions are illustrated in Figure 16. GEM's conceptualization of entrepreneurship as a multiphase process is useful for assessing the state of entrepreneurship at different points. This process starts with the involvement of potential entrepreneurs - those individuals who believe they possess the capabilities to start businesses, who see opportunities for entrepreneurship, and who would not be dissuaded from doing so for fear of failing. For some potential entrepreneurs, their intentions to start businesses are underpinned by the perceptions society holds of entrepreneurs, the status these individuals enjoy in their society, and whether the

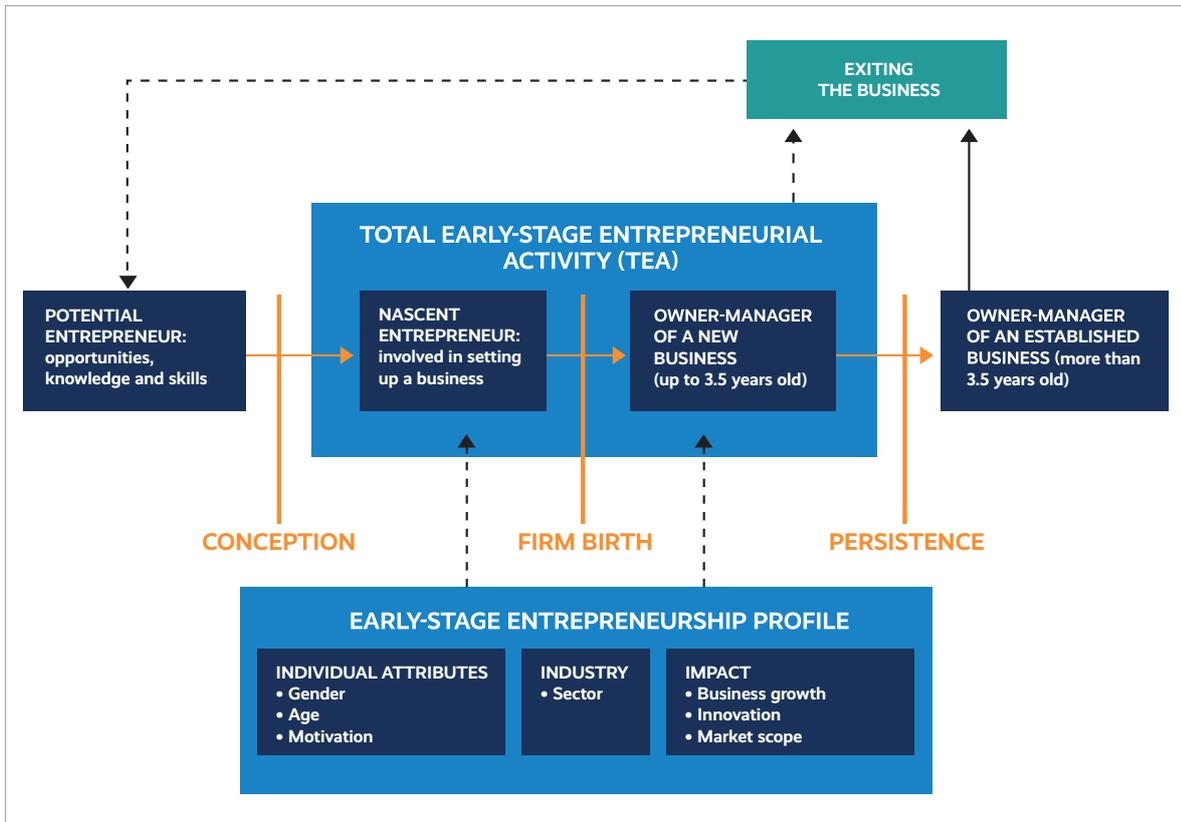
media positively represents entrepreneurs.

The next phase is nascent entrepreneurial activity - i.e., those starting new enterprises less than three months old. Given the challenges associated with starting a new business, many fledgling businesses fail in the first few months, hence not all nascent entrepreneurs progress to the next stage. New business owners are defined as those former nascent entrepreneurs who have been in business for more than three months, but less than three and a half years. Nascent and new business owners together account for the total early-stage entrepreneurial activity (TEA) in an economy, a key measure of GEM.

Established businesses are those that have been in existence for more than three and a half years. It is important to consider both established business owners as well as entrepreneurs who have discontinued or exited businesses because these two categories represent a key resource for other entrepreneurs (for example, by providing financing, mentorship, advice or other types of support). In addition, former entrepreneurs may re-enter entrepreneurship (serving as serial entrepreneurs) or they may join established companies and enact their entrepreneurial ambitions as employees.



••• **Figure 16:** Entrepreneurial phases and GEM entrepreneurship indicators

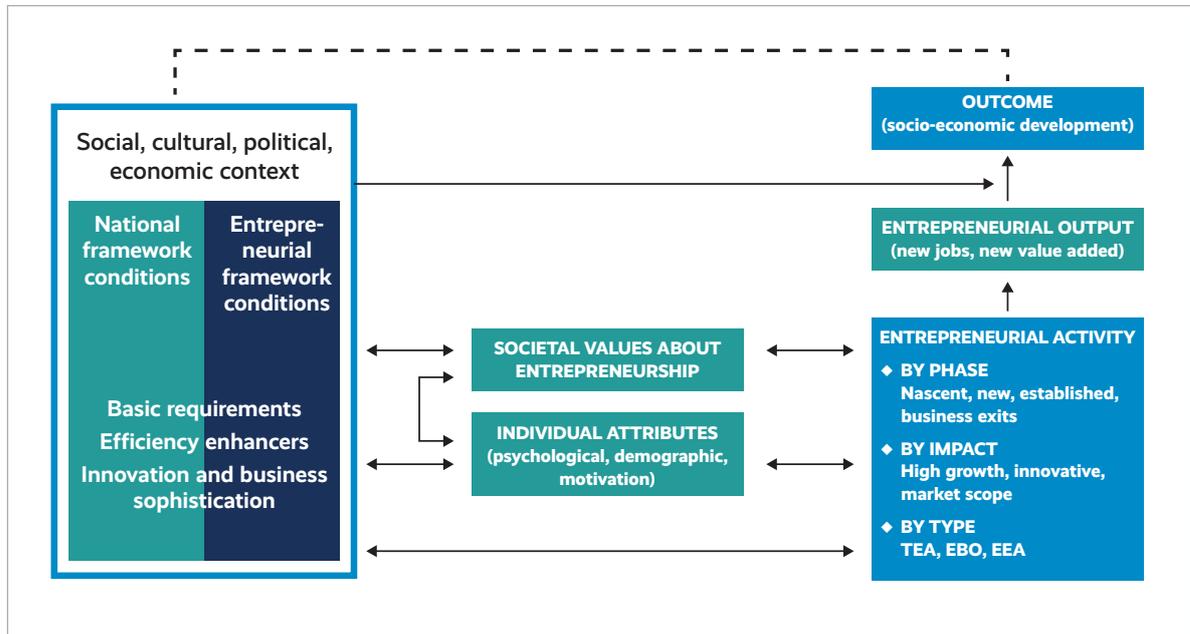


The GEM Conceptual Framework and Methodology

The GEM model shown in Figure 16 above sets out key elements of the relationship between entrepreneurship and economic growth and the way in which the elements interact.

At the same time, it acknowledges that the contribution entrepreneurs make to an economy varies according to that economy's phase of economic development, which to a certain extent drives the institutional setting.

Figure 17: The GEM Conceptual Framework



The framework incorporates the three main components that capture the multi-faceted nature of entrepreneurship: entrepreneurial attitudes, entrepreneurial activity, and entrepreneurial aspirations. These are included as components of a “black box” that produce innovation, economic growth and job creation, without spelling out in detail how they affect and reinforce each other. Figure 17 also shows how GEM measures different components, such as entrepreneurial framework conditions using the National Experts Survey, and the entrepreneurship profiles, encompassing entrepreneurial attitudes, activity and aspirations using the adult population survey.

One of the key purposes of GEM is to provide reliable data on entrepreneurship that will be useful over time

in making meaningful comparisons, both internally and between economies. For this reason, all participating economies make use of standard research instruments. The GEM data is gathered annually and is derived from the following two main sources:

Adult Population Survey (APS)

Each participating economy conducts a survey of a random representative sample of at least 2,000 adults (aged 18 years and older). The surveys are conducted at the same time of year (generally between April and June), using a standardized questionnaire developed by the GEM consortium. The raw data is sent directly to the GEM data team for inspection and uniform statistical calculations before being made available to the participating economies.

••• National Experts Survey (NES)

The NES provides insights into the entrepreneurial start-up environment in each economy with regard to the nine entrepreneurial framework conditions, namely:

- Entrepreneurial finance
- Government policies: support and relevance
- Government policies: taxes and bureaucracy
- Government entrepreneurship programs
- Entrepreneurial education at the school stage
- Entrepreneurial education at the post school stage
- R&D Transfer
- Commercial and legal infrastructure
- Internal market dynamics

The NES sample comprises a minimum of 36 respondents, with four experts drawn from each of the entrepreneurial framework condition categories. Out of this sample, a minimum of 25% must be entrepreneurs or business owners, and 50% must be professionals.

Additional aspects, such as geographical distribution, gender, the public versus private sector, and level of experience, are also taken into account in selecting the sample.

In addition to the APS and NES, GEM reports also make use of standardized national data from international data sources, such as the World Bank, the International Monetary Fund, and the United Nations. This information is used to add context to the report, and to explain the relationship between entrepreneurial activity and national economic growth.

The GEM conceptual framework opens the “black box” of an Entrepreneurship Profile and tests the characteristics of the assumed relationships between social values, personal attributes and forms of entrepreneurial activity.

The **social values towards entrepreneurship** include the social status of entrepreneurs, how society values entrepreneurship as a good career choice and how media attention to entrepreneurship has an impact on the development of a national entrepreneurial culture. Individual attributes cover demographic factors (gender, age and geographic location), psychological factors (perceived capabilities and opportunities, fear of failure) and motivational aspects (necessity-based versus opportunity-based venturing). Entrepreneurial Activity defines the venture’s lifecycle phases, the types of activity, and the sector of the activity.

..... Glossary

Measure	Description
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Societal values and perceptions

Entrepreneurship as a good career choice	Percentage of the adult population between the ages of 18 and 64 years who believe that entrepreneurship is a good career choice.
High status to successful entrepreneurs	Percentage of the adult population between the ages of 18 and 64 years who believe that high status is afforded to successful entrepreneurs.
Media attention for entrepreneurship	Percentage of the adult population between the ages of 18 and 64 years who believe that there is a lot of positive media attention for entrepreneurship in their country.

Individual attributes of a potential entrepreneur

Perceived Opportunities	Percentage of adults aged 18-64 who agree that they see good opportunities to start a business in the area in which they live.
Perceived Capabilities	Percentage of adults aged 18-64 who agree that they have the required knowledge, skills and experience to start a business.
Entrepreneurial intention	Percentage of the population aged 18-64 years (excluding individuals involved in any stage of entrepreneurial activity), who are latent entrepreneurs and who intend to start a business within three years.
Fear of Failure Rate	Percentage of adults aged 18-64 who agree that they see good opportunities but would not start a business for fear it might fail.

••• Entrepreneurial activity indicators

Total early-stage Entrepreneurial Activity (TEA)	<p>Percentage of adults aged 18-64 who are either nascent entrepreneurs or owner-managers of a new business, i.e. the proportion of the adult population who are either starting or running a new business.</p> <p>Nascent entrepreneurs – those who have committed resources to starting a business but have not paid salaries or wages for more than three months.</p> <p>New business owners – those who have moved beyond the nascent stage and have paid salaries and wages for more than three months but less than 42 months.</p>
Established Business Ownership Rate (EBO)	<p>Percentage of adults aged 18-64 who are currently owner-managers of an established business, i.e. who own and manage a running business that has paid salaries, wages or made any other payments to the owners for over 42 months (3.5 years).</p>
Business Exit Rate	<p>Percentage of adults aged 18-64 who have exited a business in the past 12 months, either by selling, shutting down or otherwise discontinuing an owner/management relationship with that business.</p>

Other indicators which describe additional types of entrepreneurial activity:

Entrepreneurial Employee Activity (EEA)	<p>Percentage of adults aged 18-64 who, as employees, have been involved in entrepreneurial activities, such as developing or launching new goods or services, or setting up a new business unit, a new establishment, or a subsidiary in the last three years.</p>
Informal Investment	<p>Percentage of adults aged 18-64 investing in someone else's new business in the last three years.</p>
High Growth Expectation Entrepreneurial Activity	<p>Percentage of adults aged 18-64 involved in TEA who expect to employ six or more people five years from now.</p>
Internationally Oriented Entrepreneurial Activity	<p>Percentage of adults aged 18-64 involved in TEA who anticipate 25% or more revenue coming from outside their country.</p>

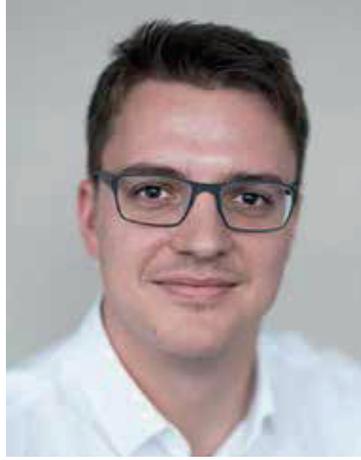
..... Country List

Global region/ income group	Low-income	Middle-income	High-income
Middle East & Africa	Angola Burkina Faso Egypt Morocco Togo	Iran	Israel Kuwait Oman Qatar Saudi Arabia United Arab Emirates
Central & East Asia	India	Kazakhstan Indonesia	Japan Republic of Korea Taiwan
Latin America & Caribbean		Brazil Colombia Guatemala Mexico	Chile Panama Puerto Rico Uruguay
Europe & North America		Russian Federation	Austria Canada Croatia Cyprus Germany Greece Italy Latvia Luxembourg Netherlands Norway Poland Slovak Republic Slovenia Spain Sweden Switzerland United Kingdom United States

... GEM Team Switzerland



Rico J. Baldegger



Pascal Wild



Gabriel Simonet



Raphaël Gaudart