



# Global Entrepreneurship Monitor 2021/2022



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**SUPSI**





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The report is available online at [www.gemconsortium.org](http://www.gemconsortium.org) and at [www.heg-fr.ch/GEM](http://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 activity<sup>1</sup> between economies, revealing the factors that determine the nature and level of national entrepreneurial activity and identifying policy implications.

In the 2021/22 census, 148'000 people (ages 18-64) in 50 economies took part in the survey. The School of Management Fribourg (HEG-FR), a member of the University of Applied Sciences and Arts Western Switzerland (HES-SO), collected data in Switzerland: 2,012 interviews (telephone and online) and 36 talks with experts revealed entrepreneurial attitudes, activities, and aspirations and identified the factors influencing the type and extent of these entrepreneurial actions.

The impact of the Spring/Summer 2020 shutdown on start-up behavior was noticeable in 2020 and founders identified fewer business opportunities and implemented fewer entrepreneurial venture projects. However, in 2021, there was a remarkable recovery and the crisis was perceived as an opportunity. This perception of opportunities, the belief in the related capabilities, and the rate of entrepreneurial intention did, in fact, increase in that year.

Opportunity recognition, i.e., the view of whether the individuals surveyed perceive a business opportunity in their locality as good and could implement it in the next six months, increased from 40.6% in 2019, 26.7% in 2020, to 54.7% in 2021.

Around a third (30.4%) of those who reported recognizing business opportunities are prevented from actually implementing these opportunities for fear of failure. Although the fear of failure fluctuates greatly from year to year, it was still below average for the selected level A economies.

<sup>1</sup> 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.

...

The entrepreneurial intentions of Swiss inhabitants are with 13.4% higher than in 2020 (7.3%) and even higher than in 2019 (10.7%), but still below the average of level A economies (16.1%), contrasting sharply with people in the Republic of Korea. Compared to past years, we Swiss have significantly more 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 40.5% (2020: 49.3%) view entrepreneurship as an interesting pathway for one's professional future, compared to 76.2% in the U.S. or 70.4% in the U.K. This indicates that the entrepreneurial career still seems to be met with some skepticism in Switzerland. Is the profile of an entrepreneur not clear, or does the risk of an entrepreneurial journey bear more negative than positive effects? As the status of a successful entrepreneur is re-

garded more or less favorably, media attention on entrepreneurship is close to the average for level A economies.

Perception of capabilities is with 49.6% higher than in the previous years and Switzerland's perception of capabilities is higher than in the European countries, but clearly behind the very strong belief of Americans in their own capacity to start a business (64.6%).

The start-up rate, the "Total Entrepreneurial Activity" (TEA), was with 9.8% in 2021 on the same level as before the pandemic (2019; 9.77%). The experts gave top marks to entrepreneurs for adaptability. Moreover, cooperation between new and growing companies with established companies stands out just as positively in an international comparison<sup>2</sup>: the government measures are rated as good in comparison with other countries, with the latter scoring even better when focusing on individual aspects.

<sup>2</sup> Level A economies: Canada, Finland, France, Germany, Ireland, Israel, Italy, Japan, Luxembourg, Netherlands, Norway, Qatar, Republic of Korea, Saudi Arabia, Sweden, Switzerland, United Arab Emirates, United Kingdom, United States.

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, and increased in the

next years. In 2021, there are 6 women entrepreneurs for every 10 male entrepreneurs, thus fewer women entrepreneurs than the year before. 12.3% male entrepreneurs (9.8% in 2020) compared to 7.2% women entrepreneurs (8.7% in 2020).

Table 1: Gender differences in TEA, EB, and EE

	% Adults	Rank/47	% Female	% Male
Total early-stage Entrepreneurial Activity	9.8	26 =	7.2	12.3
Established Business Ownership rate	7.1	19 =	5.1	9.0
	% Adults	Rank/37	% Female	% Male
Entrepreneurial Employee Activity	7.1	3	5.5	8.6

The motivation profile is slightly different for female founders compared to that of male founders. In the last survey, a shift in the motivation profile was apparent. Firstly, the motivation “to make a difference” increased impressively in 2021. This motive stimulates 57.9% (42.5% in 2020) of founders; the difference for male founders compared to 2020 is particularly im-

pressive. Secondly, a shift of motivation was discovered in relation to “earning a living”: 41.9 % (60.9%) of men involved in the early stages of entrepreneurial activity are motivated “to earn a living”. In contrast, only 54.5% of the women entrepreneurs mentioned this motivation. This stimulus was less important for female entrepreneurs in 2020.

Table 2: Gender differences in motivation

2021	% TEA	% Female TEA	% Male TEA
To make a difference	57.9	53.0	60.4
To build great wealth	51.5	43.6	55.3
To continue the family tradition	14.1	14.8	13.7
To earn a living	46.8	54.5	41.9





## 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 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 with the situation in most of the comparative countries<sup>3</sup>. In last year's GEM Report on Switzerland, the expected job creation of at least one job within the next five years increased to 70.1%, with almost a fifth of the sample indicating the aimed creation of 19 or more jobs within the next five years<sup>4</sup>. In the current survey, the expected job creation from early-stage entrepreneurs has increased even more. Overall, around 80% of our TEA sample is planning to create at least one job within the next five years. High job creation expectation has decreased slightly, from 19% to 12% indicating lower job creation expectations. In

Switzerland, the percentage of those involved in TEA who expect to create more jobs in the next five years was declining and therefore, Switzerland ranks 6th among the comparison countries. The leading countries are the Netherlands, followed by South Korea, the United States, Norway and Ireland.

*International orientation.* Swiss early-stage firms appear to have a very strong international orientation. Switzerland (36.4%) reports a rather high revenue with foreign economies, and positions itself in 5th place with comparative economies. Canada (47.4%), the UK (38.6%), Israel (40.1%) and Ireland (41.9%) 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. Canada is ahead of the ranking, which reports a correspondingly high export activity among start-ups.

*Innovation orientation.* Switzerland is again among the top 3 economies and ranks second in the share of TEA and Established Business in the technology sector. Here, the North



Americans (USA and Canada) are relatively weak, but this is not surprising given the size of their entrepreneurial sector; with so many entrepreneurial inhabitants, even Silicon Valley is a small part of the population.

## Entrepreneurial Framework Conditions

The National Entrepreneurship Context Index (NECI), an overall measure of the ease of starting and developing a business, was derived from the 2021 GEM National Expert Survey (NES). It summarizes in one figure the average state of 13 national Entrepreneurial Framework Conditions selected by GEM researchers as the most reliable determinants of a favorable environment for entrepreneurship. It is calculated as the simple average of 13

variables that represent the EFCs and which have been measured through a block of items evaluated by an 10-point Likert scale and summarized by applying factorial analyses (principal component method).

The higher the index value, the better the assessment of the entrepreneurship framework conditions in the respective country. The NECI aims to inform interested supporters and stakeholders about the overall picture of the framework conditions of Switzerland as a location for startups and businesses.

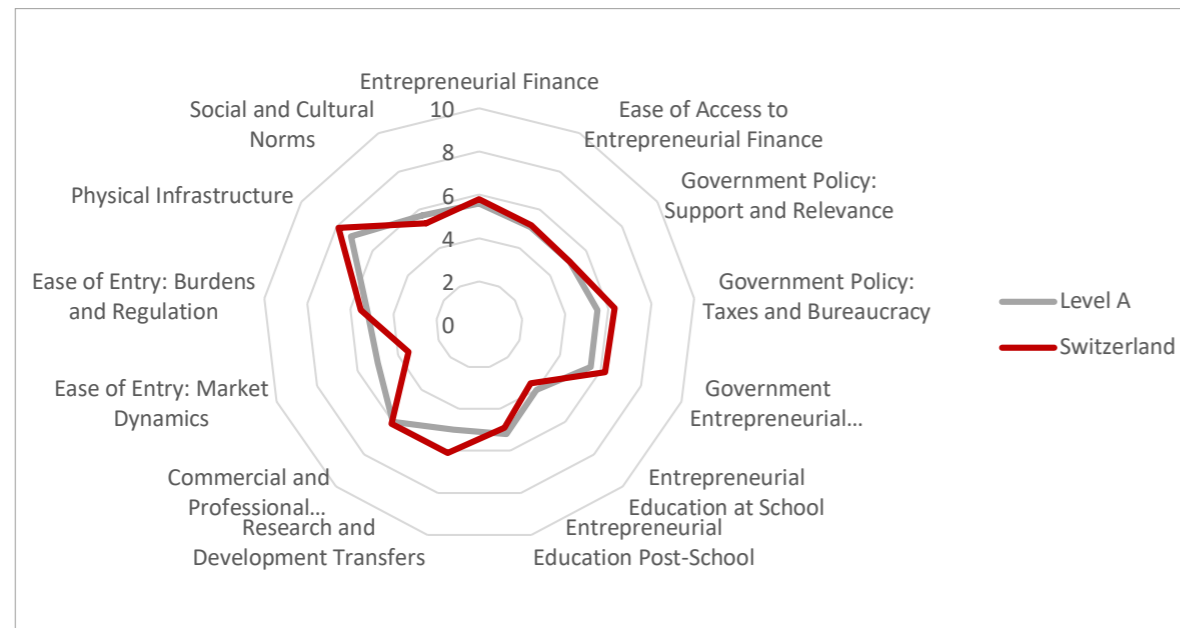
The spider figure below (figure 1) shows the strengths and weaknesses of Switzerland compared to the average of level A economies.

<sup>3</sup> Baldegger, R., et al. (2020).

<sup>4</sup> Baldegger, R., et al. (2021).



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



Switzerland’s overall entrepreneurial framework conditions are reasonable compared to other level A economies included in the study. Still, it also has to be said that Switzerland has lost in ranking. Switzerland achieves outstanding results in Research & Development Transfers, Government Policy (taxes and bureaucracy), and physical infrastructure. However, although the experts see the entrepreneurial framework conditions in a favorable light, several critical points for improvement

are mentioned in the report. They should be taken into serious consideration by policymakers.

All national governments are at least directly responsible for four of 13 Entrepreneurial Framework Conditions (EFCs), and these are not the EFCs typically rated highest by national experts. Each government can create and preserve a supportive environment for entrepreneurship. Ignoring this fact may damage the current and future wealth of its economy.

## ... 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, critical incidences, such as COVID-19 or global conflicts, 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 SMEs as the backbone for policies.

awareness of the importance of women entrepreneurs is increasing. However, 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 lower and it is quite normal for women working on entrepreneurial projects to 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!

**Serial entrepreneurs, failure and resilience:** In fact, the feeling is that if you have never experienced failure, you are not being innovative enough. In order to spur entrepreneurial activity,

**Women entrepreneurs and diversity.** 2021 was an important year for the position of women in society. Indeed,



corporations, investors, and government 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.

**SMEs, family tradition, and succession as the new venture creation:** Entrepreneurial behavior in large organizations and public institutions play a major role, particularly when 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 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.

**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 V.C. system would be an important step.

Several initiatives should be fostered to enhance the entrepreneurial ecosystem in Switzerland for 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.)

**Entrepreneurial education – 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 en-

trepreneurship 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 start-up 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 level A 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 involvement observed 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.

The GEM-participating economies are categorized into three income-levels, using World Bank GDP per capita data as follows<sup>5</sup>:

Level A: economies with a Gross Domestic Product (GDP) per capita of more than \$40,000;

Level B: economies with a GDP per capita of between \$20,000 and \$40,000;

Level C: economies with a GDP per capita of less than \$20,000.

Level A includes economies from northern Europe, east Asia and North America, plus three Gulf states, while a majority of level B economies are from southern or eastern Europe. Level C is dominated by economies from Latin America, the Caribbean and Africa. For the following report we selected some level A economies to present, analyze and conclude Switzerland's results.

### 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 level A economies in general and to the comparison group in particular.

<sup>5</sup> Note that World Bank GDP per capita data was accessed online in October 2021, finding mostly estimates for 2020, although some were for 2019. Note also that World Bank data may have been revised since then. See <https://data.worldbank.org>.

# Founders of SmartBeer



Lucien Martin and Léon Metz

*SmartBeer is a beer subscription service launched in 2012 by Lucien Martin and Léon Metz during the master's program in entrepreneurship at the HES-SO in Fribourg and Lausanne. Each month, you discover a new Swiss microbrewery with fresh craft beers delivered directly to your door. Since 2020, clients can also order craft beers through the web shop.*

## **What was the driving force in your decision to start a business?**

It all started as a business plan study paper at the HES-SO during the entrepreneurship master studies. After interviewing potential partner breweries and clients, our business model showed a high promise of success. We received very positive feedback from our professors, co-students, family

members and friends. Additionally, there was no Swiss beer subscription service at that time and we both had a high personal motivation to put our entrepreneurial study experiences in combination with our entrepreneurial mindsets into action.

Thus, during a pub visit in Fribourg, we finally decided to launch SmartBeer. Once the business bank account was opened, there was no way back. Finally, we would find out if there was not only a theoretical, but also a practical demand for our beer subscription service.

In June 2022, we will proudly celebrate our 10-year anniversary with a special delivery and we are very motivated to further develop our business.

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 failure (when it comes to starting your own business) applies only to those individuals who want to start a busi-

ness. 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 level A economies, 2021

Selected Level A 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
Canada	70.5	58.9	53.8	13.4			
Finland	61.0	42.8	44.5	9.7			
France	52.1	48.6	44.1	14.5	68.5	55.4	75.9
Germany	48.2	37.1	37.9	5.8	50.6	82.7	57.9
Ireland	57.3	57.8	49.9	15.2	67.0	83.0	82.6
Israel	45.8	37.5	46.6	17.5	63.3	82.7	53.3
Italy	34.7	44.7	45.3	9.4	61.1	56.3	65.5
Netherlands	69.9	45.4	36.8	17.6			
Norway	74.3	42.0	38.3	4.9			
Republic of Korea	44.0	54.0	14.7	26.7	57.1	89.4	71.4
Sweden	79.6	49.9	43.6	13.1			
Switzerland	54.7	49.6	30.4	13.4	40.5	75.8	61.4
United Kingdom	61.2	51.1	51.8	9.3	70.4	83.5	82.4
USA	63.2	64.6	42.6	14.8	76.2	80.4	76.7
<b>Average (Level A Economies)</b>	<b>59.2</b>	<b>51.4</b>	<b>42.8</b>	<b>16.1</b>	<b>63.8</b>	<b>78.1</b>	<b>72.3</b>

\* fear of failure assessed among those seeing opportunities.

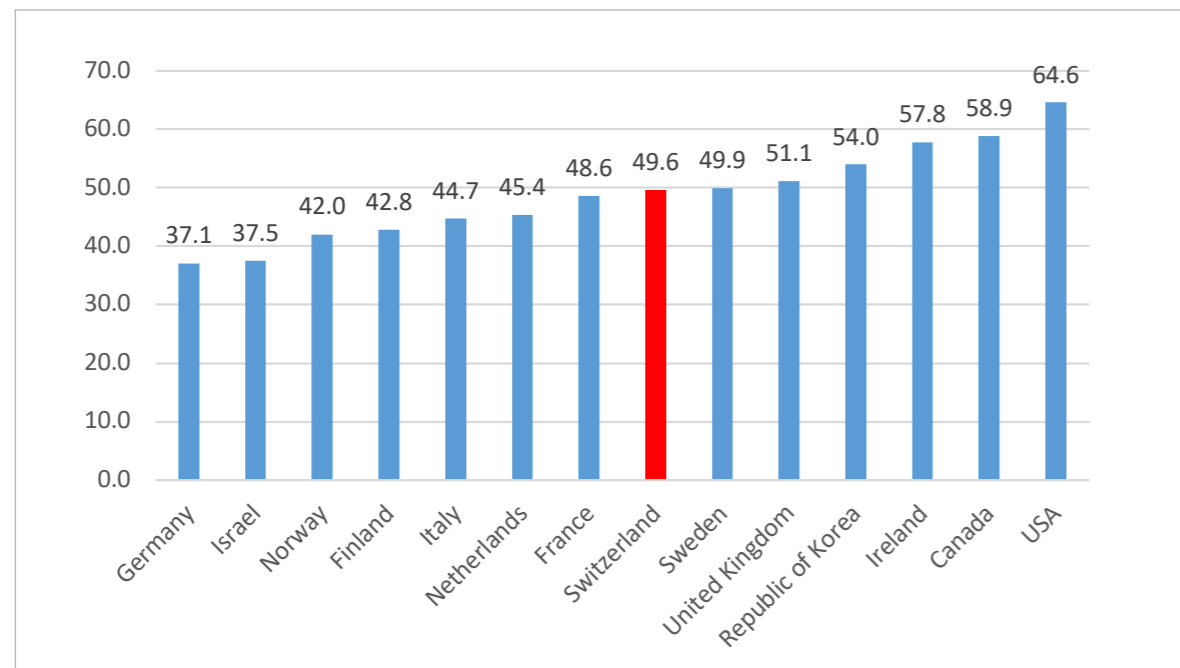
\*\* Respondent expects to start a business within three years; acurrently not involved in entrepreneurial activity.



..... In the 2021 census, the **perceived opportunities** in Switzerland to start a business are, with 54.7 %, at a slightly lower level compared to the average for level A economies (59.2%). But this number is clearly higher than in 2020 and closer to the average of level A economies. Sweden, Norway, Canada, Netherlands, Finland, and the United States remain at the top when it comes to available opportunities.

Switzerland shows a higher **perception of capabilities** (49.6%) in 2021 than in 2020, and is on the level of 2019 (49.2%). Switzerland's perception of capabilities is only slightly under the average of level A economies, but clearly behind the very strong belief of Americans in their own capacity to start a business (64.6%). The same is true of people in Canada, Ireland, and the Korean Republic.

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



... The 30.4% fear of failure in Switzerland (2020: 33.5%) is lower than the average when comparing level A economies (42.8%). 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).

preneurship as a good career choice in Switzerland (40.5%) has decreased in the last years. The result is clearly under the average of level A economies (63.8%). Compared to 76.2% the United States, 70.4% in the U.K., 68.5% in France, 67.0% in Ireland, and 63.3% in Israel, it seems that an entrepreneurial career is less attractive in Switzerland. The high status of successful entrepreneurs (75.8%) is only slightly down, as is media attention for entrepreneurship on the average for level A economies. Reports of entrepreneurs appearing in the media are increasingly more important in Norway, the US, Canada, Sweden, the UK and the Republic of Korea than in Switzerland.

The entrepreneurial intentions of Swiss inhabitants were higher in 2021 (13.4%) than in the previous years (2019 10.7%; 2020: 7.3%) but under the average for selected level A economies (16.1%). Most remarkable are the differences between Switzerland and the Korean Republic.

## 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 of failure.

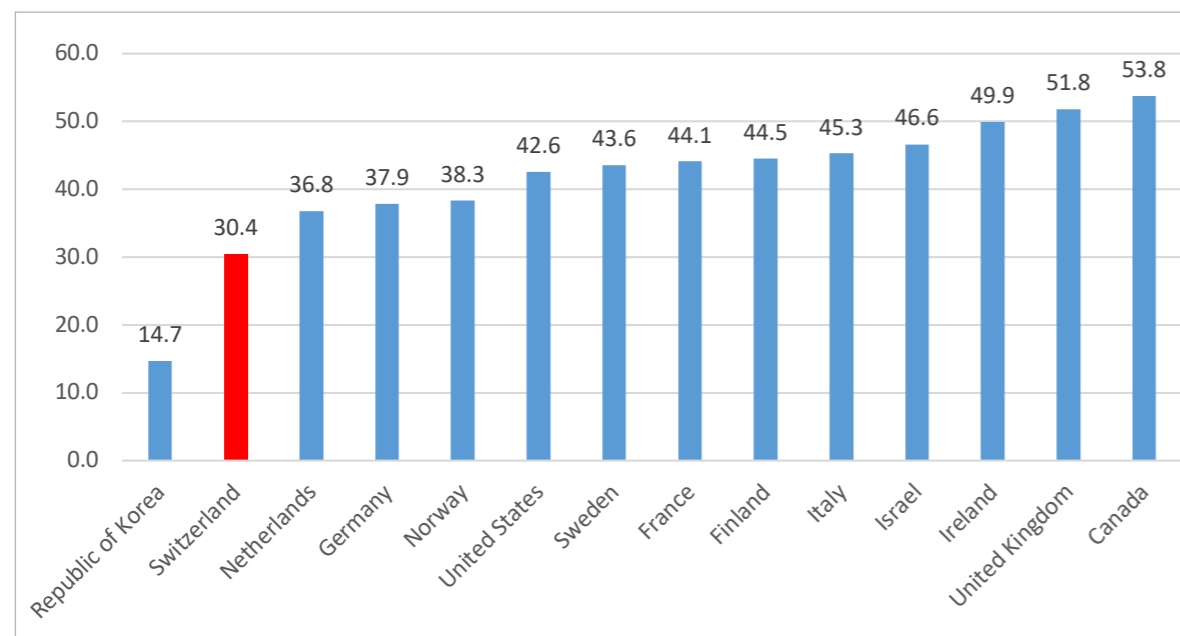
On average, two-thirds of adults in the comparison group think entrepreneurship is a good career choice. The number of people to see entre-

..... In general, more than half the adults consider they have the skills, knowledge and experience to start a new business. In Switzerland 49.6 of the people interviewed said they have the skills, compared to 64.6% in the U.S. or 58.9% in Canada.

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 14.7% (2020: 13.9%), while the next lowest percentages are in three European countries: Netherlands (36.8%), Germany (37.9%) and Norway (38.3%). About one third of the people in Switzerland would not start a business because of fear of failure 30.4% (2020: 33.5%). However, more than half of those who see good opportunities to start a business in the UK 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 questions<sup>6</sup>: 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.

<sup>6</sup> 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.

# Founder of Almighty Tree



Gilles Suard

*Almighty Tree provides a solution for businesses which aim to act against climate change with tangible actions to reduce their footprint through social reforestation and preservation. Almighty Tree developed a technological solution to make tree planting more transparent and traceable. Since 2020, more than 10'000 trees have been planted in Switzerland to create the forests of the future.*

## **What was the driving force in your decision to start a business?**

We are driven by our enthusiasm for social entrepreneurship and passion for nature. After studying entrepreneurship at the School of Management Fribourg and launching several entrepreneurial projects, we wanted to start a business which resonates with our values and which contributes to making a difference in this world. In a global warming context, we found out that planting trees in Switzerland was crucial to adapting our forests. The idea of waking up every morning with the purpose of having a bigger impact has been fulfilling for us. Being born into a family of entrepreneurs has inspired us to look for independence and create our future naturally.

..... 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 (70.4%) compared to the Republic of Korea (9.0%) and Italy (21.5%). In the Republic of Korea just 1 in 10 entrepreneurs agree

they started the business to make a difference, compared to seven out of ten in Canada. Switzerland’s results are at the same level as in Ireland, Netherlands or U.K. and above the average for comparing group/level A economies. The results for Switzerland clearly indicate Swiss Entrepreneurs` motivation to invest in business models with a purpose. Entrepreneurs in Canada and the U.S. also express a high motivation for these motives.

... **Table 4:** Motivation in selected level A countries, 2021

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
Canada	70.4%	68.4%	50.0%	70.7%
Finland	40.1%	33.4%	24.3%	47.9%
France	25.8%	39.4%	22.9%	51.2%
Germany	39.4%	43.7%	24.2%	40.9%
Ireland	57.8%	59.0%	29.0%	56.0%
Israel	36.9%	74.9%	15.0%	49.8%
Italy	21.5%	53.4%	22.8%	61.4%
Netherlands	52.7%	41.8%	24.5%	44.1%
Norway	39.2%	37.4%	23.0%	26.5%
Republic of Korea	9.0%	71.1%	4.1%	34.3%
Sweden	45.3%	55.0%	20.6%	28.0%
Switzerland	57.9%	51.5%	14.1%	46.8%
United Kingdom	53.0%	55.2%	21.7%	63.8%
USA	71.2%	74.1%	41.5%	45.8%
<b>Average (Level A Economies)</b>	<b>46.9%</b>	<b>56.5%</b>	<b>28.9%</b>	<b>49.8%</b>

“To build great wealth or a very high income” is still a very common motivation, agreed with by more than 7 out of 10 of those starting or running a new business in the US, Republic of Korea, Israel and Canada, but by 3 in 10 in Finland. In Switzerland (51.5 %) this motive is more important than in 2020 (32.5%) and only slightly under

average of the selected level A economies (56.5%).

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 14.1% (2020: 20.1%)

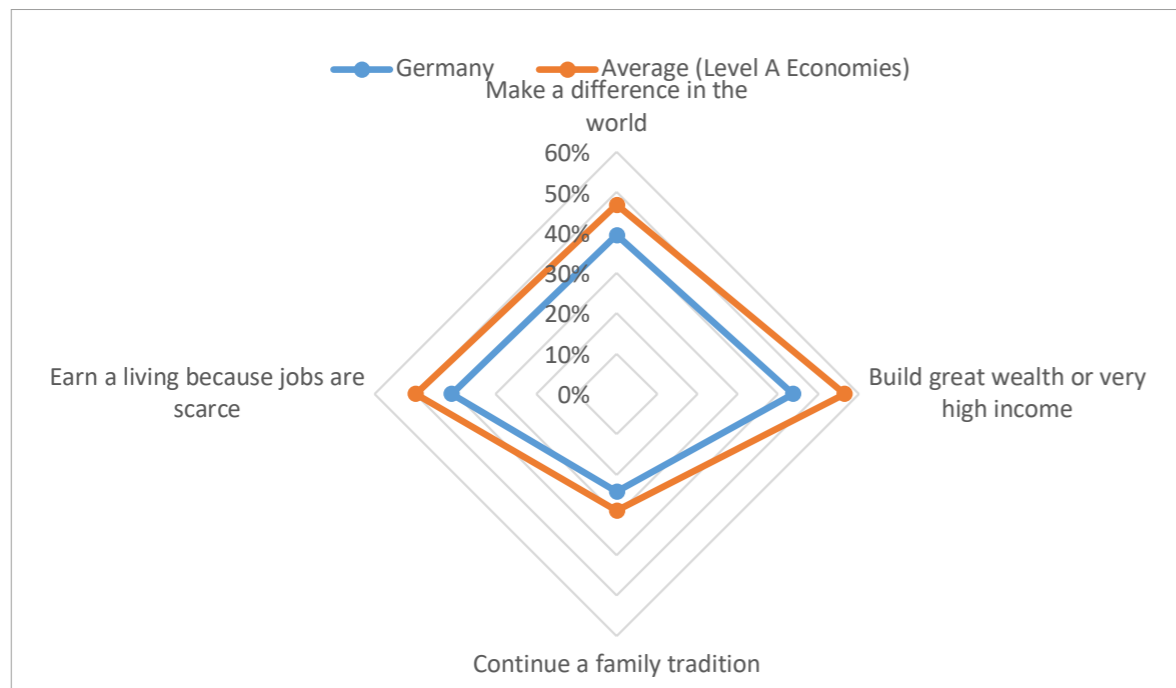
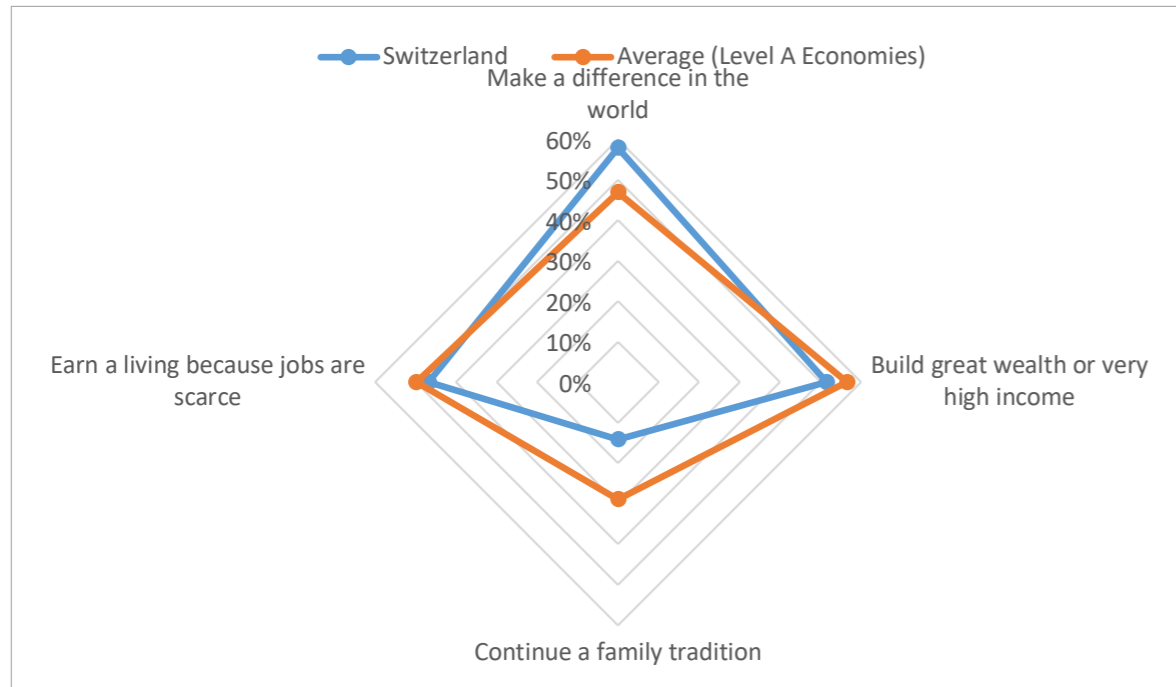


..... in Switzerland. This motive has the highest share in TEA in three economies: Ireland, Canada, and the USA.

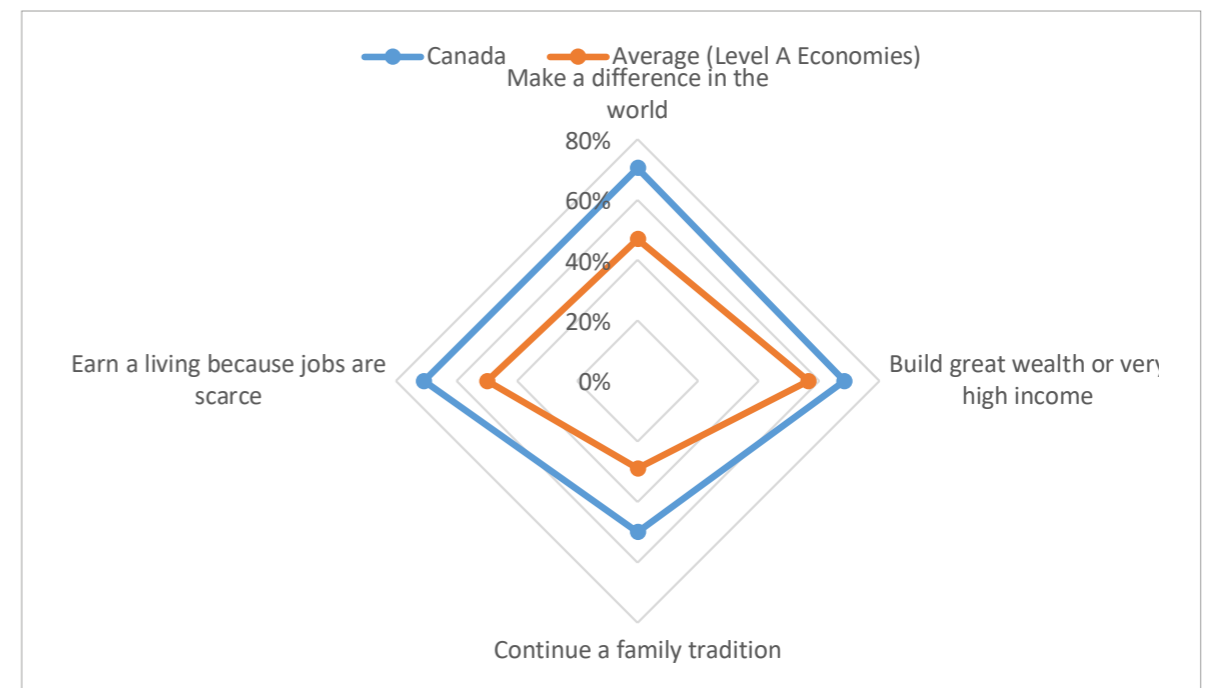
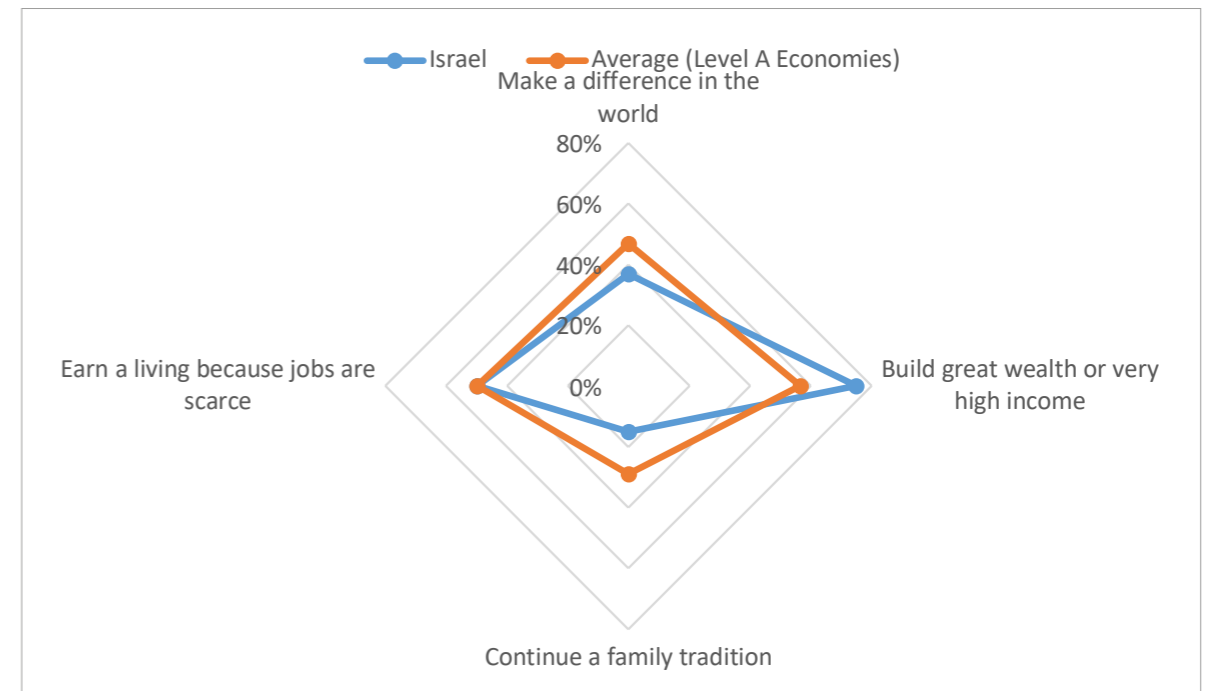
those engaged in TEA in Canada, followed by UK and Italy. In Norway and Sweden, this motive is less important compared to the results in Switzerland: for about 5 of 10 people, this motive is vital.

The motive, "To earn a living because jobs are scarce", is important for

**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 ownership). 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 level A economies.

Table 5 shows a low rate of discontinuation of businesses (1.9%) in Switzerland and an established business ownership rate (7.1%) on the average of level A 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?

### 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 level A economies. The 95% confidence intervals help to interpret the differences between countries. Although the Swiss TEA rate (9.8%) tends to be higher than in European countries such as France, Germany, or Italy, only the Netherlands’ TEA rate is higher than in Switzerland with regard to adopting a 95% certainty. Among the

comparison group, Canada (20.1%), the United States (16.5%) and the Republic of Korea (13.4%) 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 (9.8%) but is below average for level A economies (11.2%; 2020: 12.1%).

**Table 5:** Percentages of entrepreneurial activity in selected level A economies, 2021

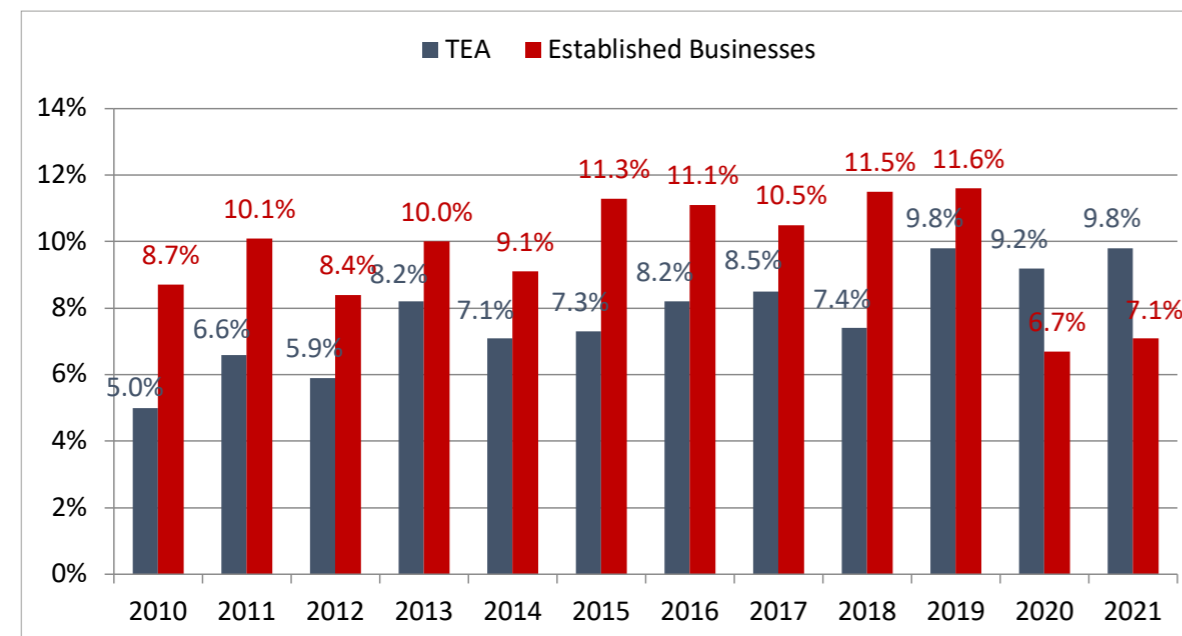
Selected level A Economies	Early-stage entrepreneurial activity (TEA)	Entrepreneurial Employee Activity (EEA)	Established business ownership rate	Discontinuation of businesses
Canada	20.1	4.7	8.2	5.6
Finland	7.9	6.6	8.9	1.4
France	7.7	2.8	3.6	1.6
Germany	6.9	3.4	5.0	2.1
Ireland	12.5	5.7	6.9	4.4
Israel	9.6	5.8	3.3	3.3
Italy	4.8	3.2	4.5	1.0
Netherlands	14.2	3.5	6.4	3.5
Norway	3.1	1.9	3.5	0.6
Republic of Korea	13.4	1.5	16.4	2.6
Sweden	9.0	5.8	4.3	2.7
<b>Switzerland</b>	<b>9.8</b>	<b>7.1</b>	<b>7.1</b>	<b>1.9</b>
United Kingdom	12.6	4.1	5.3	2.1
USA	16.5	4.5	8.9	4.3
<b>Average (Level A Economies)</b>	<b>11.2</b>	<b>4.4</b>	<b>6.2</b>	<b>3.2</b>

## 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 2010-2021 in Switzerland



The Swiss rate for established business (7.1%) was stable during the few years (Figure 5) and the rate is higher than the average of the selected

level A economies (6.2%). The outlier is the Republic of Korea with 16.4% and the USA (8.9%) or Canada (8.2%) have a higher rate than Switzerland.

# Founder of Initium



Mathieu Gigandet

### What was the driving force in your decision to start a business?

I was motivated to start my own business by the discovery of the entrepreneurial adventure during my studies at the Haute Ecole de Gestion de Fribourg. Since then, I have been fascinated by maturing an idea, shaping it, making it a reality, and persevering. It's a piece of yourself that you project to the world in the hope that it will be well received. However, I would not have ventured down the path of entrepreneurship at any cost - I wanted to embark on a project that was in line with my vision and values. This is the case with Initium, which aims to promote local know-how. - Initium was born in 2015 in Le Noirmont. Liking challenges, strategies, and responsibilities, I was seduced by entrepreneurship which I have never left since!

*Dedicated to sharing the history and legacy of Swiss watchmaking since 2015, Initium has been offering unique training and bespoke experiences in creating mechanical Swiss watches around Switzerland – in Le Noirmont (JU), Geneva, and Gebertingen (near Zurich). In 2021, the company is taking this heritage one step further by launching an innovative watch assembly kit, now enabling the creation of a unique Swiss mechanical watch directly from home.*

### 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 level A economies, 2021 (% of TEA)

Country	Business-oriented services	Consumer-oriented services	Extractive sector	Transforming sector
Canada	25.5	51.9	3.4	19.2
Finland	31.6	36.0	12.1	20.3
France	35.9	41.2	4.0	18.9
Germany	29.0	50.4	2.6	18.1
Ireland	21.8	54.4	5.1	18.6
Israel	40.4	48.1	0.6	10.9
Italy	36.9	41.0	5.4	16.7
Netherlands	26.8	57.1	0.5	15.6
Norway	32.6	44.1	7.4	16.0
Republic of Korea	16.6	56.0	3.0	24.4
Sweden	34.1	39.3	8.3	18.3
Switzerland	42.2	36.6	2.7	18.5
United Kingdom	34.5	52.1	1.9	11.5
USA	32.6	44.6	3.9	18.9
<b>Average (Level A Economies)</b>	<b>29.2</b>	<b>48.6</b>	<b>3.7</b>	<b>18.5</b>

In Switzerland and the level A economies, three of four early entrepreneurial projects are in the consumer services and business services. Consumer services are the most important sector in level A economies (48.6%) and 36.6% (42.6% in 2020) of the TEA are based on this sector in Switzerland. In the Republic of Korea, Netherlands, Ireland, Canada and Germany, more than half of the new venture projects are consumer service based. Business services (42.2%) are more important in 2021 than in 2020 (33.6%) in Switzerland, and more important than the average for level A economies. In third position in Switzerland are new ventures in the transforming sector (18.5%), where Republic of Korea, Canada, Finland, Ireland, France and the USA 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 people who abandon their business is one of the lowest (1.9%) compared to their peers of level A economies.

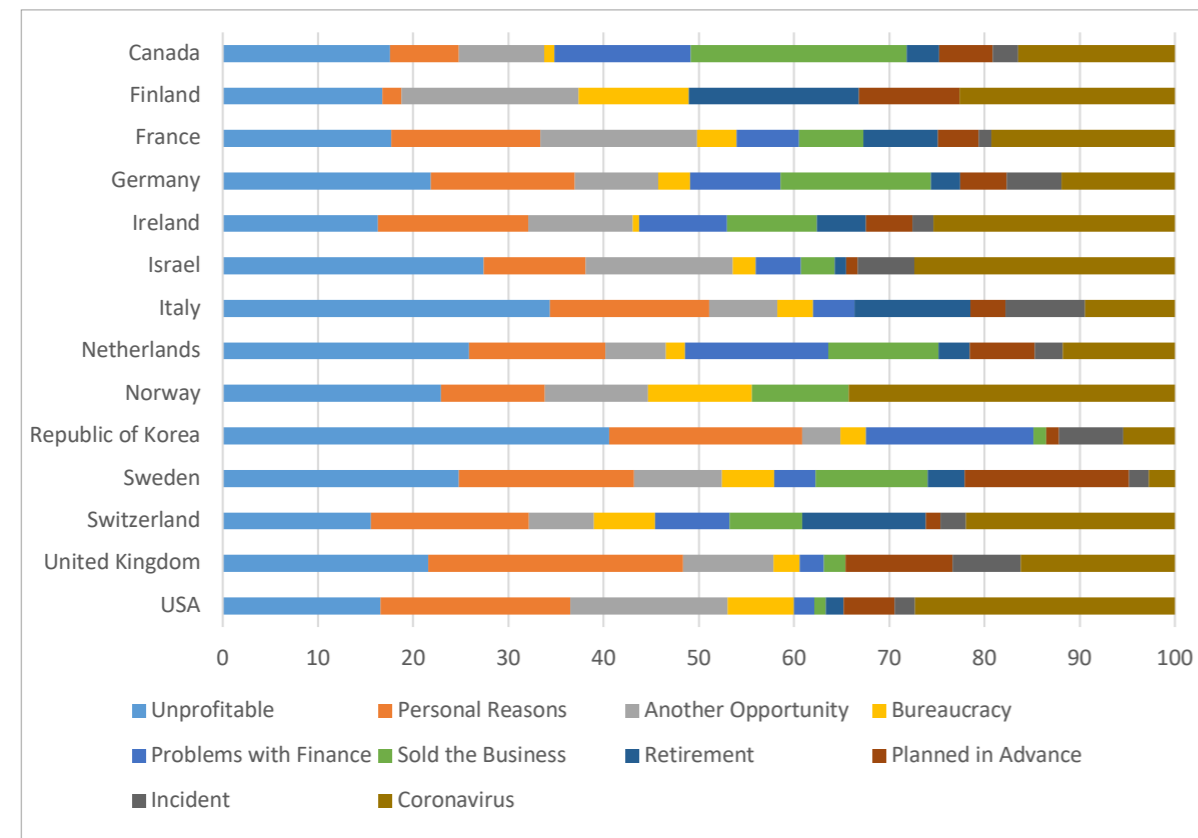
The results regarding Switzerland are special with regard to several points: Bureaucracy is not a reason to stop the business in Switzerland. 6.8% invested their time in another business opportunity, 13.0% stopped the activity due to retirement and 7.6% sold the business. These 'positive' reasons for discontinuing businesses explain one quarter of all discontinuations in Switzerland (Figure 6). A third of the discountinuation of business is due to an unprofitable situation (15.6%) and the impact of the Covid-19 pandemic. 22.0% of projects have been stopped.

<sup>7</sup> Customer service refers to hospitality, retail and wholesale services, personal services, education services, health and social services or leisure and hospitality.  
<sup>8</sup> 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.  
<sup>9</sup> 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).



In other European countries, the percentage was lower. Only in Norway, Israel and Ireland did the Covid-19 pandemic have a more negative impact. Personal reasons (16.6%), incident (2.7%), and financial problems (7.8%) cover the other reasons for discontinuing.

**Figure 6:** Reasons for discontinuing a business in selected level A economies, 2021



## 5 Diversity and Entrepreneurship

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

As in all GEM participating economies, the adult population survey (APS) in Switzerland draws on a fully representative random sample of 2'000 individuals, stratified in age, gender and the three major language regions (Swiss German, French and Italian). This method, which is more elaborate, costly and much more difficult to perform than a pure random selection without any stratification, ensures representativeness and that valid inferences can be drawn from those responses<sup>10</sup>.

The stratified sample allows us to take the demographic development of our population into account. Switzerland has a rapidly ageing population. 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<sup>11</sup>. In addition, higher education degrees, from bachelor's to doctorates, have increased significantly over the past two decades. This means that although two out of three young adults in Switzerland today decide to complete vocational training after completing compulsory schooling, the path via further training, up to studies at universities of applied sciences, occupies young adults today and keeps them away from full-time positions and mere work experience longer than in the past. If, additionally, one assumes that in most cases it needs a certain degree of education and a certain degree of vocational training in order to detect business opportunities and to become an entrepreneur, it can be expected that the average age in our TEA sample is rather high. Indeed, the older population groups from 35 -65 are more strongly represented in the TEA sample than the ones between 18 and 34. As can be read in Table 7 below, both the 35-44 as well as the 45 to 54-year-olds have the largest share of

<sup>10</sup> Hill, S. & Roomi, M. A. (2022), p.55

<sup>11</sup> Swiss Statistical Office (2021)



early-stage entrepreneurs in their relative population groups with almost 12%, whereas only 8% of 18-24-year-olds are involved in entrepreneurial projects. This rather weak representation of the youngest age groups in the TEA rate contrasts to North America (both Canada and the United States)

and the United Kingdom, where the younger age groups are usually more strongly represented than the older ones. In South Korea, one of the fastest aging populations in the world, the 55-64-year-olds are already the most strongly represented group among the early stage entrepreneurs.

**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
Canada	30.83	31.6	22.6	11.6	9.0	5.59	6.62	7.83	10.99	8.55
Finland	6.5	9.6	9.1	8.2	5.6	0.45	3.79	11.12	12.85	12.96
France	7.5	11.0	10.5	7.0	2.9	-	2.87	4.40	4.53	4.65
Germany	8.3	10.0	9.6	5.2	3.0	1.75	2.93	4.74	6.12	7.29
Ireland	16.4	16.9	12.4	9.8	7.4	3.65	3.47	7.37	8.22	11.56
Israel	4.8	12.7	9.6	10.0	9.5	0.28	1.89	5.24	5.36	3.67
Italy	3.9	11.1	5.3	2.3	2.8	0.74	4.58	7.68	3.00	4.84
Netherlands	13.8	16.8	19.6	13.8	7.7	2.36	5.60	5.77	7.54	8.99
Norway	2.9	1.5	4.9	3.4	2.7	0.64	2.00	3.97	4.79	5.46
South Korea	8.3	12.5	14.6	13.9	15.1	1.24	6.40	17.54	24.44	22.75
Sweden	9.8	8.9	11.2	8.2	7.0	0.52	1.63	4.13	5.84	8.46
Switzerland	8.2	9.2	11.8	11.7	7.2	1.01	3.06	6.65	10.25	11.70
United Kingdom	17.0	15.4	16.0	7.8	8.2	0.95	1.87	5.63	6.55	10.32
United States	18.9	18.9	20.5	18.3	6.6	2.97	5.38	10.48	10.81	13.28

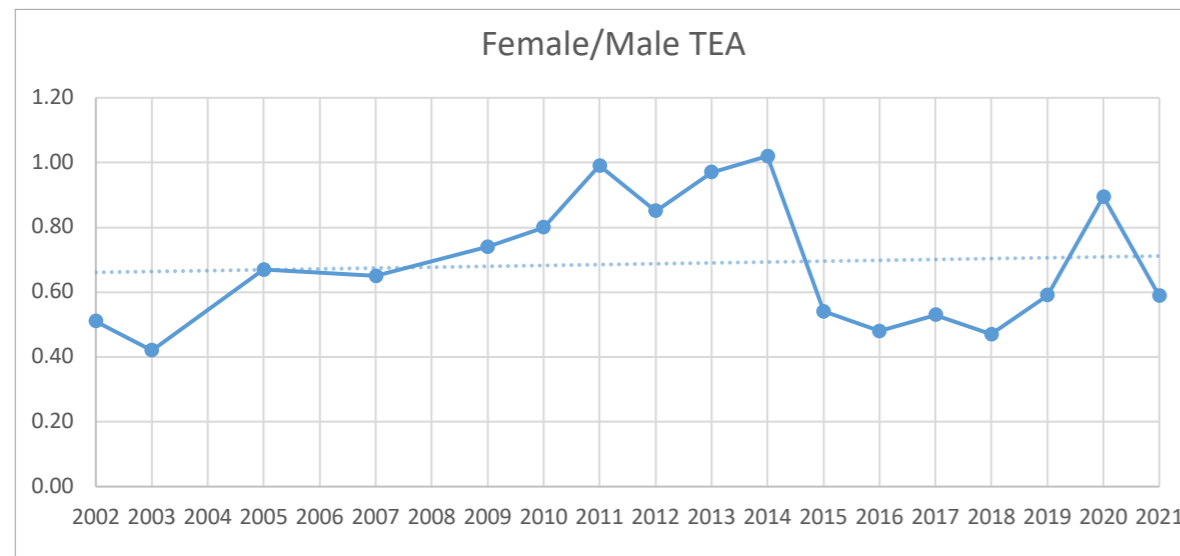
Considering that every early-stage entrepreneur that avoids a business exit needs a few years to become an established entrepreneur, it is thus not surprising that this demographic change is even more evident in the share of established-entrepreneurs per age group. Switzerland counts only 1% within the 18-24 age group and 3.1% within the 25-34 age group as established entrepreneurs, whereas within the age of 54 and retirement, 11.7% of the respective population can be entitled as established entrepreneurs. Countries such as Finland and South Korea, but also the United States, indicate a clear increase in the share of entrepreneurs per age category.

From a global perspective, there is no gender equality in entrepreneurship. The general rate of women entrepreneurs amounts to 10.2%, approximately three-quarters of that seen for men, whereas 6.2% own and manage an established business, about two thirds of the rate of men<sup>12</sup>. 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, however, female entrepreneurs are underrepresented. Figure 7 below depicts the female / male TEA ratio since the GEM measurements began almost 20 years ago in Switzerland. The points connected with a line shows the measurements while the (attenuated) dotted line indicates the trend line. In the years from 2011 to 2014, Switzerland had a balanced gender ratio. Since 2015, the ratio has fallen again and remains at values as measured prior 2010, indicating around 2 male entrepreneurs for 1 female entrepreneur on average. Although we saw a short-term increase to 0.9 women per male entrepreneur last year, the figure amounts to 0.6 in 2021 and thus remains closer to a 1:2 than a balanced ratio.

<sup>12</sup> Elam, A. et al. (2019).

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



The weaker ratio of female entrepreneurs among young and nascent entrepreneurs is also reflected in the rate of established entrepreneurs. Whereas among the male population 9% are owner-manager of an established business, only 5.1% of the female population belong to this group.

Gender inequalities have also been measured with regard to attitudes and perceptions towards entrepreneurship among individual adults. As in previous years, fewer women, namely, only half of the surveyed ones (mean= 50%, SEM<sup>13</sup>=2.2%) reported seeing good opportunities for starting a business in the next 6 months, whereas the males tend to recognize more opportunities (mean=60%, SEM=2.1%). In the same vein, there are only 39% (SEM=1.9%) of

women acknowledging having the required knowledge, skill and experience to start a new business, whereas 60% (SEM=1.9%) of men would acknowledge having all the skills, knowledge and experience needed. This disappointing result is corroborated by the higher fear of failure among women, 42% (SEM=1.8%) of women would not start a business for fear it might fail, whereas only 34% (SEM=1.7%) of men indicated that their fear of failure would prevent them from starting a business. Finally, these tendencies which have remained unchanged for years, also reveal a strongly gender-specific picture of current entrepreneurial activities. 12.3% (SEM=1.2%) of men are involved in early-stage entrepreneurial activities but only 7.2% of women (SEM=0.9%).

<sup>13</sup> SEM stands for the standard error of the mean and indicates the accuracy of the measured mean as compared to the true population mean. The true mean value for each group, men and women, can be considered lying with a 95% confidence somewhere within two SEM from the mean.

# Founder of ProsperitYou and Coworkingbar Blu



Francesca Prospero Cerza

*In ProsperitYou I support entrepreneurs and start-ups in scaling up their businesses in a cost-efficient manner by shaping a go-to-market strategy as well as by digitalizing processes.*

*In coworkingbar.ch I aim to create a network of laptop-friendly pubs and I offer activities to all power coworkers to expand business skills and professional network.*

*I also joined the founders' team of the first 3D Expo in Switzerland: the Swiss Virtual Expo.*

## What was the driving force in your decision to start a business?

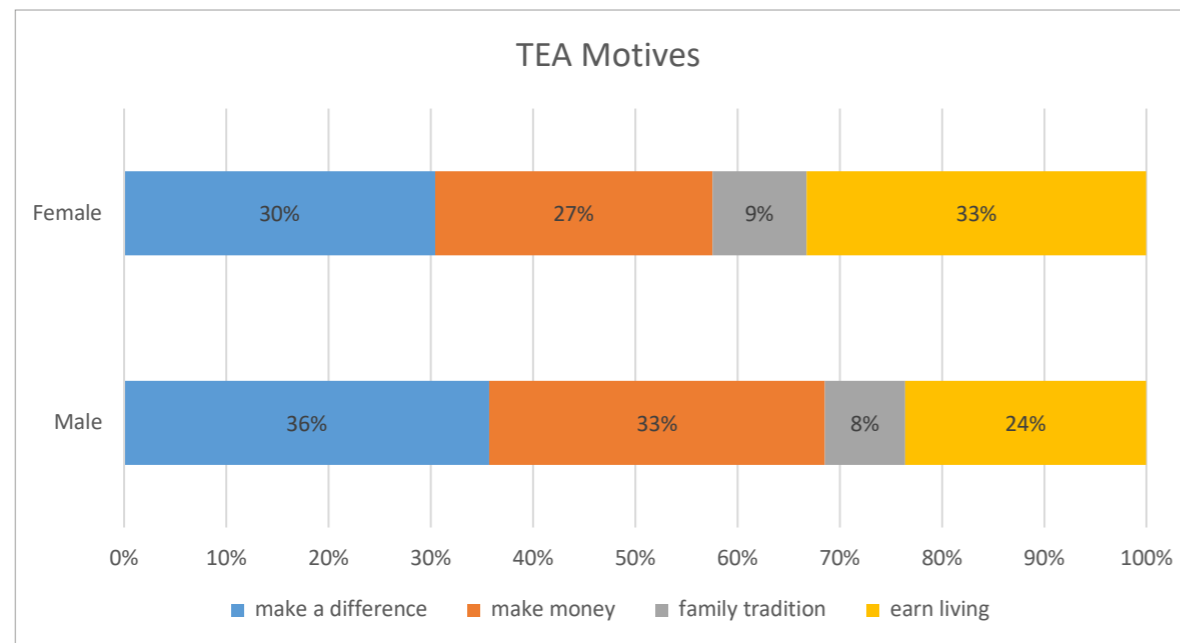
I have always known that soon or later, I would become an entrepreneur. My first entrepreneurial experience was at the age of 6, when, together with my older brother, we sold our toys and books at the Christmas Market. My Bachelor thesis also focused on female entrepreneurship. So, probably it was already inside my DNA.

When I became a mom, I started to perceive the importance of my free time differently and my need to work with very high flexibility. Work-life balance was not enough anymore. Covid-19 made me realize that my need was to integrate my family into my professional life. That was the time when my vision to be my own boss came true.

Among the various motives that make individuals become early-stage entrepreneurs (TEA), there are fewer differences among the genders. When comparing the absolute figures in each category, such as in Figure 8 below, we see that women stated slightly less often that they wanted to “make a difference” and just “earn a living” while men more

often stated that they wanted to “make a difference” or simply “make money”. However, the motivations between men and women entrepreneurs were just the opposite in the 2020-21 survey. Altogether it can be stated that for both, men and women entrepreneurs, the motivations are more or less equally distributed.

**Figure 8:** TEA Motives of male and female entrepreneurs



### Improving Framework Conditions for Women Entrepreneurs in Switzerland

*Written by Prof. Dr. Susan Müller, Dr. Nadine Hietschold, Jan Keim, M.Sc., Prof. Dr. Ingrid Kissling-Näf (Bern University of Applied Sciences)*

Studying framework conditions for women entrepreneurs in Switzerland: In order to investigate the framework conditions for female founders, a team from the Bern University of Applied Sciences collected quantitative data in collaboration with the GEM Switzerland team. For this purpose, the „National Expert Survey“ (NES) was supplemented with additional items that helped capture specific framework conditions for female founders. The questionnaire was completed by 45 national experts (37 who participated in the regular NES and an additional eight experts who only assessed the framework conditions for female founders).

In addition, the team from the Bern University of Applied Sciences conducted 20 problem-centered interviews with representatives of the Swiss start-up scene, as well as with decision-makers and opinion leaders from politics, business, and society. In the interviews, conducive and obstructive framework conditions, as well as potentials for improving them, were discussed.

Quantitative data: Descriptive analysis of the quantitative data underlined the need to bolster education, care and household services, and the need to address cultural and social norms in particular, to improve the framework conditions for women entrepreneurs in Switzerland (see Table 8, scale from zero to 10). When asked to what extent the framework conditions in Switzerland are generally tailored to the needs of women, the experts’ medium rating was 5.2.

Qualitative data: After coding and analyzing the qualitative data, five key themes were identified as having potential for further improvement of the framework conditions for female founders.

- Entrepreneurship education: Education should whet the appetite for entrepreneurship at a young age. Students could acquire basic entre



preneurial skills at primary and secondary level. By letting students work on their own projects and presenting them with relatable role models, more of them could build up entrepreneurship skills and their desire for entrepreneurship could be increased. Entrepreneurship should be woven into all study programs at universities.

- Starting a business mid-career: The framework conditions in Switzerland make it difficult for women to start a business mid-career and after starting a family. Measures that could alleviate the situation include helping women to (re)establish relationships with universities or developing programs and networks specifically aimed at women in this phase of life. The study found that younger female academics, who were often still in close contact with their universities, were hardly disadvantaged compared to their male colleagues.
- Diversity in entrepreneurship: Start-ups led by women are diverse and do not necessarily correspond to „classic“, growth-oriented and time-intensive entrepreneurship. Alternative models attractive to women could include impact orientation and locality. The media should highlight and celebrate these different forms of entrepreneurship and not just portray „power women“ leading growth-oriented startups.
- Social entrepreneurship: The increasing interest in social entrepreneurship reflects the values of many women and could ramp up entrepreneurial activity. In addition, linking social entrepreneurship with technology to increase social value creation (i.e., „social-tech entrepreneurship“) offers potential to boost women’s interest in entrepreneurship.
- Norms and care work: Traditional role perceptions of women leading care work, associated socialization and stereotypes, and inadequate care support lead to lower start-up intentions among women. Role models in the private sphere and in the media are central to this. If more women start companies and they are highlighted in the media, it would help change the familiar perception of female founders; it legitimizes them and female founders become an integral part of the culture.

## Conclusion

Although the framework conditions for start-ups in Switzerland are good on an international scale, they could be designed even better for (future) female founders. The potential for female founders in Switzerland remains largely untapped. However, women are urgently needed for the transformation of the economy. They embrace greater need for sustainability and diversity in the start-up landscape and are working on innovations that directly take the needs of women more into account.

**Table 8:** Framework conditions for women entrepreneurs in Switzerland

Framework condition	Item	Mean
Entrepreneurial finance **	In my country, access to financing is granted equally for male and female entrepreneurs.	5.9
Ease of access to entrepreneurial finance *	In Switzerland, it is easy for female founders to obtain financing for new and growing firms.	5.2
Government policies – regulations **	In my country, regulations for entrepreneurs are so favorable that women prefer becoming an entrepreneur to becoming an employee.	2.7
Government entrepreneurial programs *	In Switzerland, government support programs and support institutions (e.g. technology and business incubators) are sufficiently geared towards supporting female founders.	5.4
Entrepreneurial education at school *	1. In Switzerland, female founders are sufficiently incorporated as examples and role models at primary and secondary education level. 2. In Switzerland, girls have adequate opportunities to develop entrepreneurial skills at the primary and secondary education levels.	4.1



Entrepreneurial education post-school *	1. In Switzerland, female founders are sufficiently incorporated as examples and role models at universities of applied sciences and universities. 2. In Switzerland, the topic of female entrepreneurship is given sufficient attention at universities of applied sciences and universities.	4.6
R&D transfer *	In Switzerland, female engineers and scientists are supported to the same extent as men in transforming their ideas into new and growing firms.	6.2
Commercial and professional infrastructure **	In my country, market and public procurement are equally accessible for male and female entrepreneurs.	6.5
Ease of entry - market	In Switzerland, new and growing firms led by women can enter new markets just as easily as those led by men.	6.0
Social and cultural norms **	In my country, the national culture encourages women as equally as men to become self-employed or start a new business.	4.5
Work-life balance during the pandemic **	In my country, as a result of the pandemic, the increase in teleworking has improved work life balance for women.	5.3
Support services **	In my country, there are sufficient affordable support services (i.e., child-care, home services, after school programs, elder care ...) so that women can continue to run their businesses even after they have started a family.	3.9
Framework conditions in general *	The framework conditions for female founders in Switzerland are sufficiently geared to their needs.	5.2
* Items have been added for the current study on women entrepreneurship; ** Items have been added by the GEM Global team and have been asked at international level.		

## 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).

# Founder of Altitude1502



Emilie Yerly

*Altitude1502 est une marque de soins d'hygiène naturels créé à base de plantes médicinales et respectueux de l'environnement. Tous nos produits sont fabriqués en Suisse de façon artisanal dans notre laboratoire. Fondée en 2020, la gamme Altitude1502 se compose de différents produits tels que des cosmétiques contrôlés et validés par des laboratoires, infusions, compléments alimentaires et bougie.*

## **What was the driving force in your decision to start a business?**

Il y a 4 ans une infection majeure est apparue sur mon visage. Il s'agissait d'un staphylocoque, une bactérie provenant d'un produit cosmétique. Défigurée, je me suis alors mise à lire la liste des ingrédients de tous les produits avant de les appliquer sur ma peau. J'avais de la peine à trouver des produits sains pour le corps et le visage. Par la suite je suis partie à Paris suivre une formation sur les produits d'hygiène naturels et cela fut pour moi une révélation.

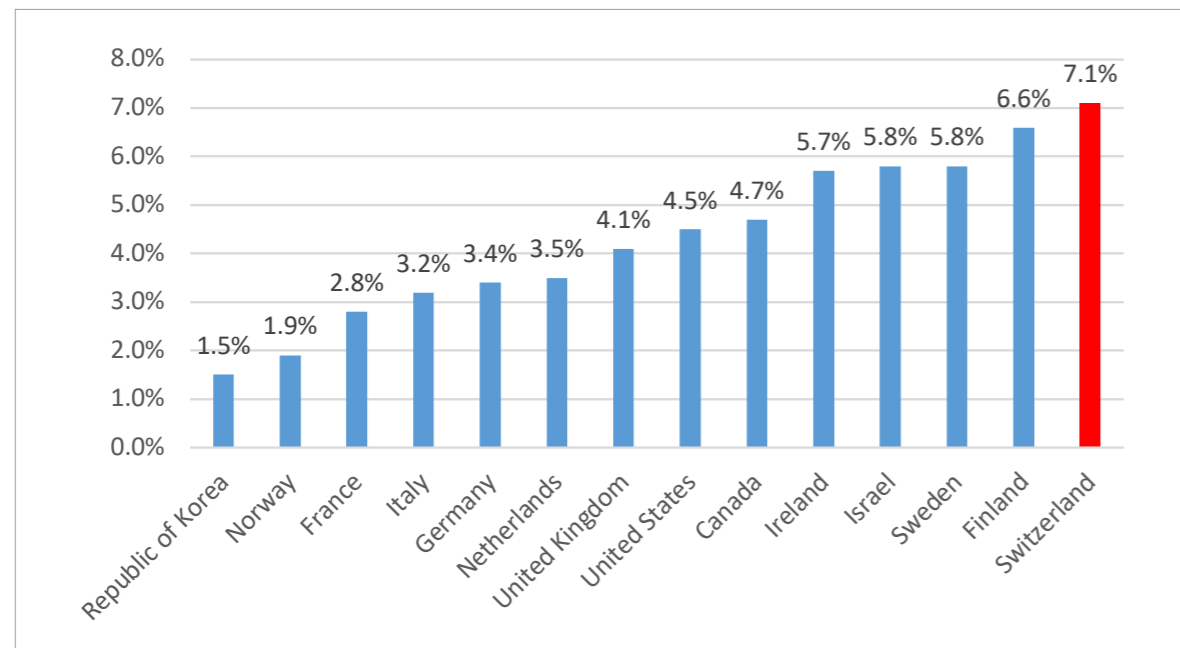
Pourquoi Altitude1502 ? Depuis l'alpage de la famille situé à 1502mètres d'altitude à « La Berra » dans les Préalpes fribourgeoises, j'allais cueillir avec ma maman des plantes pour en faire ensuite des huiles et les transformer en crèmes pour guérir ma peau. Les résultats étaient là. J'ai commencé à distribuer les produits que je fabriquais aux amis et à la famille. C'est à ce moment que j'ai remarqué qu'il y avait de la demande. Alors j'ai décidé de créer Altitude1502.

... 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 entrepreneurial 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 (GEM/Global Entrepreneurship Monitor), 2022). 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 2% of adults in Republic Korea and Norway, up to around 5% of adults in the U.S. and Canada. Israel and some northern European countries have an increasing entrepreneurial employee rate and as good news, the highest level of employee entrepreneurial activity is shown in Switzerland.

Figure 9: Employee entrepreneurial activity (% adults)

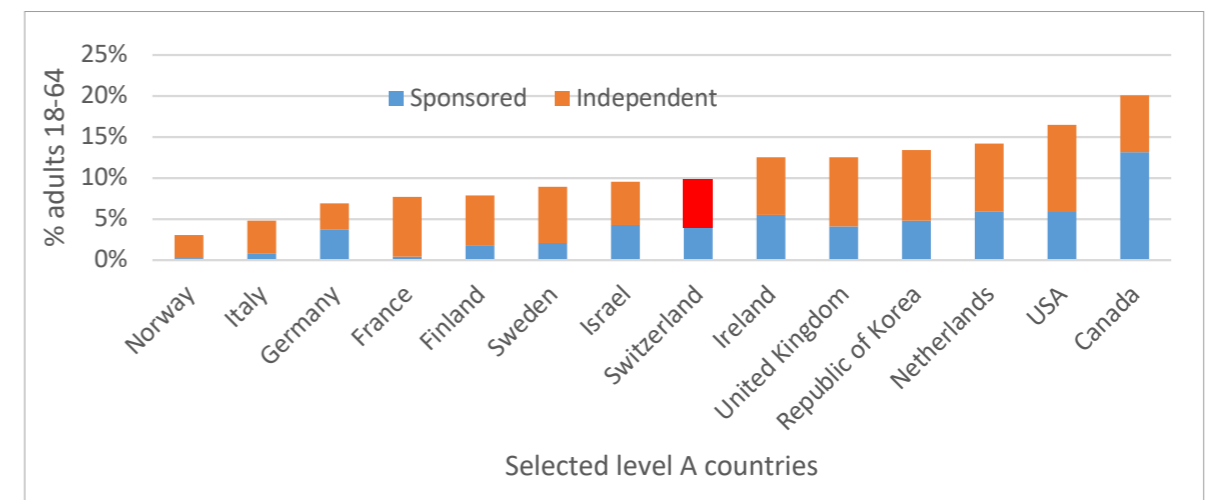


In 2019 a new question was introduced: “Are you - alone or with others - currently the owner of a business you help manage for your employer as part of your main employment?” Combined with existing questions, this one enabled identification of nascent, new, and established business owner-managers whose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



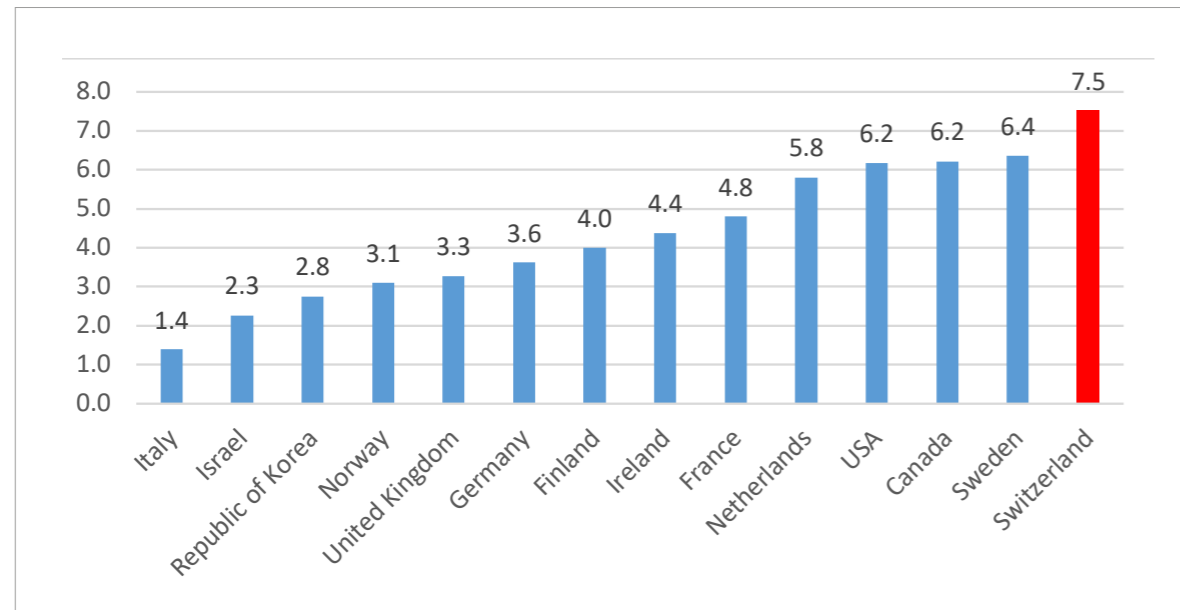
## 6.2 Informal Investment

Informal investments are funds for a new business started by someone else and are typically from family, or friends and other acquaintances. In the 2021 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 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. Informal investment decreased in 2020 and a partial recovery could be observed in 2021. In Switzerland the rate in 2019 was 8.9%. It decreased in 2020 (5.0%) and was at 7.5% in 2021.

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 stronger contribution than large and multinational enterprises to national development

through the creation of new jobs<sup>14</sup>. 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.

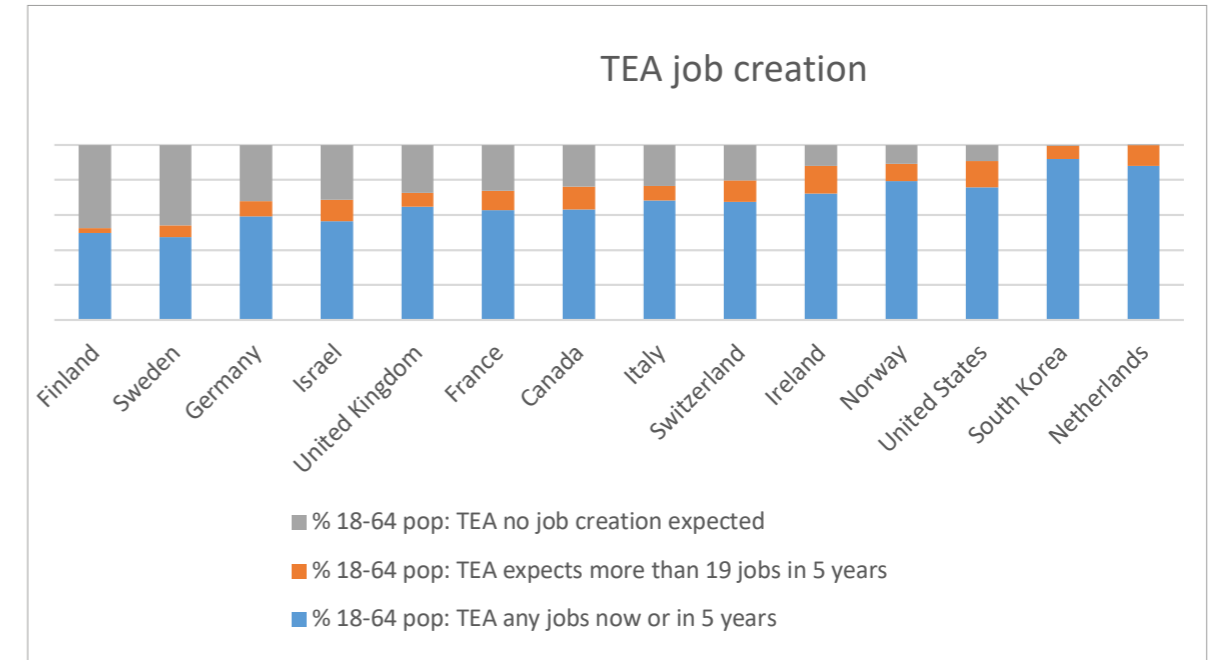
In the GEM survey, it is therefore of interest to consider the intended job creation of young entrepreneurs. Thus, the entrepreneurs in the TEA sample were asked to supply information on their estimate number of new employees in five years' time.

<sup>14</sup> Welte, J. (2019).

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<sup>15</sup>. In last year's GEM Report on Switzerland, the expected job creation of at least one job within the next five years increased to 70.1%, with almost a fifth of the sample indicating the aimed creation of 19 or more jobs within the next five years<sup>16</sup>. In the current survey, the expected job creation from early-stage entrepreneurs has increased even more. Overall, around

80% of our TEA sample is planning to create at least one job within the next five years. High job creation expectation has decreased slightly from 19% to 12% compared to lower job creation expectations. As seen in Figure 12 below, we find that in each of our comparison countries, the job creation expectation lies above 50% of the TEA sample, with Finland and Sweden bringing up the rear. In contrast and similar to last year, the United States, South Korea and the Netherlands indicate having the highest rates of job creating entrepreneurs.

Figure 12: % of TEA with low, high or no job creation expectation



<sup>15</sup> Baldegger, R., et al. (2021).

<sup>16</sup> Baldegger, R., et al. (2021).

#### 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 try to make up for this lack of resources by competing with innovative and new market solutions. Innovation is therefore often considered a kind of magic bullet that can be used to combat the overpowering incumbent firms and that help start-ups overcome the first volatile phase of their life-cycle. One can even assume that the entrepreneurial 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<sup>17</sup>.

The GEM study monitors the innovative direction of entrepreneurial activities by investigating the innovation orientation of the newly fund-

ed firms and other entrepreneurial activities. Switzerland usually ranks among the countries with the highest share of innovative start-ups among their total population of newly funded firms (% of TEA). In last year's survey, Switzerland topped the list of countries with the highest % share of TEA active in medium or high-technology sectors. Together with Norway, Switzerland had around an eighth of its start-ups active in such sectors. In the 2021-22 survey, as can be seen in Table 9 below, Switzerland is again in the lead with 11.6% of TEA active in technology sectors, just slightly behind Finland (11.7%) and closely followed by Italy (11.5%) and Spain (10.6%).

Among its established businesses, the share of firms active in technology sectors amount to 13.6%. Here again, Switzerland ranks second, closely behind Ireland (15.5%) and followed by the United Kingdom (13.1%) and Israel (11.8%).

<sup>17</sup> 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).

**Table 9:** % within TEA and EB active in technology sectors (high or medium)

% within TEA	
Active in technology sectors (high or medium)	
Finland	11.7
Switzerland	11.6
Italy	11.5
Sweden	10.6
Spain	9.5
Israel	9.5
South Korea	8.6
Canada	8.4
France	7.8
Norway	7.7
United Kingdom	7.7
Netherlands	7.2
United Arab Emirates	6.4
Ireland	6.3
United States	6.0
Germany	5.8

% within EB	
Active in technology sectors (high or medium)	
Ireland	15.5
Switzerland	13.6
United Kingdom	13.1
Israel	11.8
Norway	11.0
Netherlands	10.5
Spain	10.1
Italy	10.1
Germany	9.8
South Korea	9.7
Canada	9.5
United Arab Emirates	9.4
Finland	7.9
France	7.6
Sweden	5.9
United States	5.6

North America, both Canada and the United States, ranked fairly low with values of between 5-7% of their TEA active in medium to high tech sectors. Among the established businesses, the United States even ranks last among our comparison countries, with only 5.6% of its established businesses active in technology sectors.

These figures for North America are rather surprising. Both countries are known for their entrepreneurial spirit. The USA in particular, is known as

the country with the most influential world-leading technology companies, so that one would expect higher values. That being said, and considering the absolute size of the U.S. start-up and entrepreneurship scene, the fact that the current TEA value of 16.5% and established business rate of 8.9% applies to an adult population between the ages of 18 and 65 of around 174 million individuals<sup>18</sup>, we can state that the absolute share of medium- and high-tech entrepreneurs in the US is still relatively high.

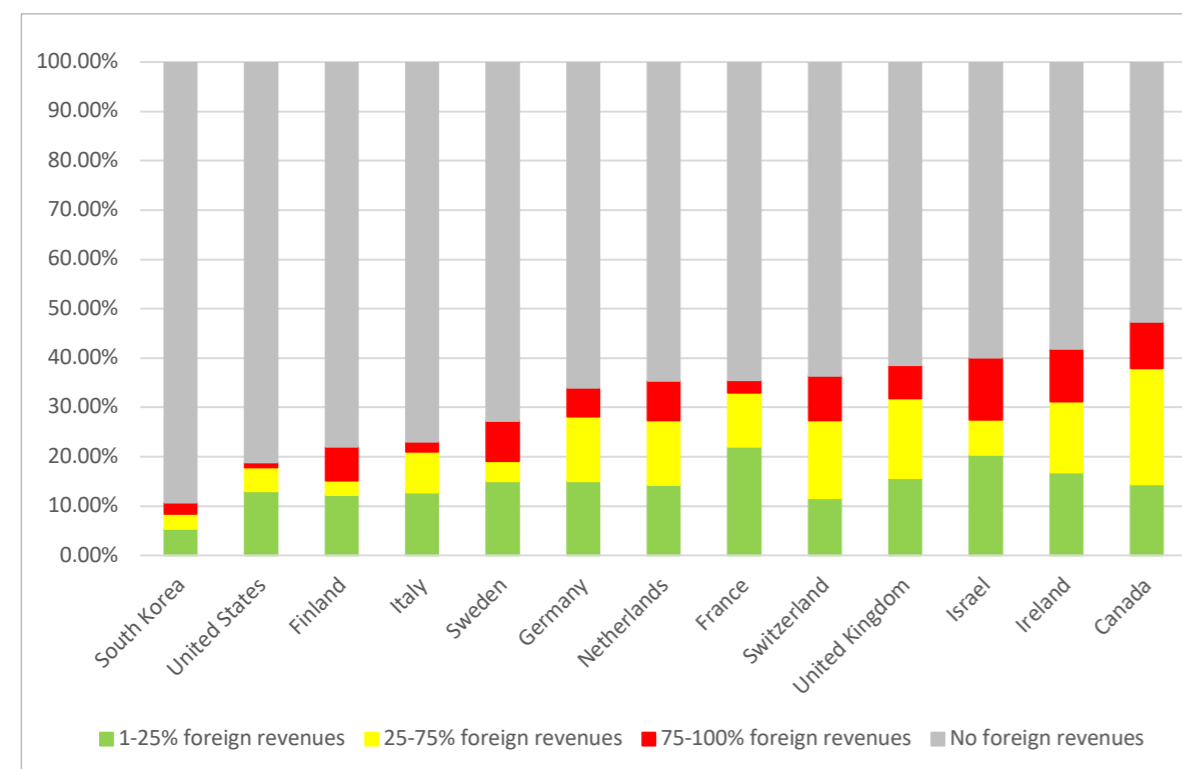
<sup>18</sup> US Census Bureau (2021).

## 6.5 International Orientation

In highly developed but small domestic markets such as in Switzerland, internationalization is an important strategic option for many firms. Not least due to their high degree of specialization in often highly sophisticated niche markets, Swiss start-ups are pulling their business into global markets from very early on<sup>19</sup>.

In the GEM survey, we measure the degree of internationalization based on the percentage of foreign sales to total sales, below here entitled as “foreign sales”. In Figure 13 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 least foreign revenues and on the right those with the most.

**Figure 13:** Share of TEA with or without foreign revenues



<sup>19</sup> Baldegger, R., et al. (2019).

South Korea brings up the rear with only about 10% of its TEA sample generating any foreign revenues. In Switzerland, 11.6% of the TEA sample generates between 1-25% of revenues from foreign countries. Medium-exporting firms with between 25-75% foreign sales make up 15.8% of the TEA sample, whereas the young firms exporting high volumes with more than 75% of foreign revenues are represented by 9.1%. Compared to prior years, we register an increasing share of exporting start-ups in Switzerland, in particular, among those who generate from 25% to 100% in foreign sales.

As in previous years, we can observe a strong difference between the North American countries, 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 by far most of-

ten expect to remain on their home market only.

From a general perspective, we can state that foreign revenues have dropped drastically since the global covid-19 breakout. In 2019-20, seven out of fifteen comparison countries indicated that more than half of their TEA sample firms' revenues are being generated through exports from foreign countries respectively. Among them were countries such as the United Kingdom, German as well as Switzerland<sup>20</sup>. In the 2020-21 Report, as well as in this years' survey, even in first ranked countries, Slovenia (2020-21, 41.2% of TEA indicating foreign revenues) and Canada (2021-22, 47.4% of TEA indicating foreign revenues) less than half of the TEA sample firms reported generating foreign revenues. As depicted in Figure 13 above, in most countries there were between 20% and 40% of the TEA sample firms that generated foreign revenues.

<sup>20</sup> Baldegger, R., et al. (2020).

## ..... 7 Entrepreneurship Context Switzerland

Every Entrepreneur who decides to start a new enterprise is taken in a specific context encompassing many economic, political, institutional, financial, and social conditions. These conditions may encourage and facilitate or discourage and hinder entrepreneurial activity. Each national context is different, has its particularities, and evolves with time. Therefore, it is crucial to have a spotlight on these conditions. In entrepreneurship research, that context is vital for understanding when, why and how entrepreneurial activity happens. This growing recognition is the fruit of years of effort to generate interest in entrepreneurship among policymakers.

### 7.1 Entrepreneurship Framework Conditions – EFC

One exciting component of GEM that has been unaddressed so far in this report is the National Expert Survey (NES), which is of interest thanks to the different sets of framework conditions. It consists of twelve founda-

tion-related framework conditions analyzed by all participating countries.

These include political, economic, social, and cultural contextual factors that, if positive, can promote the quantity and quality of start-ups. At least 36 experts in all GEM countries are interviewed annually to analyze these startup-related framework conditions. The interviewed experts (NES) include people from universities and colleges, federal and state ministers, technology and start-up centers, start-up incubators, business development agencies, chambers of industry and commerce, investors, business angels, and entrepreneurs.

The NES distinguishes between nine areas of the Entrepreneurship Framework Conditions (EFCs) that are thought to stimulate or constrain the level and nature of the entrepreneurial activity. Thirty-six Swiss experts were asked to give their as-

...

sessments (score on a Likert scale with values from 1 (completely false) to 10 (completely true)) about a wide range of statements. 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 limits 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 venture. 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.

### 7.2 EFCs in Switzerland and benchmark countries in 2021

In an international comparison of countries, Switzerland ranks 7th place among the selected level A countries. These are selected economies with a Gross Domestic Product (GDP) per capita of more than \$40,000. Level A includes economies from northern Europe, East Asia and North America, plus three Gulf states. Table 10 shows Switzerland's position within the global ranking for each condition, and where it compares to the average.



**Table 10:** Entrepreneurial Framework Conditions (EFC) in selected level A economies, 2021.  
Average scores from Likert scales of 10 points (1 = highly insufficient, 10 = highly sufficient)

	Entrepreneurial Finance 1a	Ease of Access to Entrepreneurial Finance 1b	Government Policy: Support and Relevance 2a	Government Policy: Taxes and Bureaucracy 2b	Government Entrepreneurial Programs 3	Entrepreneurial Education at School 4a	Entrepreneurial Education Post-School 4b
Canada	5.1	4.9	4.6	5.9	4.7	4.0	4.7
Finland	7.1	6.6	5.5	6.3	5.6	6.1	6.0
France	5.7	5.2	6.3	5.4	5.9	2.9	5.7
Germany	5.3	5.1	4.4	4.7	6.4	2.8	5.2
Ireland	5.0	4.5	4.4	5.1	5.5	3.3	4.0
Israel	5.5	4.8	3.4	3.9	4.1	3.2	4.5
Italy	4.8	4.3	5.0	3.8	4.7	3.2	4.6
Netherlands	6.7	6.0	5.8	6.8	6.4	5.8	6.1
Norway	5.1	4.9	4.4	6.8	6.4	5.4	5.5
Republic of Korea	5.3	5.3	6.4	5.9	5.9	4.3	4.8
Sweden	6.4	5.7	3.5	4.7	5.0	4.1	4.4
Switzerland	5.8	5.2	5.1	6.3	6.2	3.6	4.9
United Kingdom	5.2	4.4	4.2	5.6	4.3	3.2	5.0
USA	6.2	5.1	4.2	5.3	4.2	3.2	5.0
<b>Average of Level A Economies</b>	<b>5.6</b>	<b>5.1</b>	<b>5.1</b>	<b>5.5</b>	<b>5.5</b>	<b>4.0</b>	<b>5.2</b>

	Research and Development Transfers 5	Commercial and Professional Infrastructure 6	Ease of Entry: Market Dynamics 7a	Ease of Entry: Burdens and Regulation 7b	Physical Infrastructure 8	Social and Cultural Norms 9
Canada	4.2	6.0	4.6	5.1	6.6	5.7
Finland	6.0	6.9	4.2	6.1	8.6	5.4
France	4.7	5.6	3.4	4.7	7.2	4.3
Germany	4.9	6.3	5.3	5.0	6.1	4.6
Ireland	4.4	5.4	4.2	5.1	5.2	5.4
Israel	4.7	6.3	4.3	3.9	6.7	7.9
Italy	4.9	5.6	4.7	4.7	6.0	5.1
Netherlands	5.6	6.7	5.0	6.5	8.0	6.7
Norway	5.7	6.9	3.0	5.4	8.0	6.1
Republic of Korea	4.5	5.0	7.8	4.8	7.7	5.7
Sweden	4.9	6.5	5.1	4.9	7.6	5.8
Switzerland	6.1	6.1	3.5	5.5	7.9	5.3
United Kingdom	4.2	5.8	4.9	5.5	6.5	5.3
USA	4.7	6.4	5.6	4.7	7.5	7.0
<b>Average of Level A Economies</b>	<b>5.0</b>	<b>6.0</b>	<b>5.0</b>	<b>5.2</b>	<b>7.2</b>	<b>5.7</b>

For the 2021 cycle, the chart above presents the thirteen national entrepreneurial framework conditions that assess Switzerland's entrepreneurship context. Therefore, nine out of thirteen EFC ratings are higher than the average among the comparative countries. The four conditions which are below average are:

- Entrepreneurial Education at school (10/19)
- Entrepreneurial Education post school (12/19)
- Ease of entry: internal market dynamics (16/19)
- Social and cultural norms (13/19)

Unfortunately, there is still no particular curriculum for children and youths at primary and secondary level schools which will assist them in understanding the concept of entrepreneurship. Hence, the question we shall ask ourselves is, why do schools not introduce entrepreneurship ideas?

For Entrepreneurial Education at school, the specific statements are:

„In my country...  
 teaching in primary and secondary education encourages creativity, self-sufficiency and personal initiative,  
 teaching in primary and secondary education provides adequate instruction in market economic principles, and  
 teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation.“

Basically, these three points do not appear to be overly demanding and we could expect that we shall be pretty good at these. Surprisingly, Switzerland is low at this condition, but most participating economies fail to provide sufficient entrepreneurial education at school. Of the 13 EFCs, Entrepreneurial Education at school was rated last in 39 of the 50 economies participating in GEM 2021<sup>21</sup>. Where is the problem and what could the solution be?

<sup>21</sup> GEM (Global Entrepreneurship Monitor) (2022). Global Entrepreneurship Monitor 2021/2022 Global Report: Opportunity Amid Disruption. London: GEM.

In Switzerland, Entrepreneurial Education post school is below the average and has lost in position compared to previous years. Although a wide range of offers is available, two worldwide recognized polytechnical institutes in Lausanne and Zurich, the University of St. Gallen, Zurich, and the School of Management Fribourg, with its Entrepreneurship orientation experts, judge it to be below average. This is not necessarily to say that entrepreneurial education is neglected overall, because in 16 economies, it scored as sufficient or better. Finland is the only economy where EES achieved higher than Entrepreneurial Education post-school. So, what else is missing in Switzerland? Is there space for more courses on starting a business? What is the leading country, the Netherlands, doing differently than we are doing? Perhaps it would also be helpful to ask our neighboring countries, Germany and France, for their recipe for success.

Experts still do not perceive ease of market entry in Switzerland with market dynamics. It shall be a free, open, and growing market where no large businesses control access or prices. Changes in demand are met with changes in supply and vice versa. Unfortunately, this condition does not sufficiently support Switzerland's entrepreneurial environment. Compared to the leading countries, such as Germany or the Republic of Korea, the internal market dynamics were considered extremely favorable for new and growing firms.

Due to the effects of the COVID 19 pandemic, the purchasing behavior of consumers in Switzerland has changed. It is increasingly shifting towards digital channels<sup>22</sup>, and therefore this will also lead to changes in the consumer goods and services and services markets.

<sup>22</sup> <https://de.statista.com/statistik/daten/studie/1230768/umfrage/veraendertes-online-kaufverhalten-waehrend-der-corona-krise-in-der-schweiz/>

# Founders of Bouteka



Noureddine Souai, Kushtrim Mehmetaj, Romeo Elzi, Alexis Balimann

*SmartBeer is a beer subscription service launched in 2012 by Lucien Martin and Léon Metz during the master's program in entrepreneurship at the HES-SO in Fribourg and Lausanne. Each month, you discover a new Swiss microbrewery with fresh craft beers delivered directly to your door. Since 2020, clients can also order craft beers through the web shop.*

*The mission of Bouteka can be summarized as follows: Firstly, the will to*

*offer organic and local products to the inhabitants of Fribourg in a way adapted to their needs in order to raise awareness, confront and incite them to recognize a mode of responsible consumption beneficial for the local economy and the environment. Secondly, the determination to offer through our concept a revaluation of the work of local farmers by regularly putting them forward, by cultivating a relationship of long-term trust, and by*

*proposing close contact between producers and customers. This close contact will bring producers and customers together around the questions of sustainability – which affects us all - and recreate a link between town and country.*

*In the long term, Bouteka wishes to become an alternative reference to the current mode of food consumption and thus contribute in a beneficial way to the renewal of the local economy and the preservation of Swiss natural resources.*

## **What was the driving force in your decision to start a business?**

I We don't believe that there was only one driving force, but several elements gathered at the same time that pushed us to embark on the entrepreneurial adventure.

First of all, there was the support of local organizations (FriUp, HEG, Innovation Club Fribourg) who made

us understand that our project was credible and had potential.

Secondly, we, the four co-founders, have excellent friendly relations with each other and were used to working on common projects in an efficient way during our bachelor's degree at the Haute Ecole de Gestion. There is a real complementarity and group cohesion.

Thirdly, we all had the desire to create something on our own and to develop a project according to our values and mindset, from A to Z.

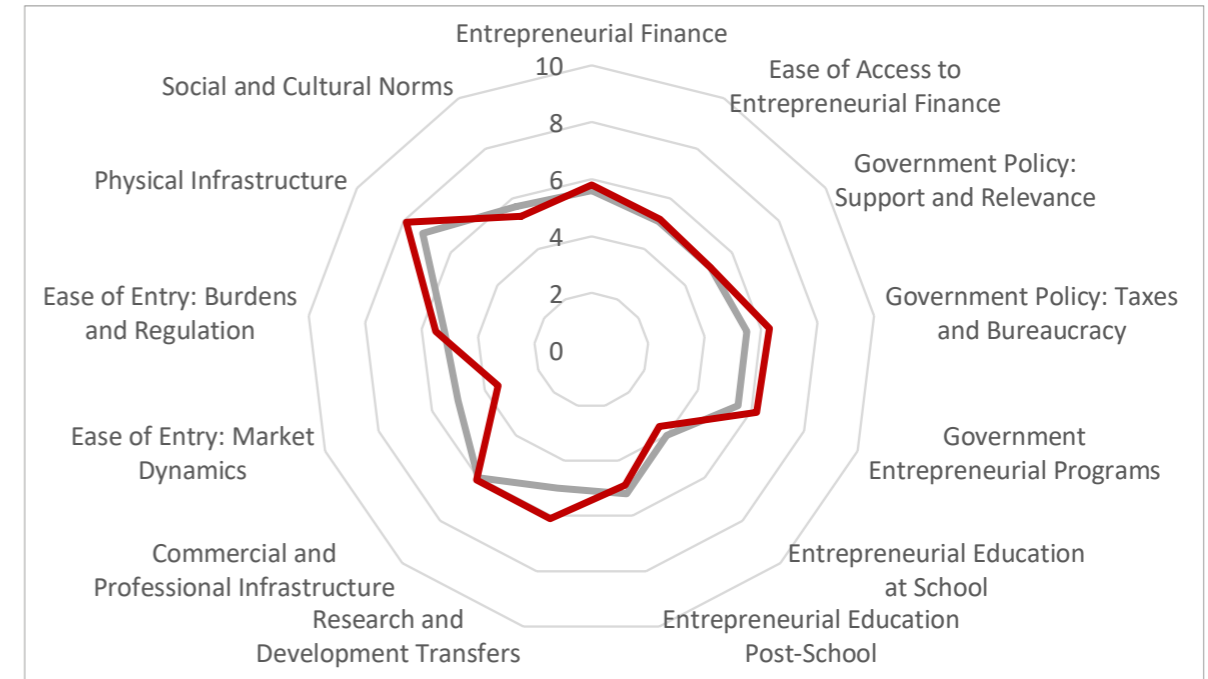
Finally, all four of us are concerned about the ecological and social issues that our society is currently facing. It was important to us to participate in our own way in a sustainable transition of our system and thus to propose a commercial service with a real positive impact, at both societal and environmental levels.

..... The fourth framework condition where Switzerland positions below average are the social and cultural norms. Does the Swiss culture encourage and celebrate entrepreneurship? According to the experts, the answer is no. Switzerland is a melting pot of various cultures (influenced by the neighboring countries), with four official languages. This influences the communication styles in particular, which vary depending on the speakers' culture. As a whole, Swiss people tend to be polite, reserved, direct, and a little guarded at first. In work environments, social etiquette in Switzerland remains formal until explicitly told otherwise<sup>23</sup>. Therefore, the leading economy, Israel, has a very entrepreneurship-supportive culture. People tolerate failures and even value them, whereas people can be ashamed of them in Switzerland. An interesting point of view is shared by Ms. Ludivine Nornberg, CEO of Pictet's representative office in Tel Aviv. She believes Israel has a culture of "building from scratch"

that contrasts with other innovation hubs, like Switzerland (where Pictet is based), which excel in optimization. While both countries rank high in global innovation indices, they operate from polar opposite perspectives. *"In Switzerland, we have big innovative corporations. Israeli DNA is more about creating companies. The Swiss are experts in improving a product. Israelis are masters of disruption<sup>24</sup>."*

The spider figure below (Figure 14) shows the strengths and weaknesses of Switzerland compared to the average of level A economies. The four main weaknesses are explained above. Therefore, we want to underline that Switzerland has remarkable strengths as well and that some considerable efforts have been undertaken in the past to overcome these weaknesses.

... **Figure 14:** Composite indicators on Entrepreneurial Framework Conditions, by stage of development compared to Switzerland



### 7.3 Dynamics of NECI and EFCs in Switzerland from 2018-2021

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 NES conditions. It enables environmental conditions that facilitate entrepreneurship in the economy to be assessed. The index

represents the country's entrepreneurial strengths and weaknesses, provides guidelines for corrective actions, and contributes to the development and growth of entrepreneurship in the country. Compared to 2020, there was a slight increase in the perception of the overall state of the entrepreneurial context in 2021. The NECI for Switzerland increased from 5.4 (10th position) to 5.5 (9th position).

<sup>23</sup> <https://www.expatica.com/ch/living/integration/social-etiquette-switzerland-106551/#work>

<sup>24</sup> <https://innovationmatters.economist.com/telaviv/culture-of-entrepreneurshiprend-der-corona-krise-in-der-schweiz/>

Figure 15: National Entrepreneurship Context Index (NECI) : 50 economies, 2021

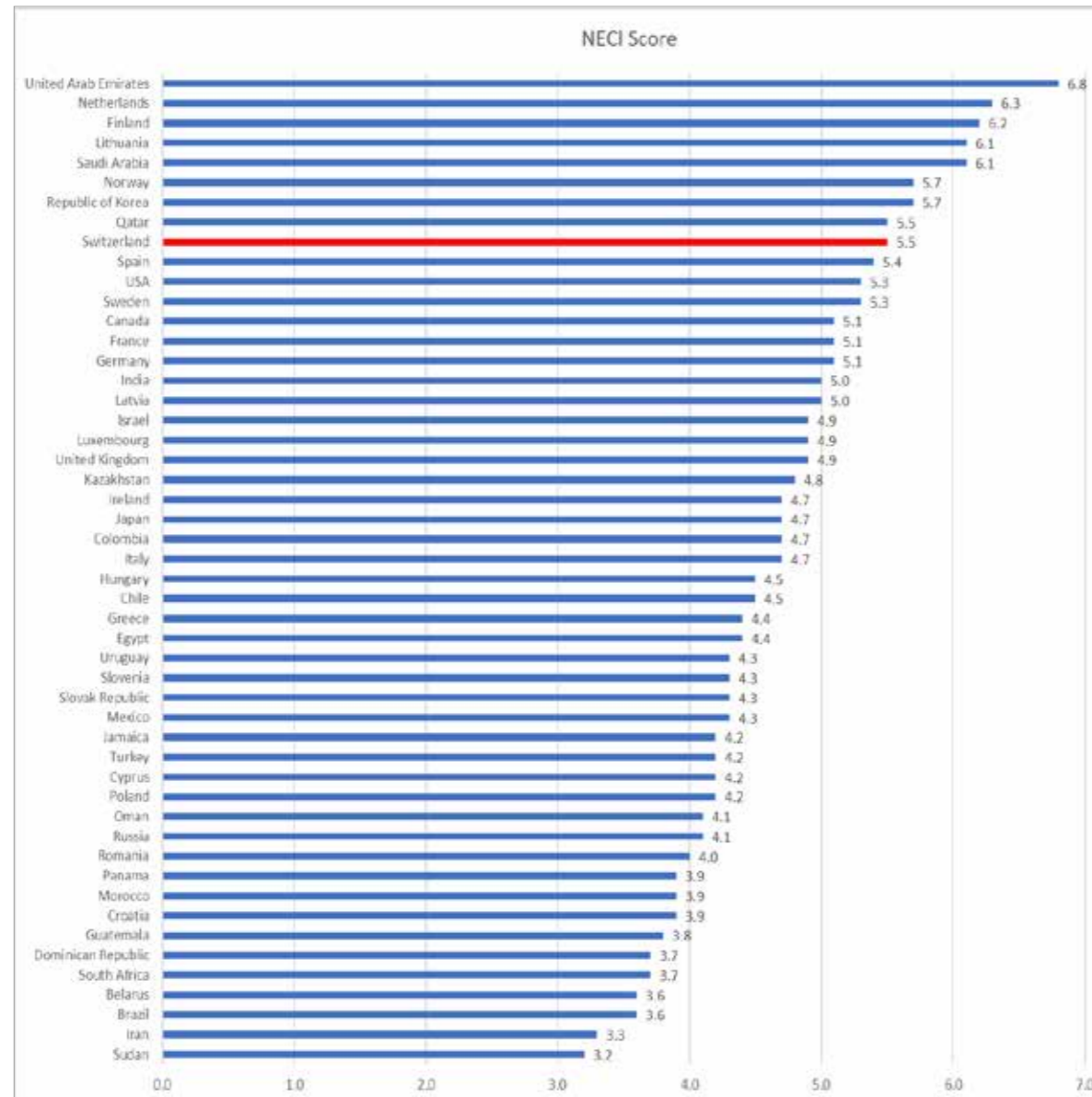


Table 11 shows the dynamic of the value of each EFC between 2018 and 2021. While the green-colored cells show an EFC value above average (sufficient), the orange-colored cells show that a condition is insufficient (the score is below average). The blue and red arrows indicate if there was an improvement in EFC score from one year to the other.

Table 11: Dynamic of each EFC in Switzerland between 2018 and 2021

Score						EFCs
2018		2019		2020	2021	
4.6	↗	5.5	↗	5.7	↗	Entrepreneurial Finance
4.6	↗	5.8	↘	4.8	↗	Government Policy: Support and Relevance
4.8	↗	6.2	↘	5.6	↗	Government Policy: Taxes and Bureaucracy
5.7	↗	6.1	↘	5.8	↗	Government Entrepreneurial Programs
3.4	↗	4.6	↘	3.1	↗	Entrepreneurial Education at School
5.3	↗	6.3	↘	5.2	↘	Entrepreneurial Education Post-School
5.4	↗	6.4	↘	5.5	↗	Research and Development Transfers
5.8	↗	6.4	↗	6.6	↘	Commercial and Professional Infrastructure
4.5	→	4.5	↘	3.7	↘	Ease of Entry: Market Dynamics
4.8	↗	5.5	↘	5.2	↗	Ease of Entry: Burdens and Regulation
7.9	↗	8.6	↘	7.6	↗	Physical Infrastructure
4.6	↗	6.7	↘	6.1	↘	Social and Cultural Norms

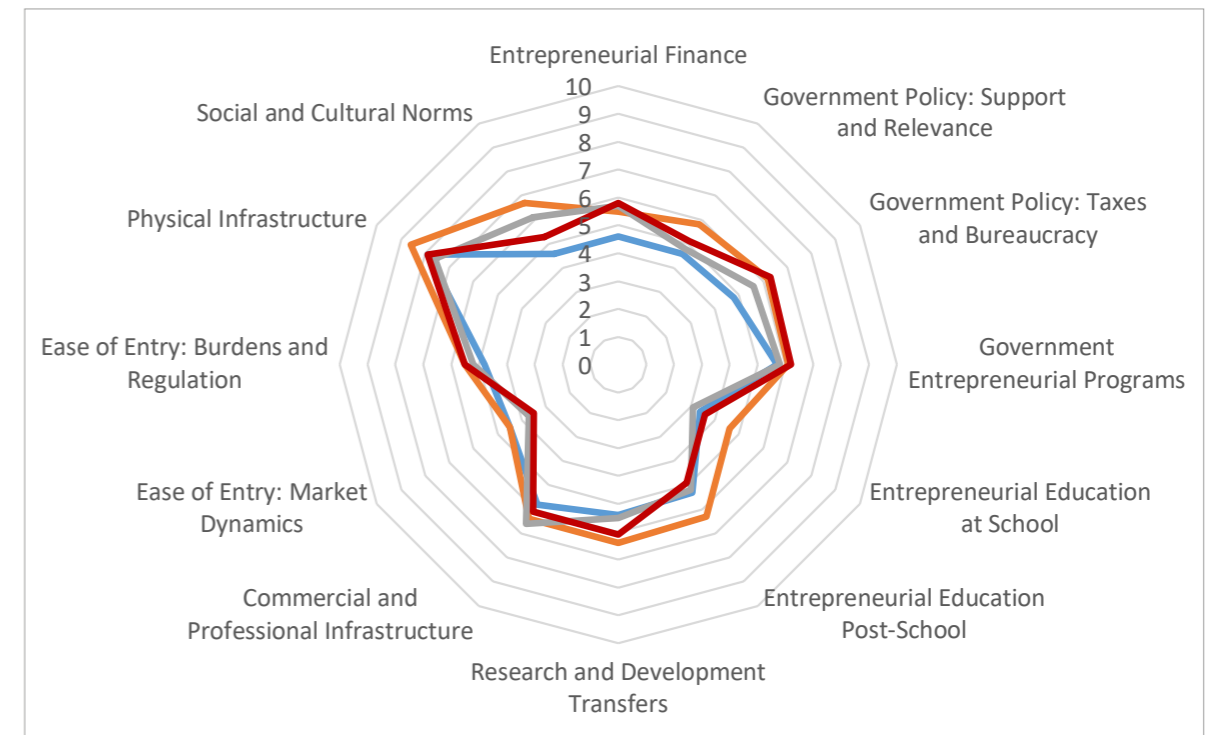
..... A constantly rising framework condition is access to entrepreneurial finance, which has been increasing since 2018. Available money for an entrepreneurial venture is a key component and factor for Switzerland. The entrepreneurial finance framework condition describes the availability of financial resources—equity and debt—for small and medium enterprises (SMEs). Experts evaluate Switzerland’s financial environment positively (5.8), with a slight increase compared to last year (5.7). It is ranked after the Nordic countries, Finland and Sweden, and below the Netherlands and US.

Another essential and much-appreciated condition is the physical infrastructure. This includes communication, utilities, transportation,

land, or space at a price that does not discriminate against new, small, or growing firms. Switzerland (7.9) belongs to the top five countries and is well above the GEM average.

This graph shows us once more that Covid hit the majority of the framework conditions quite hard or that the year 2019 was an exceptional year for Switzerland. Let’s have a closer look at that. Government Policy: Support and Relevance, Government Policy: Taxes and Bureaucracy, Government Entrepreneurial Programs, Research and Development Transfers, Ease of Entry: Burdens and Regulation are all EFCs that would be in a constantly rising curve if we were to fade out the year 2019. Or, to put it another way, these five factors were strongly set back by the pandemic.

... **Figure 16:** Composite indicators on Entrepreneurial Framework Conditions, by stage of development in Switzerland between 2018 and 2021



## 8 COVID-19

In the subsequent sections of this chapter, we will first compare the GEM Indicators with the previous years in order to determine where there have been significant changes resulting from the Covid pandemic. Subsequently, we will evaluate and discuss some Covid-related variables, such as, among others, the entrepreneurs' assessments of whether the pandemic has made entrepreneurship more difficult or if it is even creating new business opportunities.

The last two years were heavily impacted by the Covid-19 pandemic. From mid-March to mid-June 2020 the Swiss Federal Council had to declare a nationwide shutdown. After that, all publicly accessible places and businesses had to have protective concepts in place and cultural and other social events still remained banned. During this period of nationwide relaxations from mid-June to mid-July 2020, the penultimate APS survey was conducted. The total early-stage entrepreneurial activity (TEA) comprising all individuals involved in entrepreneurial activities from setting up a business up to 3.5 years of business existence did not vary significantly from 2019. The perceived

opportunities for business activities that could be implemented in the area where the respondents live, however, did drop drastically from 40.6% in 2019 to 26.7% in 2020. Despite this drastic decline of 13.9%, Switzerland was actually among the countries with the lowest dropdown, far from the declines at around -18% in Canada and the US as well as from Spain, where the perceived opportunities rate dropped almost 20%, from 36.1% in 2019 to 16.5% in 2020.

The current APS survey was conducted between June and July 2021. At this time in Switzerland, a bit of normality was achieved again after months of partial shutdowns, a nationwide home-office duty and remote schooling in the tertiary education sector between fall 2020 and spring 2021. The Swiss Federal Council gradually adopted various opening steps: the home office duty became a home office recommendation, masks were only required indoors and large events were allowed again. In this timespan, we measured a new all-time high in early-stage entrepreneurial activities (TEA) of 9.8% and the perceived opportunities experienced its strongest rebound to its current all-time high of

54.7%, more than twice as much as in the previous year (+28% from 26.7% in 2019). Entrepreneurial intentions (i.e. the intention to start a business in the next three years) increased to a new current all-time high of 13.4% (10.7% in 2019 and 7.3% in 2020) whereas the rate of perceived skills among the population remained virtually unchanged since the Covid-19 breakout.

Some will assume that starting a business has become much more difficult since the outbreak of the Covid pandemic, whereas others might speculate whether new business opportunities for both, nascent entrepreneurs as well as owner-managers of established businesses, have arisen as a result of the pandemic and its potentially lasting impact on our life- and consumption-style. Destruction as an essential fact for capitalism are not least the core argument for the concept of creative destruction, made famous by the Austrian-Ger-

man-American economist, Joseph Schumpeter<sup>25</sup>. 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<sup>26</sup>, the Covid pandemic could be such a destructive game changer.

As can be read from Table 12 below, about a third of both startup-entrepreneurs and established business owners assume that starting a business has become much more difficult due to the Covid-pandemic. This corresponds to only about half of the values measured last year. Thus, Switzerland ranks in the middle of the country comparison, similar to France, Germany, the United States and the United Kingdom. In the Scandinavian countries of Norway, Sweden and Finland, as well as in the Netherlands, only 10-20% of the population of entrepreneurs and business owners assume that starting a business has become

<sup>25</sup> 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. Source: Reinert, H., & Reinert, E. S. (2006).

<sup>26</sup> Schumpeter, J. (2005).

more difficult. In Italy, Ireland, Canada and South Korea, still about half of the population of entrepreneurs and busi-

ness-owners assume that it is more difficult to start a business in these Covid-19 times.

**Table 12:** Difficulties to start a business, expectations for business growth and new opportunities in selected level A economies, 2021

	Starting a business is (much more) difficult	Starting a business is (much more) difficult	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	TEA	EB	TEA	EB
Canada	52.8	54.9	36.3	34.0	67.1	41.9
Finland	13.3	21.0	16.2	26.5	28.8	22.4
France	35.2	33.0	26.2	32.3	39.9	30.9
Germany	39.0	40.7	37.3	33.0	36.5	30.9
Ireland	51.8	55.3	34.3	34.2	60.5	52.6
Israel	40.9	45.9	14.8	30.8	50.0	25.9
Italy	47.0	57.6	18.6	30.3	46.3	23.4
Netherlands	31.7	35.5	22.5	29.1	57.4	41.7
Norway	14.5	10.0	11.2	8.8	30.5	41.7
South Korea	57.9	69.9	71.3	80.2	8.2	1.2
Sweden	18.6	15.6	24.4	28.1	38.6	26.1
<b>Switzerland</b>	<b>30.6</b>	<b>35.6</b>	<b>22.8</b>	<b>35.0</b>	<b>36.6</b>	<b>40.3</b>
United Kingdom	35.7	40.9	24.6	34.0	57.4	38.0
United States	35.4	39.0	24.8	28.2	52.6	40.1

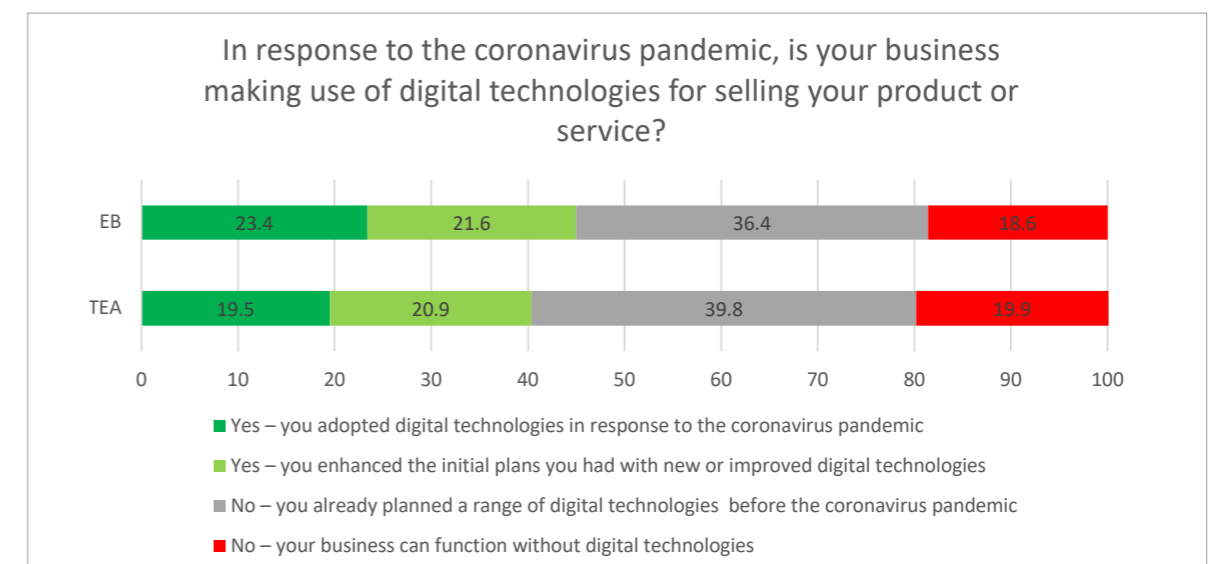
Only 22.8% of early-stage entrepreneurs (TEA) and 35% of established business owners and managers (EB) expect future business growth to be lower or even much lower due to the Covid pandemic. In general, it can be stated that in most countries, the rate of established business owners and managers (EB) being pessimistic about future business growth is above the rate of growth among pessimistic early-stage entrepreneurs (TEA). Among our comparison countries, entrepreneurs and owner-managers of businesses in South Korea seem to be strongly affected by the pandemic since their values for both, starting a business as well as growth expectations, are considerably higher than those of the other countries.

detect new business opportunities due to the coronavirus pandemic that they aim to pursue. Whereas in the 2020-21 survey, 24.2% of the TEA and 22.3% of the EB indicated aiming to pursue new pandemic-related business opportunities, we can state that in the current survey, 36.6% of the TEA and 40.3% of the EB indicated seeing new pandemic-related business opportunities.

On the upside we recorded a significant growth of both TEA and EB that

The pandemic also had an amplifying effect on the companies' use of digital technologies for selling their products and services. As depicted in Figure 17 below, almost half of the TEA and EB either adopted digital technologies in response to the coronavirus pandemic or enhanced their initial plans to sell products or services with new or improved digital technologies.

**Figure 17:** Use of digital technologies among EB and TEA for selling products and services





## 9 Literature

Acs, Z. J., Armington, C. (2006). *Entrepreneurship, geography, and American economic growth*. Cambridge University Press.

Acs, Z. J., Desai, S., Hessels, J. (2008). *Entrepreneurship, economic development and institutions*. Small business economics, 31(3), 219-234.

Baldegger, R., Gaudart, R., Wild, P. (2020). *Global Entrepreneurship Monitor 2019/2020: Report on Switzerland*. Fribourg: School of Management.

Baldegger, R., Gaudart, R., Wild, P. (2021). *Global Entrepreneurship Monitor 2020/2021: Report on Switzerland*. Fribourg: School of Management.

Baldegger, R., Hervé, A., Wild, P. (2019). *Swiss International Entrepreneurship Survey 2019: Résultats de l'étude sur le comportement d'internationalisation des PME suisses*. Fribourg : School of Management.

Bosma, N., Schutjens, V. (2011). *Understanding regional variation in entrepreneurial activity and entrepreneurial attitude in Europe*.

Cacciotti, G., Hayton, J. C. (2015). *Fear and Entrepreneurship: A Review and Research Agenda*. International Journal of Management Reviews, Vol. 17, 165-190.

Elam, A., Brush, C., Greene, P., Baumer, B., Dean, M., Heavlow, R. (2019). *2018/2019 Women's Entrepreneurship Report*. London: Global Entrepreneurship Research Association, London Business School.

Expatica (2022). *Social etiquette in Switzerland*, accessed in March: <https://www.expatica.com/ch/living/integration/social-etiquette-switzerland-106551/#work>

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

Hill, S. and Roomi, M. A. (2022). *Who Are the Entrepreneurs?* In Hill, S., Ionescu-Somers, A., Coduras, A., Guerrero, M., Roomi, M.A., Bosma, N., Shay, J. (Ed.) *Global Entrepreneurship Monitor 2021/2022 Global Report*.

Reinert, H., Reinert, E. (2006). *Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter*. In: Friedrich Nietzsche (1844-1900). Boston: Springer, 55-85.

Schumpeter, J. (2005). *Kapitalismus, Sozialismus und Demokratie*. UTB: Stuttgart.

Shane, S.A. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Edward Elgar Publishing.

Shane, S. A., Venkataraman, S. (2000). *The promise of entrepreneurship as a field of research*. Academy of management review, Vol. 26/2000, 217-226.

Sledzik, K. (2013). *Schumpeter's view on innovation and entrepreneurship*. *Management Trends in Theory and Practice*. (Ed.) Stefan Hittmar, Faculty of Management Science and Informatics, University of Zilina & Institute of Management by University of Zilina. The Annals of Regional Science, 711-742.

Statista (2022). *Purchasing behavior of consumers in Switzerland*, accessed in March: <https://de.statista.com/statistik/daten/studie/1230768/umfrage/veraendertes-online-kaufverhalten-waehrend-der-corona-krise-in-der-schweiz/>

Swiss Statistical Office (2021). *Population ageing*, accessed on Mai 12th: <https://www.bfs.admin.ch/bfs/en/home/statistics/population/ageing.html>

The Economist (2022). *An entrepreneurial Ethos*, accessed in March: <https://innovationmatters.economist.com/telaviv/culture-of-entrepreneurship>.

US Census Bureau (2021). *Demographic statistics of the US population*, accessed on May 17th: <https://www.infoplease.com/us/census/demographic-statistics>.

Welte, J. (2019). *Struktur der Schweizer KMU 2017*. Bundesamt für Statistik (BFS) Neuchâtel: Bundesamt für Statistik.

World Bank (2021). *World Bank GDP per capita*, accessed in October: <https://data.worldbank.org>.

**The GEM Project**

Entrepreneurship has become a term that is increasingly widespread around the world. According to key players in society, including policymakers, 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 2021, 50 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 poten-

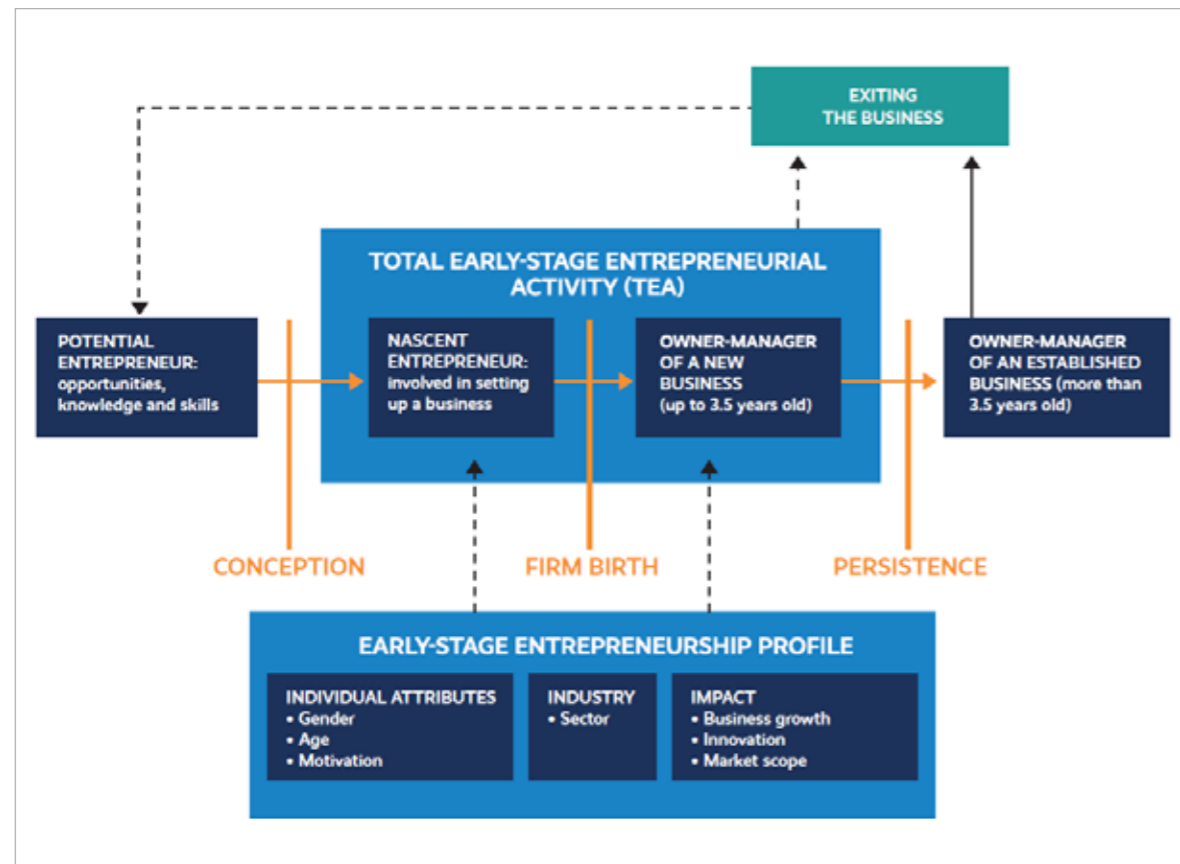
tial entrepreneurs, their intentions to start businesses are underpinned by the perceptions society holds of entrepreneurs, the status these individuals enjoy in their society, and whether the media positively represents entrepreneurs.

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 busi-

... nesses 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 18:** Entrepreneurial phases and GEM entrepreneurship indicators

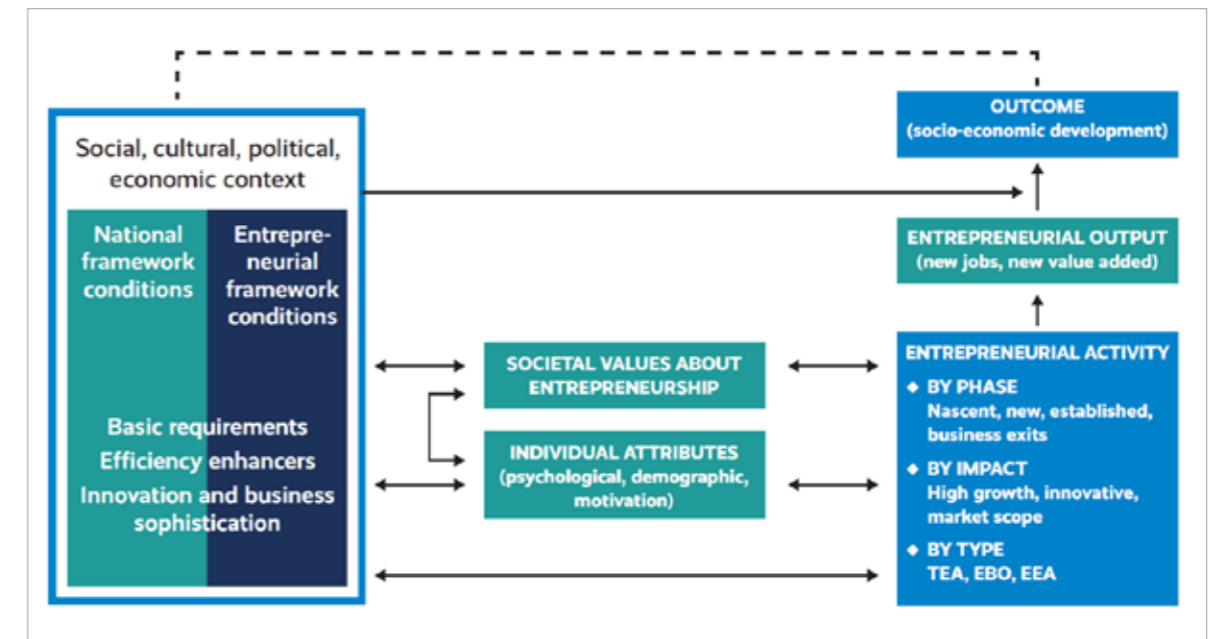


... **The GEM Conceptual Framework and Methodology**

The GEM model shown in Figure 18 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 19:** 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 19 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 13 entrepreneurial framework conditions, namely:

- Entrepreneurial finance
- Government Policy: Support and Relevance
- Government Policy: Taxes and Bureaucracy
- Government Entrepreneurial Programs
- Entrepreneurial Education at School
- Entrepreneurial Education Post-School
- Research and Development Transfers
- Commercial and Professional Infrastructure
- Ease of Entry: Market Dynamics
- Ease of Entry: Burdens and Regulation
- Physical Infrastructure
- Social and Cultural Norms

... 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 the impact media attention to entrepreneurship has 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

Three indicators describe the lifecycle of a venture:

Total early-stage Entrepreneurial Activity (TEA)	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. <b>Nascent entrepreneurs</b> – those who have committed resources to starting a business but have not paid salaries or wages for more than three months. <b>New business owners</b> – those who have moved beyond the nascent stage and have paid salaries and wages for more than three months but less than 42 months.
Established Business Ownership Rate (EBO)	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 and wages or made any other payments to the owners for over 42 months (3.5 years).
Business Exit Rate	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.

Other indicators which describe additional types of entrepreneurial activity:

Entrepreneurial Employee Activity (EEA)	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.
Informal Investment	Percentage of adults aged 18-64 investing in someone else's new business in the last three years.
High Growth Expectation Entrepreneurial Activity	Percentage of adults aged 18-64 involved in TEA who expect to employ six or more people five years from now.
Internationally Oriented Entrepreneurial Activity	Percentage of adults aged 18-64 involved in TEA who anticipate 25% or more revenue coming from outside their country.

## ..... Country List

Level A >\$40,000	Level B >\$20,000<\$40,000	Level C <\$20,000
Canada	Belarus	Brazil
Finland	Chile	Colombia
France	Croatia	Dominican Republic
Germany	Cyprus	Egypt
Ireland	Greece	Guatemala
Israel	Hungary	India
Italy	Kazakhstan	Iran
Japan	Latvia	Jamaica
Luxembourg	Lithuania	Mexico
Netherlands	Oman	Morocco
Norway	Panama	South Africa
Qatar	Poland	Sudan
Republic of Korea	Romania	
Saudi Arabia	Russian Federation	
Sweden	Slovak Republic	
Switzerland	Slovenia	
United Arab Emirates	Spain	
United Kingdom	Turkey	
United States	Uruguay	

## ... GEM Team Switzerland



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