ENTREPRENEURIAL ENVIRONMENT AND ATTITUDES IN HUNGARY

GLOBAL ENTREPRENEURSHIP MONITOR NATIONAL REPORT

HUNGARY 2021-2022



Global Entrepreneurship Monitor



BUDAPEST BUSINESS SCHOOL UNIVERSITY OF APPLIED SCIENCES

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The GEM partner institution in Hungary is Budapest Business School. The research is conducted by BBS Budapest LAB Entrepreneurship Office. For more information, visit our <u>website</u>.

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Welcome Message



László György, Ph.D.

Secretary of State for Economic Strategy and Regulation, Ministry for Innovation and Technology

Physicists are well aware that it is impossible to exactly describe the position of all the gas molecules trapped in a balloon, but if we have enough data on their movement, we can predict the behaviour of the balloon itself quite accurately. There are also tens of thousands of businesses that are constantly changing, evolving, and disappearing; however, economic policy needs up-to-date and accurate data to track and influence the movements of this sector.

This is why it is important news that the Global Entrepreneurship Monitor (GEM), the world's largest entrepreneurship survey, has resumed data collection in Hungary after a five-year break, led by BBS Budapest LAB Entrepreneurship Office, with the support of the Ministry of Innovation and Technology and the Makronóm Institute. The research involved a representative questionnaire survey of 2014 adults aged between 18–64 years and interviews with 36 selected experts.

Even amid the pandemic, the survey showed that entrepreneurship is booming in Hungary: one in two people know someone who has started a business in the last two years. The GEM survey provides information not only on the economic situation of businesses but also on the motivations of the entrepreneurs. It is worth noting that entrepreneurs in Hungary see their business not only as a way to make a living but also as a means to achieve something important, to make the world a somewhat better place.

As one of the shapers of economic policy, I see this latter motivation as the strongest link between entrepreneurs and the enterprise development system, and a strong starting point for making Hungarian SMEs the winners of the 2020s.

Foreword



Prof. Balázs Heidrich, Ph.D. Rector, Budapest Business School

Budapest Business School (BBS) contributes to the development of the economy and society by providing high-quality training for the economic professionals of the future and pays special attention to the field of entrepreneurship research in its academic activities. At our university, we focus on the study and development of family business, corporate sustainability, the entrepreneurial ecosystem, entrepreneurship development, education, and several other related areas. An important milestone in our academic efforts to acquire more information about businesses and entrepreneurs was the joining of the Global Entrepreneurship Monitor (GEM) research community in 2020 as the Hungarian partner. Thus, after an interval of many years, from 2021 onwards, Hungarian data appear in the world's largest entrepreneurship survey once again. A key element of our strategy is to increase the economic and social impact of our research, for which a widely applicable research programme such as this offers an excellent opportunity.

We are pleased that BBS is further strengthening its position in the Hungarian and international business research community by joining the GEM community. As a university of applied sciences, it is also important for us that GEM be not only an outstanding source of scientific knowledge about business but also support policy and informed business decision-making.

For me, as the head of a university, particularly interesting findings of GEM's latest survey are that a high proportion of the surveyed experts identified enhancing entrepreneurship education and training as the most crucial factor contributing to the development of the entrepreneurship ecosystem and that the results of the representative

survey of the general public show that many people do not feel equipped with the knowledge to start a business. We realised that we could play a key role in preparing young people for entrepreneurship and in the undergraduate and postgraduate education of managers and owners of Hungarian SMEs already in the mid-2010s. This conviction led us to focus our university's strategy on supporting SMEs. BBS pays particular attention to developing entrepreneurial skills and knowledge and to increasing openness to entrepreneurship among young people in its business education programmes. Our work in recent years has shown that education and research can really support entrepreneurship.

I hope that this present report will be a useful source of information and inspiration for many people in their work, whether they are academic researchers, policymakers, business development experts supporting the ecosystem, or, last but not least, entrepreneurs.

Executive summary

Understanding the business environment and attitudes towards entrepreneurship is a prominent issue for the whole economy and society, as businesses create the financial and non-financial value that our economy and communities need. The development of enterprises and their innovation potential can contribute to solving many economic, environmental, and social problems. A deeper understanding of the current state of entrepreneurs and the business environment can provide useful insight and resources for policymakers. Since 1999, the Global Entrepreneurship Monitor (GEM), the world's largest entrepreneurship survey, has provided reliable data on entrepreneurial activity in the participating economies, and the state of the entrepreneurial ecosystem.

From 2020 onwards, Budapest Business School will represent Hungary in the global survey, in which renowned universities from all over the world participate. The first domestic data collection since 2016, now conducted by the BBS Budapest LAB Entrepreneurship Office, took place in 2021. The survey involved a representative questionnaire of 2014 adults aged between 18–64 years and interviews of 36 selected experts. The present report summarises the Hungarian results of the research, providing information on the entrepreneurial atmosphere, activity, and ecosystem in Hungary.

Business is attractive, but they won't set one up

The latest results of the GEM survey provide a mixed picture of the Hungarian business atmosphere. Although many people—more of those with higher education and those who live in more developed economic regions—identify entrepreneurship as a career path to follow, which offers a high status, few would actually start a business, mentioning mainly the lack of knowledge and experience as a reason. Yet, almost half of the Hungarian population (49.7%) think it is easy to start a business in Hungary and a third (36.5%) believe that there are good opportunities to start a business in the next 6 months. The buoyancy of entrepreneurial life is also shown by the fact that almost every other person knows someone who has started a business in the last two years; this ratio is even higher among young people.

One third (36%) of the respondents feel they have the skills and knowledge to start a business, which puts **the readiness of Hungarians to start a business among the lower portion of the participating countries in both EU and regional comparisons**. Although Hungarians are often described as having a failure-evasive attitude, only 38.2% of the respondents claim to fear failure, which is better than the international average.

A higher proportion of men consider it easy to start a business in Hungary and are more confident that they have the knowledge and skills to do so. Young people, regardless of gender, are less confident in their knowledge and less positive about the supportive environment for starting a business but would still prefer to do so. A larger proportion of those with higher education and those living in more developed economic regions think they would be able to start a business and view a career in entrepreneurship as the most desirable goal.

Considering entrepreneurial activity, Hungary is in the mid-section of the participating countries. Overall, entrepreneurial activity is higher among men aged between 25–44 years, as well as those with a higher level of education. According to the survey, 10.4% of the adult population plans to start a business in the next three years, while early-stage entrepreneurship (i.e., paying wages for less than three and a half years) amounted to 9.8%. This is lower than the GEM average (13.7%); however, the ratio of established businesses (8.4%) is slightly higher than the global average (6.8%). By European standards, Hungarian entrepreneurial activity is rather high. Early-stage entrepreneurial activity in Hungary is fifth highest among the 18 EU member states surveyed and eighth highest among the 23 participating European countries. The ratio of established businesses is seventh highest among both EU and European countries surveyed.

Livelihood and making the world a better place

The strongest motivation for entrepreneurs in Hungary is to earn their living; but another important motivational factor, especially for early-stage businesses, is that business is a means to make a difference in the world. That being said, the main reason for Hungarian entrepreneurs leaving the entrepreneurial sphere in 2021 is also financial (34% of the respondents indicated such reasons), followed by the COVID-19 pandemic (18%).

The results of the GEM survey show low innovation activity in Hungarian enterprises. Seventy-three per cent of early-stage entrepreneurs and 85% of established entrepreneurs are engaged exclusively in selling their existing products and services, which are known in their local community. Three-quarters of early-stage enterprises (76.8%) and four-fifths of established enterprises (79.4%) use only established technologies and processes. Entrepreneurs who are open to innovation also enter the market with products or services that are new to their local community or country at the most. At a global level, the share of innovative firms is minimal and only exists among early-stage firms.

According to the GEM results, a vast majority of Hungarian businesses have customers in their local environment, with slightly more than half of the businesses having a national customer base (59.6% for early-stage businesses and 62.2% for established businesses). Less than one in five Hungarian businesses have customers outside Hungary.

Domestic business ecosystem in the mid-ranks

According to Hungary National Entrepreneurship Context Index (NECI) of 4.5-characterising the entrepreneurial ecosystem - the country ranks in the lower-middle segment of the business ecosystems in Europe. There is a clear divide between the NECI scores of countries in the Western and Northern regions of Europe and those in the Central and Eastern regions. The Central and Eastern European region has an average score of 4.2, with Hungary's entrepreneurial ecosystem scoring the highest within the region.

The domestic ecosystem is ranked in the middle section of the development ranking (rather in the lower-medium segment in European context, while taking leading position in Central and Eastern Europe). Participating experts assess the ecosystem's strengths and weaknesses similar to the other countries surveyed. In terms of the entrepreneurial ecosystem, Hungarian experts have a negative view of entrepreneurship education, market openness and dynamism, government support policies, and R&D transfer, while there is a positive attitude concerning infrastructure segments and government policies on taxes and red tape. **Strengthening entrepreneurship educa-tion and training was highly rated by domestic experts as a key factor influencing the development of entrepreneurial activity.**

GENERAL ENTREPRENEURIAL ATMOSPHERE

The GEM survey allows an assessment of the entrepreneurial atmosphere in various countries and the perceptions of the adult population (Figure 1). Entrepreneurial activity is vividly illustrated by the fact that almost every other respondent (49.7%) personally knows someone who has started a business in the last two years, and the same proportion of people think it is easy to start a business in Hungary. A third of the population (36.5%) think that there are good opportunities in Hungary to start a business in the next 6 months. Additionally, a third (36%) of the population also feel they have the necessary knowledge and skills to do so. In addition to the above, just over a third (38.2%) of those surveyed are deterred from starting a business due to the fear of failure.



Figure 1: The entrepreneurial atmosphere in Hungary

The impact of age and gender on the assessment of the entrepreneurial atmosphere

An analysis of the five variables measuring the entrepreneurial atmosphere by age (Figure 2)* shows that young adults (18–34-year-olds) know slightly more people who have become entrepreneurs in the last two years (55.4%) than those aged between 35–54 (49.2%) and over 55 (41.6%) years. The extent to which people think starting a business in the next few months is a promising idea varies similarly with age. As opposed to 41.4% of young people, only 33–34% of older people have a positive attitude in this respect.



Figure 2: Evaluation of entrepreneurial atmosphere by age

The distribution with respect to the question on knowledge, skills, and experience is as follows: the youngest age group feels the most inexperienced (31.5%), the oldest age group is in the middle (34.2%) and the middle-aged feel the most prepared (40.4%) to start a business. However, young people are the least afraid of the potential failure related to an enterprise (33.2%). This fear increases steadily in the older age-groups (38.1% and 46.3% respectively). By contrast, the oldest age group is the most likely to believe (54.8%) that it is easy to start a business in Hungary, a view that becomes less common as age decreases (49.9% and 44.0%).

^{*} In the cross-variate analyses, the significance results of the khi2 tests were less than 0.05 in all cases, so there is a stochastic correlation among the variables. Furthermore, the η (Eta) values indicated that there were no sharp differences in the effects.

Overall, people's perception of the entrepreneurial atmosphere in Hungary changes

with age. Younger people know more entrepreneurs, are more willing to start a business, and are less afraid of failure. However, they do not feel that they have the necessary skills and experience to start a business and are much less likely to think that it is easy to start a business in Hungary, compared to older people. The same pattern is broken only in the case of the knowledge and skills variable, where the middle-aged generation, situated between the young and old age group, is the most likely to believe that they have the knowledge, skills, and experience necessary to start a business.

A higher proportion of male respondents than female ones agree that it is easy to start a business in Hungary and that they would think it a clever idea to do so in the following months (Figure 3). Likewise, a higher proportion of them felt that they have the necessary knowledge and experience to do so; they reported in higher numbers that they have personal contacts with entrepreneurs. Not surprisingly, men are also less afraid of the potential failure of starting a business.



Figure 3: Gender assessment of the entrepreneurial atmosphere

The impact of educational attainment on the perception of the entrepreneurial atmosphere

Perception of the entrepreneurial atmosphere also differs among people with different levels of education (Figure 4).

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hose with higher ation have re positive iew of the preneurial nosphere. As the level of education rises, the proportion of people who know someone who has started a business in the last two years (43.8%, 50.4%, and 56.4%), who think they have the necessary knowledge and skills to start a business (29.2%, 36%, and 44.7%), and who think it is easy to start a business (45.3%, 48.7%, and 54.2%) increases steadily. Moreover, it is observed that the higher the educational level of the respondents, the higher the percentage of people who think that there will be good opportunities to start a business in the next 6 months (40.2%), compared to those with secondary or lower education (35.2% and 35.1%, respectively). There is an opposite correlation with respect to fear of failure, wherein the proportion of those deterred from starting a business because of fear of failure decreases from lower to higher levels of educational attainment (43.1%, 35.8%, and 34.7%, respectively).

Regional differences in the perception of the entrepreneurial atmosphere

The analysis of the factors influencing the entrepreneurial atmosphere by county shows a varied distribution, but the results do not reveal any trend-like regional differences for all the factors examined.



Patrick Schild

Student of entrepreneurship at Team Academy of Budapest Business School

Co-founder of Light'n'Shoes, a company selling limited edition sports shoes. I have been interested in entrepreneurship since an early age. Both my father and grandfather having been entrepreneurs must have something to do with it. My parents run a family business, where I used to help out occasionally. As my own interests led me in other directions, it was clear that my parents' was not the business I was going to take over. But still, I was always sure that I wanted to be an entrepreneur. Why? Because I like to be able to do what I'm really interested in, make my own decisions, and find creative solutions. And nothing could give me more freedom than having my own business.

Of course, risk is a part of business, but that has never scared me. I have seen businesses in tricky situations, including my father's. And I've also seen how he managed and resolved these situations. Difficult situations are inevitable, but I believe that with the appropriate knowledge and the right decisions, everything can be solved. And failure, for me, is part of the process of growing and moving forward. How we handle it, whether we learn from it and use it to our advantage or let it break us is entirely up to us. So, the fear of failure or the idea of taking risks has never deterred me from being an entrepreneur. People in more economically developed counties are more likely to think it is a good idea to start a business in the next 6 months. A particularly high proportion of people in Győr-Moson-Sopron county, which is close to Austria, and an above-average proportion of people in Veszprém, Fejér, and Bács-Kiskun counties, as well as in the capital, think so. Nevertheless, there is no such regional polarisation with respect to being acquainted with people who have started a business in the last two years. A high proportion of respondents know entrepreneurs personally in both the eastern and western parts of the country (Figure 5).





Szabolcs-Szatmár-Bereg and Zala counties have the highest percentage of people who consider themselves equipped with the knowledge, skills, and experience necessary to start a business. The analysis by territorial distribution shows that a high proportion of people living in the Heves county, counties mainly on the western border (Győr-Moson-Sopron, Vas, Zala, and Somogy counties) and Pest and Nógrád counties think that it is easy to start a business in Hungary. The lowest proportions of those who agree with this view are found in the southern and north-eastern counties. This is only partially matched by the rate of fear of failure. The fear of failure is strongest among respondents in Borsod-Abaúj-Zemplén county and appears among the more economically developed counties, i.e., in Komárom-Esztergom, Veszprém, and Zala counties.

Do people wish to become entrepreneurs?

How far the general public perceives entrepreneurship as a career path to pursue, how high a social status they attribute to entrepreneurs, or how much emphasis they think the media places on portraying entrepreneurs, says a lot about how attractive they find entrepreneurship. The GEM survey shows that entrepreneurship is a desired lifestyle for many people in Hungary, with almost half of the respondents considering it a highly prestigious and desirable lifestyle.

About half of the sample agreed with all three statements: entrepreneurs are prominent in the media (49.9%), entrepreneurs in Hungary have a high social status (47.6%), and entrepreneurship is a desired career in Hungary (47.9%) (Figure 6). The opposite of all three statements is thought by about a quarter of the respondents. The picture is blurred somewhat due to the high proportion of 'don't know' responses, which is also around 25% for all three statements.





In this respect, the study showed no significant differences between men and women; however, there were interesting differences uncovered by age. Entrepreneurship, as a career path to follow, is strongest among young people (70.5%) (Figure 7). Although in decreasing proportions (62.4% and 58.2% respectively), it is a strongly present career option among older age groups as well. Similarly, high proportions of people from all three age groups associate a higher social status with entrepreneurship, but it is the youngest and oldest age groups who strongly agree with this variable (71.1% and 64.7%, respectively). Across all age groups, around 65% of the respondents believe that a lot of media attention is focused on entrepreneurship.



Figure 7: Assessment of entrepreneurship by age

Further, it is observed that educational attainment has little influence on the perception of entrepreneurship (Figure 8). In all three educational categories, the proportion of respondents who see entrepreneurship as a career path to follow is high (over 60%). Additionally, there is a slight difference in the perception of the high prestige associated with entrepreneurship on account of educational attainment. However, there is a small positive bias (67.1%) among those with secondary education. Finally, there is a spike with respect to media visibility among those with a high level of education (71.7%), with a high proportion of respondents associating high media visibility with entrepreneurship.



Figure 8: Assessment of entrepreneurship by educational attainment

As a career path to follow, entrepreneurship is most attractive to people living in the more economically developed regions of Western Transdanubia. Yet, the relationship between high social status and entrepreneurship at the county level is more complex (Figure 9). Here, the counties along the border and in southern Hungary (Baranya and Bács-Kiskun counties) stand out, but there is a high agreement rate with the statement in Komárom-Esztergom county, as well as in the counties around Lake Balaton and the capital. Finally, as regards media presence, we again find a high level of agreement among respondents living in the counties of Western Transdanubia and Csongrád-Csanád county.





Álmos Bartha

Founder, QuizNight.hu

Quiznight.hu

was the first in Hungary to implement pub quizzes, which are well-known in the Anglo-Saxon culture. In their seven years of operation, they have welcomed people who want to play in five countries and more than thirty cities. I started organizing pub quizzes 13 years ago, without any business intentions at first, just as a hobby. It has been my main activity for about seven years now, and the first thing that comes to mind about it is that it is difficult but cool. I find that other people look positively and appreciatively at those who dare to be entrepreneurs. It has taken me a long time to accept the latter because I come from a family that sees selffulfilment as a reprehensible rather than a desirable career path. However, the image of entrepreneurs has improved a lot in Hungary in the past decade, thanks to the new companies that have become internationally successful.

For a long time, I did QuizNight in parallel with my other projects and assignments, I never thought it would become my primary business activity. It just so happened that one summer, all my other projects ended, and I had enough income from the quizzes to live on. It occurred to me that if I had an opportunity to make a living from my hobby, I should take it and continue with it while I still enjoyed it, while there was a demand and momentum. So, for me, despite all the difficulties, being an entrepreneur is a gift, for which I am happy; and I try to live it to the fullest while it lasts.

Figure 9: Assessment of entrepreneurship by region



International outlook

Hungary ranks in the middle range in terms of the frequency of personal contact with entrepreneurs, when compared to the data from the EU member states and the Viseg-rád countries participating in the GEM survey^{*} in 2021 (Figure 10). In Hungary, almost every other respondent (49.7%) has said they personally knew someone who had become an entrepreneur in the last two years.

Nevertheless, the data do not reveal a pattern typical of EU countries. Neither the countries in the leading positions of the international comparison (Cyprus, Croatia, and Finland), where almost two-thirds of the respondents have personal relationships with entrepreneurs, nor the countries at the bottom of the list, where only one-third of the respondents know entrepreneurs personally (Greece, Romania, Spain), form a coherent group, either regionally or economically.

* In 2021, the Czech Republic did not participate in the GEM survey, so we could only compare the Hungarian data at a "V3" level: i.e., we could only compare the data of Poland, Slovakia, and Hungary.

Based on t assessmen the entrep neurial en ment, Hur ranks in th middle ran amongst B member s



You personally know someone who have started a business in the past 2 years

The Visegrád countries participating in the survey can, however, be considered as a cluster: a similar proportion of respondents know someone who has become an entrepreneur in the last two years in all three countries (Poland: 54.0%, Slovakia: 53.9%, and Hungary: 49.7%).

In contrast to the question above, the three Visegrád countries surveyed do not form a unified block when it comes to how good an idea people think it is to start a business in the next 6 months. In Hungary, compared to the EU and Visegrád countries, only a third (36.5%) of the respondents think it would be a clever idea to start a business in the next 6 months. This puts Hungary as well as Slovakia (33.4%) in the bottom third of the list, while Poland (72.5%) scores particularly high at an international level (Figure 11).



In the next 6 months, there will be good opportunities for starting a business

Almost half of the respondents (49.1%) believe that Hungary provides a favourable environment and good opportunities for starting a business, which puts Hungary in the middle range when compared with other EU countries (Figure 12).

The Netherlands (85.6%), Sweden (82.6%), and Finland (69.6%) are at the top of the list. Among the Visegrád countries participating in the survey, Poland is also at the top of the list with respect to this question (64.3%).



In your country, it is easy to start a business

In Hungary, only a third (36%) of the respondents feel they have the knowledge, skills, and experience necessary to start a business, which relegates us to the bottom of the list in both EU and regional comparisons. Yet, the proportion of those who do not wish to start a business because they fear failure is low by international standards (38.2%). Thus, the data do not suggest that Hungarians do not start a business due to the evasion of failure.

With regards to knowledge, skills, and experience needed to start a business, no regional or economic development clusters can be identified at the EU level, with Croatia (71.1%), Cyprus (64.1%), and Poland (60.1%) topping the list. The results of the Visegrád countries participating in the survey are also polarised. While Poland is among the best performing economies, Slovakia (41.7%) and Hungary are in the bottom third of the list.

t is not the r of failure the lack of preneurial ledge that s the main barrier to starting a business.



Among the Visegrád countries, Slovakia produced a particularly high proportion (54.4%) of people who would not start a business for fear of failure, while Poland is at the lower end of the international range (44.6%) in this respect (Figure 13).



You personally have the knowledge, skill and experience required to start a new business

Figure 13: Knowledge, skills, experience, and fear of failure from an international perspective



You would not start a business for fear it might fail

The Entrepreneurship Atmosphere Survey, therefore, places Hungary in the middlerange in the EU comparison with regards to personal contact with entrepreneurs and perceived difficulty in starting a business. In an international comparison, Hungarian respondents are less likely to perceive themselves as having the necessary knowledge, skills, and experience to start a business. Fear of failure is less of a deterrent to starting a business in Hungary than in the majority of EU Member States, yet Hungarians are less likely to think there would be good opportunities for starting a business in the next 6 months.

CHARACTERISTICS OF ENTREPRENEURS

GEM explores in depth the entrepreneurial activity, demographic characteristics of entrepreneurs, their activities, motivations, role in employment, attitude to innovation and their activity in the foreign markets in the surveyed countries.

In Hungary, 10.4% of the adult population plans to start a business in the next three years (including self-employment), while early-stage (see box) entrepreneurial activity is at 9.8%. Within this category, the ratio of nascent and new enterprises is nearly the same (5.3 and 4.5%, respectively). Lastly, the ratio of established businesses is 8.4% (Figure 14).

THE GEM METHODOLOGY distin-

guishes three phases of the entrepreneurial process. It considers nascent enterprises, those initiatives or existing enterprises where a business is actively being started but wages have only been paid for up to 3 months, and new enterprises that are more established and have been paying wages for at least 3 months but no more than 42 months (3.5 years). In GEM terminology, the criterion for an established enterprise is a longer period of operation with more than 42 months (3.5 years) of wage payment.

GEM defines business activity that is described as nascent and new as early-stage entrepreneurial activity, which is measured by the Total Early-Stage Entrepreneurial Activity (TEA) indicator.

Figure 14: Indicators of entrepreneurial activity in Hungary



Entrepreneurial activity in Hungary lies in the middle range of the 47 countries participating in the GEM survey in 2021—early-stage entrepreneurial activity (9.8%) is lower than the GEM average (13.7%), while the ratio of people with an established business (8.4%) is slightly higher than the international average (6.8%).

In international comparison, the ratio of early-stage enterprises shows considerable variability (Figure 15), with high-income countries typically having lower TEA, averaging at 11.3%, while the ratio of established enterprises is almost the same in all three income groups, averaging at 6.7–6.8%.



Figure 15: Ratio of early-stage and established business activity

in the international context

Countries were grouped in ascending order of total early-stage entrepreneurial activity (TEA)

and economic development.

In the European context, Hungarian entrepreneurial activity can be considered rather high. Early-stage entrepreneurial activity is the fifth highest among the 18 EU member states surveyed in this survey and the eighth-highest among 23 European countries. The ratio of established businesses is seventh highest among the countries surveyed from both EU and Europe.

There are significant differences among the surveyed countries in terms of early-stage entrepreneurial activity (Figure 16). These may be explained by a combination of factors, such as economic development, economic model, cultural aspects, entrepreneurial atmosphere, entrepreneurial ecosystem, and random factors. In the Netherlands (14.2%), Ireland (12.5%), Latvia (15.1%), and the UK (12.6%), TEA is particularly high. However, apart from Latvia, there is no clear trend in the new EU member states of Central and Eastern Europe. Poland (2%), on the other hand, has an extremely low TEA, while Croatia (12.4%) can be considered as having a rather high TEA value.



Figure 16: The ratio of early-stage entrepreneurial activity and established business activity in the international context — Europe

Countries were grouped in ascending order of total early-stage entrepreneurial activity (TEA) and European Union membership.



Anna Niszkács

Owner and managing director, Gerbeaud Gasztronómia Kft.

Gerbeaud is one of the best-known Hungarian brands. The café has been welcoming guests since 1858. In addition to the iconic confectionery, the Gerbeaud Group now includes two Michelin-starred restaurants: ONYX and Émile in Buda. We have a tradition of innovation, as the founder, Henrik Kugler, and his successor, Emil Gerbeaud, were both renowned for their constant innovation. Tradition is a good thing, but it must also be developed. The COVID-19 pandemic has been an important multiplier in recent innovation. In 2007, when we opened ONYX, fine dining was still completely new in Hungary, so it was a huge thing, even if today we see the results are rather amusing. Over the years we have grown, we have earned Michelin stars, and it is not easy to touch a successful place. But the closure due to the pandemic was an opportunity in this respect, and we embarked on a major development.

We created the Workshop, an innovative space and restaurant at the same time, where we are developing experimental dishes for the restaurant, which is in the process of being revamped with a team of creative professionals and scheduled to open in 2023. Our guests will not only get an insight into the development, the experimentation, but they will also be part of the creative process. Their feedback helps us to perfect our dishes. The Workshop will remain a space for research, development, and innovation after the opening of the revamped ONYX. When a dish is declared ready by the Onyx Creative Community, it will be placed on the ONYX menu and the prototype will be taken off the Workshop menu and replaced by a new experimental dish.

Demography

An examination of the gender and age distribution of TEA may shed light on the most active entrepreneurial strata of the population (Figure 17). **Based on the 2021 Census, men's entrepreneurial activity is higher than that of women's in all age groups and types of enterprises**; however, statistically significant differences could only be observed in three cases:

- in the 18–24 years age group in early-stage businesses,
- in the 35–44 years age group in established businesses, and
- in the 55–64 years age group.

In all three cases, men's entrepreneurial activity is at least twice as high as that of women in the respective age groups.

Early-stage entrepreneurship rate forms an inverted C-shaped curve for the age groups, i.e., the TEA index is highest in the 25–44 age group, regardless of gender, and lower in the younger and older age groups.

In the case of established businesses, there is an expected linear trend, with an increasing ratio of older age groups who have stable businesses on average. There were no respondents in the sample aged 18–24 years who owned and managed an established business, so the entrepreneurship rate for this age group is significantly lower for both genders compared to the other age groups. In addition, it is observable that the 25–34 years age group demonstrates a significantly lower entrepreneurial activity in the case of men, compared to the 35–44 and 55–64 years age groups. However, no statistically verifiable difference is observed for the 45–54 years age group.




Figure 17: Entrepreneurial activity by gender and age group in the population aged 18–64 years

The GEM 2021 survey shows that, overall, entrepreneurs are slightly more educated than the population as a whole (Figure 18). This is particularly true for those with an established business, where 43.8% of men and 36.2% of women have some tertiary education, compared to only 28.4% and 30.2%, of the total population. With respect to early-stage entrepreneurs, the ratio of those with tertiary education is lower (35.3% for men and 27.3% for women), which is even lower when women are compared to the total population. However, when examined in depth, only men show a higher level of education as entrepreneurs, while no such correlation is found in the case of women.

Figure 18: Distribution of early-stage entrepreneurial activity (TEA), established business activity (EBO), and the adult population of the sample by educational attainment



Breakdown by technological level

The level of technology applied in the course of the business activity can be a good indicator of the added value of the activity carried out by the enterprises. With respect to this, the GEM research set up three categories based on the sectoral classification of the activity, which are (1) low or no tech, (2) medium-tech and (3) high-tech.

The vast majority of Hungarian entrepreneurs are engaged in low or no technologyintensive activity, with no significant differences with respect to the age or gender of the entrepreneur (Figure 19). However, there are more men among entrepreneurs using technology at a comparatively higher level, and only men among those using high-level technology.

e majority Hungarian repreneurs t innovate only serve stomers in trea where they live.

Figure 19: Distribution of early-stage entrepreneurial activity (TEA) and established business activity (EBO) by gender and technological level of the sector



	Esta	Estabilished business (EB)		Total early-stage Entrepreneurial Activity (TEA)			
	total	female	male	total	female	male	
No/low-tech	92.3%	96.6%	90.0%	94.9%	97.4%	93.3%	
Medium tech	7.1%	3.4%	9.1%	3.1%	2.6%	3.3%	
High-tech	0.6%	0.0%	0.9%	2.0%	0.0%	3.3%	

No/low-tech Medium tech High-tech

Discontinuing the entrepreneurial activity

The percentage of people discontinuing their entrepreneurial activity compared to the total population was 2.1%. The reasons for entrepreneurs quitting business can be divided into four categories (Figure 20):

- financial reasons (34%)—the business was not profitable or had problems raising finance;
- COVID-19 pandemic or some other event (19%);
- another job or business opportunity (19%);
- **other reasons** (28%)—family or personal reasons, planned discontinuation, or other (specified separately).

Overall, one in three (34%) entrepreneurs who quit their business cited a financial reason as their reason for the discontinuation of their business. In addition, the COVID-19 pandemic explains 18% of business discontinuations.



Motivations

Based on the 2021 survey, it can be stated that nearly two-thirds (61.7%) of early-stage entrepreneurs cited the chance to make a difference in the world as a motivation for starting a business (Table 1). This figure is significantly lower (16.2%) for established businesses.

The motivation to create wealth and earn a high income was mentioned by one third (32.5%) of all early-stage entrepreneurs; most of these entrepreneurs were females. This factor is less of a motivation for established businesses, as it is mentioned only by one in six entrepreneurs (18.3%), regardless of gender. Further, the continuation of family traditions is mentioned by one in five early-stage and one in four established businesses.

The strongest motivation for entrepreneurship is to earn a living: two thirds (66.8%) of entrepreneurs, regardless of gender, cited this as a motivation for entrepreneurship in case of early-stage businesses, while this proportion was three quarters (76.5%) in case of established entrepreneurs, with nearly 80% of women citing this as a motivational factor.

	Total early-stage Entre- preneurial Activity (TEA)			Estabilished business (EB)		
	male	female	total	male	female	total
To make a difference in the world.	62.7%	60.3%	61.7%	48.0%	40.6%	45.5%
To build great wealth or a very high income.	29.6%	37.0%	32.5%	18.9%	17.2%	18.3%
To continue a family tradition.	27.7%	10.4%	21.0%	21.8%	30.1%	24.7%
To earn a living because jobs are scarce.	66.6%	67.1%	66.8%	74.7%	79.9%	76.5%

The GEM data show that a strong motivation for entrepreneurs in Hungary to start an enterprise is to earn a living, both in the case of early-stage and established businesses. Further, for both groups, the motivation to make a difference in the world is also an important reason for running a business.

Employment

The GEM survey also provides an opportunity to examine the role of entrepreneurs in employment (Table 2). Almost half of the early-stage enterprises are either not employing other people currently (49%) or are micro-enterprises with five or fewer employees (44%). The majority of entrepreneurs do not plan to create new jobs in the future. Around one-third of those with no employees as of now plan to take one to five people, just under 16% of those with up to five employees plan to increase the number of positions to at least six in the future, and one in twenty expect to cut jobs in the next five years. **Overall, the picture is negative, wherein a significant proportion of early-stage entrepreneurs expect to maintain only their current rate of employment**. Further, only a minority of entrepreneurs are expecting to expand significantly: over a third (37.2%) of those with no employees, less than a sixth (15.8%) of those with one to five employees and exactly a fifth (20%) of those with six to nineteen employees plan to expand their workforce significantly.

For established businesses, the situation is similar: two in five (41%) have no employees, one in two (48%) has five or fewer employees, while only one in ten (9%) has between six and nineteen employees. As in the case of early-stage enterprises, only a minority of established enterprises plan to create new positions: over a third (36.1%) of those with no current employees, nearly a sixth (15.5%) of those with five or fewer employees, and 30.8% of those with six or more employees plan to expand.



Endre Szűcs Founder, bedrock.farm

As a start-up, bedrock.farm grows nutritious, safe, and affordable edible plants locally, without seasonality and on demand. As a high school student, I spent a month in the famous MIT entrepreneurship program in the US. The most important thing I brought home was the idea that impact and responsibility are in direct correlation. If I take responsibility for a slice of our future, I empower myself to do something about it. And an enterprise, I think, is the best form of taking action to move the world in the direction I want it to go.

I wanted to work in agriculture, and somehow it quickly became a field close to my heart. Anyone who works in this field is faced with global challenges such as water scarcity, land scarcity, or even the ageing farming community. So, I am intensely driven to do something to ensure that the next generation has healthy, nutritious, and delicious food. But solving global problems requires a lot of people to start doing something differently. Bedrock.farm, as its mission states, works to do just that: to show that anyone can start growing food, pretty much anywhere, in a sustainable and profitable way. Faith is the weakest link here, so we said let's show the world that two college students can grow lettuce for Michelin-starred restaurants from a basement. For me, entrepreneurship is a tool to create a future I want to live in.

Table 2: Ratio of total early-stage entrepreneurial activity (TEA) and establishedbusiness activity (EBO) by the current and expected number of jobs

		Expected number of job						
	Current number of job	No job	1-5 jobs	6-19 jobs	20+ jobs			
Total	No job	62.8%	34.9%	0.0%	2.3%			
early-stage	1-5 jobs	5.3%	78.9%	10.5%	5.3%			
Entre- preneurial	6-19 jobs	0.0%	0.0% 80.0%		20.0%			
Activity	20+ jobs	0.0% 0.0% 0.0		0.0%	100.0%			
(TEA)	Total	33.3%	51.7%	9.2%	5.8%			
	No job	63.9%	36.1%	0.0%	0.0%			
	1-5 jobs	8.5%	76.1%	15.4%	0.0%			
Estabilished business	6-19 jobs	0.0%	0.0%	69.2%	30.8%			
(EB)	20+ jobs	0.0%	0.0%	0.0%	100,0%			
	Total	30.6%	51.7%	13.6%	4.1%			

The data in the table can be summed up to 100% for each row.

Innovation

The methodology used by the GEM research examines innovation from two angles. It assesses the extent to which firms offer new products and services, and whether they use innovative technologies or processes in their production. It also examines the geographical scope of the innovation, i.e., to whom the products or services are new (not new, new to local residents, new to the country or new worldwide).

The vast majority of Hungarian entrepreneurs, i.e., three-quarters of early-stage entrepreneurs (73%) do not innovate at all, while the vast majority of established entrepreneurs (85%) are engaged in selling their existing products or services (Figure 21). In addition, entrepreneurs who are open to innovation enter the market with products or services that are new in their local community or the country at the most. On a global level, innovative enterprises are minimal and exclusively earlystage.

Figure 21: Ratio of enterprises with a product

or service that can be considered new



An analysis of new technologies and processes involved in the production of products or services reveals that the ratio of enterprises not using innovative solutions is also painfully high in this area at three-quarters of early-stage enterprises (76.8%), while four-fifths of established enterprises (79.4%) use only traditional technologies and processes (Figure 22). It is also typical that the applied innovative technologies and processes are only new in the local community or the country of the enterprise, while only a fraction of entrepreneurs, 0.4% of early-stage enterprises, use solutions that can be considered innovative at the global level, compared to that of 1.7% of established enterprises.

4	0	%	50%	100
Wo wo	Estabilished business (EB)	1.7%		
New to the world	Activity (TEA)	0.4%		
	Total early-stage Entrepreneurial			
New to people in your country	Estabilished business (EB)	9.4%		
New o people in your country	Activity (TEA)	7.3%		
	Total early-stage Entrepreneurial	7 20/		
Nev peop the wher li	Estabilished business (EB)	9.5%		
w to ple are e y ve	Activity (TEA)	15.5%		
o a ou	Total early-stage Entrepreneurial	15.5%		
prod	Estabilished business (EB)			79.4%
Not new product or service	Activity (TEA)			,,
or o	Total early-stage Entrepreneurial			76.8%

Figure 22: Ratio of enterprises using new technologies or processes for their products or services

Locality and export activity

The vast majority of Hungarian entrepreneurs are characterised by having customers in their local area (Figure 23). It is observed that 59.6% of early-stage enterprises and 62.2% of established businesses have a national customer base. Moreover, fewer than one in five Hungarian enterprises have customers outside Hungary.

The ratio of businesses with customers from abroad is 16.2% for early-stage enterprises and 18.1% for established businesses. These figures are not significantly different from the averages of the other Visegrád countries participating in the GEM survey.



Figure 23: Ratio of early-stage entrepreneurial activity and established business activity by the locality of their customers

The ratio of enterprises with export turnover (Table 3) is low: 14.7% of early-stage enterprises and 17.8% of established enterprises engage in commercial activity abroad. Among exporting enterprises, the ratio of those with significant export earnings of more than 75% of their turnover is extremely low, at just under 4%.

Among Hungarian firms that are performing rather weakly in the export market, early-stage medium-technology and established high-technology businesses show activity in foreign markets.

T A		Export intensity of enterprises (%)						
Type of enterprise	Technology level	0%	1%-11%	11%-25%	26%-75%	76%- 100%		
Total	No/low tech	86.1%	3.3%	2.8%	3.9%	3.9%		
early-stage	Medium-tech	57.1%	% 14.3% 14.3%		0.0%	14.3%		
Entrepreneu- rial Activity	High-tech	100.0%	0.0%	0.0%	0.0%	0.0%		
(TEA) 	Total	85.3%	3.7%	3.1%	3.7%	4.2%		
	No/low tech	83.2%	5.2%	2.6%	4.5%	4.5%		
Estabilished	Medium-tech	75.0%	16.7%	8.3%	0.0%	0.0%		
business (EB)	High-tech	50.0%	50.0%	0.0%	0.0%	0.0%		
	Total	82.2%	6.5%	3.1%	4.1%	4.1%		

Table 3: Export intensity of enterprises

The data in the table can be summed up to 100% for each row.

ENTREPRENEURSHIP ECOSYSTEM

The GEM National Expert Survey (NES) provides the basis for the analysis of the entrepreneurial ecosystem across countries.^{*} The National Entrepreneurship Context Index (NECI) is a cumulative index that provides a comparative assessment of the entrepreneurial ecosystem across countries. The list and explanation of the Entrepreneurial Framework Conditions (EFCs) on which the NECI is based can be found on page 60.

The analysis of domestic NECI segments is summarised in Figure 24.

* The NES data collection does not use a complete list of countries; thus, due to gaps in data, the index only shows trends in global, European, and Central and Eastern European (CEE) comparisons.





Figure 24: Assessment of the elements of the entrepreneurial ecosystem





Ágnes Hűvös

Senior partner and strategic consultant, Karson Consulting

Karson provides strategic consulting services to micro and small businesses, implementing complex growth projects. A good ecosystem means access to opportunities. Internationally, this increases the competitiveness of companies that really seize opportunities in their home country. Enterprises operating in a favourable ecosystem have access to resources and knowledge in favourable conditions, at lower risks of entry and lower costs than their competitors in other countries. The key is the extent to which businesses are aware of these opportunities and the confidence they have in the system that provides them with benefits. It is important, therefore, that ecosystem actors see their task not only as creating opportunities but also as building that trust. It is also important that businesses in their most vulnerable situations (e.g., start-ups) have access to information in time so that they can maximise the benefits.

If all this is structured in a harmonious way, i.e., (1) the opportunity to benefit is stable, (2) the information is accessible, and (3) businesses trust the system, not only will competitiveness be higher in an international environment, but the ecosystem itself will be spontaneously strengthened. On a day-to-day basis, this means that businesses can focus on achieving their strategic goals because they are surrounded by a supportive environment, growth is predictable, and fewer ad hoc actions are needed to sustain performance. astructure is a strong ponent of ecosystem, ding to the experts. The surveyed experts rated physical infrastructure (7.21), commercial and services infrastructure (5.75), and elements of government policy on taxes and bureaucracy (5.14) above average within the ecosystem. The state of the financial segment (4.86 and 4.71), government entrepreneurship programmes (4.36), social and cultural context (4.30), market entry in terms of barriers and regulation (4.21), entrepreneurship education in higher education and vocational training (4.04), and R&D transfer (4.01) were rated below average. Areas designated for improvement include government support programmes (3.99) and market dynamics (3.46). The weakest factor was entrepreneurship education in public education (2.45).

The GEM expert survey collects views on areas designated for change in the form of open questions. Figure 25 shows the percentage distribution of responses coded into categories of what the experts consider to be the most supportive factors for entrepreneurship in Hungary. The two most crucial areas are considered to be government policy (19%) and ensuring financial access (19%). Training and education (14%) and the development of government programmes (14%) also emerge as strong factors.



Figure 25: Topics and areas promoting entrepreneurship in Hungary

Education and training (33.3%) stand out among the factors that experts believe could positively influence the domestic entrepreneurial ecosystem (Figure 26). Government policy and financial support are also mentioned several times, but the rates at which they are mentioned are well below the top factor of education and training.



Figure 26: Areas of business development in Hungary

International outlook

With a NECI score of 4.5*, Hungary ranks almost exactly in the middle of the GEM survey countries occupying the 27th place (Figure 27).

The ranking is spread across a wide spectrum, with the world's most developed economies at the top (United Arab Emirates, Netherlands, Finland, USA, Germany, Canada) and countries with lower economic development at the bottom (Sudan, Iran, Guatemala).

The ranking shows a strong correlation between a country's economic performance and the development of its entrepreneurial ecosystem. This is consistent with Hungary's position in the rankings. Hungary i ranked in middle see globally, w taking lea position regionally

* Standard deviation: +-1.1.

Sudan		1	3.1	0			
Iran							
Brazil			3.2				
Belarus				59			
South Africa				.64			
				3.73			
Dominican Republic				3.74			
Guatemala				3.80			
Panama				3.86			
Croatia				3.91			
Morocco				3.95			
Romania				3.98			
Oman				4.13			
Russia				4.15			
Turkey				4.1			
Jamaica				4.2			
Poland				4.2			
Cyprus				4.2			
Urugay				4.2			
Slovakia				4.3			
Slovenia				4.	32		
Mexico				4.	35		
Greece				4.	39		
Egypt				4	44		
Hungary				4	.50		
Chile				4	•55		
Colombia				4	1.66		
Italy					4.71		
Ireland					4.73		
Japan					4.73		
Kazakhstan					4.75		
Israel					4.87		
Luxembourg					4.87		
United Kingdom					4.94		
India					4.99		
Latvia					5.03		
Germany					5.07	*	
Canada					5.0	8	
France					5.14	4	
Sweden					5.2	5	
USA					5.	31	
Spain					5.	42	
Qatar					5	.51	
Switzerland					5	5.51	
Norway						5.66	
South Korea						5.67	
Saudi Arabia						6.0	
Lithuania						6.1	
Finland						6.1	
Netherlands						6	.32
United Arab Emirates							6.75
(0 1	2	3 4	1	5	6	7 8

However, it is important to stress that the relationship between economic performance and the assessment of the development of the business ecosystem is far from deterministic. In the case of entrepreneurial ecosystems that are highly rated by experts, we find several cases of countries (the Netherlands, Finland, Norway) where expert assessment is more favourable than with respect to other countries with better performing economies (e.g., the US, Germany). There are also examples where a country's economy is stronger than its NECI ranking (Croatia, Romania).*

The European average NECI score is 4.9^{**} points, placing Hungary in the lower-middle group, below the world average (Figure 28). There is a clear divide between the scores of the Western and Northern European countries and those of the Central European countries.





* The economic performance of countries is defined on the basis of their nominal GDP in 2020.

** Standard deviation: +- 0,73



László Radácsi Phd.

Vice rector for Entrepreneurship Development at Budapest Business School, head of Team Academy Entrepreneurship Training

Entrepreneurship research, entrepreneurship education, and entrepreneurship skills development and inspiration to choose entrepreneurship have been a pillar of the development strategy of Budapest Business School for years. Considering the European Union's Entrepreneurship Competence Framework, we seek to enhance the knowledge and skills of our students in areas such as business planning, teamwork, smart risk-taking, experiential learning, and integrating the aspects of sustainability into innovation. Developments in this area in recent years have often failed to lead to spectacular breakthroughs and entrepreneurial success stories because there is so much catching up to do. We are lagging in general knowledge and skills that could find their logical place in public education, university courses, and vocational training, and would certainly support the life and success chances of those taking part in these trainings. Of course, all players in the ecosystem have a role to play here: government education policy, the media, training institutions, and the entrepreneurs themselves. Change, appearing in a survey like the GEM, can only be the result of a series of actions, consciously structured, derived from a long-term vision, and conducted in cooperation with all the actors involved.

In this sub-regional breakdown, the experts surveyed consider Hungary's entrepreneurial ecosystem to be the leading ecosystem in the region.



Figure 29: NECI in Central and Eastern European comparison

On breaking down the NECI index, it is observable how the business development experts surveyed rate the Hungarian entrepreneurial ecosystem for each of the components, and how this compares with global, European, and Eastern and Central European data.

The business development experts involved in the research assessed the framework conditions for entrepreneurship slightly differently than the global average (Figure 30). They found financial conditions slightly more favourable in the case of Hungary; and government support from among government activities less favourable, and taxes and red tape more favourable than the global average. Entrepreneurship education in public education and market dynamics lag behind the global average. Moreover, physical infrastructure, in contrast, is rated above the global average. Overall, the perception of the Hungarian entrepreneurial ecosystem follows international trends, both in global and European comparisons (Figure 31).

Figure 30: NECI in global comparison



In an Eastern and Central European context (Figure 32), the ecosystem was rated more favourably by domestic experts in several segments, except for market openness (which remains below the regional average).



Figure 32: NECI in Central and Eastern European comparison

Regarding financial access, government policies, R&D transfer, and physical infrastructure, the ecosystem is perceived much more favourably in Hungary than in other Eastern and Central European countries. Nevertheless, it is worth bearing in mind that the regional averages for Eastern and Central Europe are extremely low by global standards.

GEM TERMINOLOGY

APS (Adult Population Survey): the GEM's annual representative survey of at least 2,000 adults selected from among the domestic adult population aged between 18–64 years.

GEM (Global Entrepreneurship Monitor): the world's largest annual survey of entrepreneurial dynamics since 1999, and a rich and reliable source of data describing entrepreneurial activity and ecosystems.

NES (National Expert Survey): the GEM's annual survey of at least 36 experts who assess the entrepreneurial ecosystem against nine Entrepreneurial Framework Conditions.

Fear of Failure Rate: the percentage of the adult population aged between 18–64 years who see good business opportunities but do not start a business for fear of failure.

Nascent Entrepreneurship Rate: the percentage of the adult population aged between 18–64 years who are nascent entrepreneurs, i.e., actively involved in starting a business that they will own or co-own and that has not paid wages or made other types of payments to its owners for more than 3 months.

New Business Ownership Rate: the percentage of the adult population aged between 18–64 years who are owner-managers of a new business that has been paying wages and other types of payments to its owners for more than 3 months but less than 42 months (3.5 years).

TEA (Total Early-Stage Entrepreneurial Activity): the percentage of the adult population aged 18–64 years who are nascent or new entrepreneurs, starting or running a new business.

EBO (Established Business Ownership Rate): the percentage of the adult population aged 18–64 years who are current owner-managers of an established business that has been paying wages, salaries, and other types of payments to its owners for more than 42 months (3.5 years).

EFCs (Entrepreneurial Framework Conditions): conditions identified by the GEM that enhance (or inhibit) the creation of new businesses in an economy. These conditions form the framework of the NES and are as follows:

- A1. Financing of enterprises
- A2. Easy access to business finance
- B1. Government policy: support and relevance
- B2. Government policy: taxes and red tape
- C. Government enterprise programmes
- D1. Entrepreneurship education in public education
- **D2**. Entrepreneurship education in higher education and vocational education and training
- E. Research development transfers
- F. Commercial and service infrastructure
- G1. Easy access: free, open, and growing markets
- G2. Easy access: barriers and regulation
- H. Physical infrastructure
- I. Social and cultural standards

NECI (National Entrepreneurship Context Index): an aggregate indicator of the average state of the entrepreneurial environment in economies, calculated on the basis of NES data. It combines into a single number the 13 national EFCs identified by GEM researchers as the most reliable determinants of a favourable environment for entrepreneurship. It is calculated as a simple arithmetic average of the 13 variables representing the business framework conditions. Business environment conditions are measured on the basis of items rated by the experts surveyed on an 11-point Likert scale, with responses aggregated using principal component analysis.

GEM conceptual framework and data collection methodology

The GEM is the world's most comprehensive survey of entrepreneurial activity using a solid methodological basis, with many countries of the world involved in collecting data every year since 1999. In 2021, a total of 50 countries participated in the survey (with representative population surveys conducted in 47 and expert interviews conducted in 50 countries).

Since the beginning, the countries participating in the GEM have helped to understand the link between entrepreneurship and national economic development by answering the following questions:

- Does the level of entrepreneurial activity vary between countries, and if so, to what extent?
- Does the level of entrepreneurial activity affect a country's rate of economic growth and prosperity?
- What makes a country entrepreneurial and what factors influence entrepreneurial activity?

To uncover the link between entrepreneurship and national economic development, the GEM has developed a conceptual framework along the following objectives (Figure 33). The model should:

- enable comparisons of the level of entrepreneurial activity among countries, geographical regions, and levels of economic development;
- make it possible to determine the extent to which entrepreneurial activity influences economic growth within each economy;
- contribute to the identification of the factors that encourage and/or discourage entrepreneurship (in particular the links among the national framework conditions for entrepreneurship, societal values, personal characteristics, and entrepreneurial activity);;
- ensure the monitoring of entrepreneurial attitudes, activities, and aspirations within countries, and provide the basis for the annual national assessment of the entrepreneurial sector;
- support the development of effective and targeted policies to build the entrepreneurial capacity of countries.

The basic premise of the GEM conceptual framework is that economic growth is the result of individuals' ability to identify and seize arising business opportunities. Individuals' decisions to start an entrepreneurial activity are influenced by environmental factors, in addition to their personal skills and knowledge. The determinants of starting an entrepreneurial activity are an individual's perception of opportunity and ability (motivation and skills) to take advantage of that opportunity, and the environment sur-

rounding the individual. Within the GEM conceptual framework, the entrepreneurial framework describes the environment that influences entrepreneurial activity, which in turn feeds back into the environment through social values and economic development. (Source: https://gemuae.uaeu.ac.ae/en/framework.shtml)



Figure 33: GEM conceptual framework

(GEM Global Report 2021/22)

The GEM provides a clear and consistent definition of entrepreneurial activity and possesses a well-established methodology for measuring and evaluating entrepreneurial activity, laid down in the conceptual framework. The National Team is responsible for conducting the data collection and analysing the data in each of the countries participating in the survey. Data collection consists of two complementary surveys, the Adult Population Survey (APS) and the NES. The APS examines the characteristics, motivations, and ambitions of those who are starting a business, as well as the society's attitudes towards entrepreneurship. The NES collects the assessments of at least 36 experts, validated by the GEM Data Team, on the framework conditions for entrepreneurship.

Countries participating in the GEM survey and their categorisation

Countries participating in the GEM data collection were categorised according to World Bank data, based on the income thresholds defined by the GEM (Table 4):

- low-income countries with a GDP per capita of less than USD 20 000,
- middle-income countries with a GDP per capita between USD 20 000-40 000,
- high-income countries with a GDP per capita higher than USD 40 000.

Low income countries < 20 000 USD	Middle income countries > 20 000 USD < 40 000 USD	High income countries > 40 000 USD
Brazil	Chile	United States
Republic of South Africa	Cyprus	United Arab Emirates
Dominican Republic	Belarus	United Kingdom
Egypt	Greece	Finland
Guatemala	Croatia	France
India	Kazakhstan	Netherlands
Iran	Poland	Ireland
Jamaica	Latvia	Israel
Colombia	Lithuania	Japan
Morocco	Hungary	Canada
Mexico	Oman	Qatar
Sudan	Russia	Republic of Korea
	Panama	Luxembourg
	Romania	Germany
	Spain	Norway
	Slovakia	Italy
	Slovenia	Switzerland
	Turkey	Sweden
	Uruguay	Saudi Arabia

Table 4: Categorisation of countries in the GEM survey

Technical details

The Hungarian GEM National Report was based on a representative survey conducted among the Hungarian adult population (APS) and interviews with Hungarian experts (NES).

The technical details of the data collection are set out in the table below.

Table 5: Technical details of data collection

Sampling features	Information
APS	
Target population	Hungarian adult (18-64 age range) population
Target population size	6.465.545
Sample size	2.014
Sample design	Multiple strata – each sampled at identical rate
Type of sample	Random
Sampling period	2021. 05.04 2021.06.11.
Interview method	Telephone
Sampling methodology	Random dial from list
Fieldwork carried out by	TÁRKI Social Research Institute
Data recording and SPSS database creation	TÁRKI Social Research Institute
Monitoring, quality control, and final verification	GEM Hungary National Team
NES	
Target population	Experts in entrepreneurship
Sample	36 experts
Type of sample	Convenience sample
Sampling period	2021.04.20 2021.06.09.
Interview method	Telephone interview
Fieldwork carried out by	Budapest Business School – University of Applied Sciences
Data recording and SPSS database creation	GEM Hungary National Team