

TAKING INITIATIVE AND EARNING A LIVING

ENTREPRENEURIAL MOTIVATIONS AND OPPORTUNITY
PERCEPTION IN HUNGARY

GLOBAL ENTREPRENEURSHIP MONITOR
NATIONAL REPORT
HUNGARY
2022-2023



JUDIT CSÁKNÉ FILEP • LÁSZLÓ RADÁCSI •
ÁRON SZENNAY • GIGI TIMÁR

TAKING INITIATIVE AND EARNING A LIVING

ENTREPRENEURIAL MOTIVATIONS
AND OPPORTUNITY PERCEPTION
IN HUNGARY



GLOBAL ENTREPRENEURSHIP MONITOR
NATIONAL REPORT
HUNGARY
2022-2023



BGE

Budapest, 2023

ISBN: 978-615-6342-65-2

ISSN online: 2939-8339

DOI: [10.29180/978-615-6342-65-2](https://doi.org/10.29180/978-615-6342-65-2)

Authors: Judit Csákné Filep, László Radácsi, Áron Szennay, Gigi Timár

Reviewer: Dr. Attila István Petheő

The Global Entrepreneurship Monitor National Report - Hungary, 2022-2023 may be cited as Csákné Filep, J., Radácsi, L., Szennay, Á., Timár, G. (2023). Taking initiative and earning a living – Entrepreneurial motivations and opportunity perception in Hungary.

The authors would like to express their special thanks to Zsófia Borsodi for her support as the project manager of the research and their colleagues at Budapest Business School (BBS) who contributed to the data collection.

© Published by Budapest Business School, 2023

Responsible publisher: Prof. Dr Balázs Heidrich

Editor in Chief: Judit Csákné Filep PhD.

Series Editor: Gigi Timár

Copy Editor: Zsófia Borsodi

Pre-press by Andrea Pais

Disclaimer

The Global Entrepreneurship Monitor (GEM) National Report – Hungary 2022–2023 has been prepared using information from the GEM project data collection. The authors are responsible for the interpretation and analysis of the data in this report; their views do not necessarily reflect those of the institution they represent.

GEM's partner in Hungary is Budapest Business School. The research is conducted by BBS Budapest LAB Entrepreneurship Office. For more information, visit: <https://budapestlab.hu/>

Project number TKP2021-NKTA-44 was funded by the Ministry of Innovation and Technology with support from the National Research Development and Innovation Fund, under the Thematic Excellence Programme 2021 (TKP2021-NKTA).

Sponsors:



Professional partner:



PROJECT
FINANCED FROM
THE NRDI FUND

Table of Contents

Welcome Message	5
Foreword	7
Executive summary	9
THE GENERAL ENTREPRENEURIAL CLIMATE	15
The effect of age and gender on the entrepreneurial climate	
The effect of education on the perception of the entrepreneurial climate	
Entrepreneurship education	
The attractiveness of entrepreneurship	
CHARACTERISTICS OF ENTREPRENEURS	31
Family enterprises – A special group	
Demography	
Breakdown by the level of technology	
Exiting entrepreneurship	
Motivations	
Employment	
Innovation	
Location and export activity	
ENTREPRENEURIAL ECOSYSTEM	48
Entrepreneurship education through the eyes of experts	
GEM TERMINOLOGY	59
GEM conceptual framework and data collection methodology	
Countries participating in the GEM survey and their categorisation	
Technical details	

Welcome Message



Máté Lóga

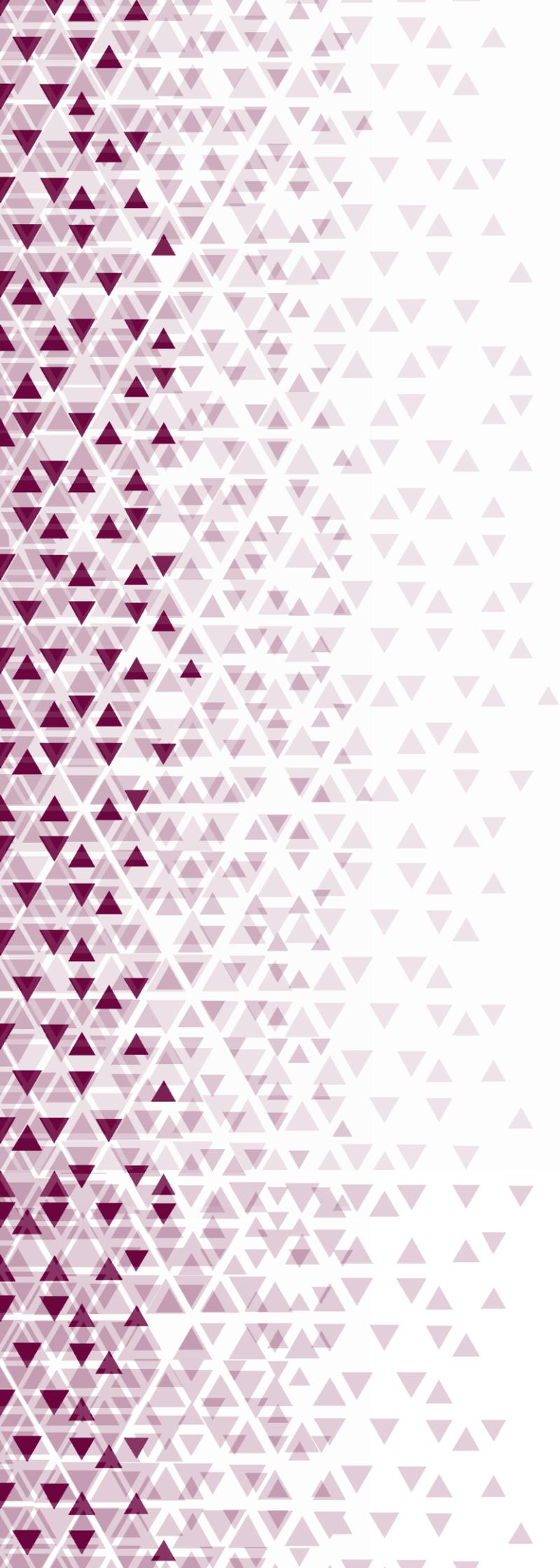
*Secretary of State for Economic Development and International Financial Services,
Ministry of Economic Development*

We are proud that as part of the world's largest business survey, Budapest Business School is conducting a survey of the Hungarian business environment together with several world-renowned foreign universities. This provides both experts and decision-makers with up-to-date, internationally comparable information. In today's dynamically changing business world, data is one of the most important resources and continuous monitoring is essential.

No sooner had we recovered from the pandemic than a war broke out in our neighbourhood, severely disrupting the economy of our continent. Shifts in global economic power also pose a major risk to Europe's competitiveness, while adapting to climate risks is a longer-term challenge. Yet turbulent times can also be an opportunity for renewal and realignment. More than ever, innovation and entrepreneurial ingenuity are needed.

The main objective of the SME strategy set out by the Hungarian government for the period up to 2030 is to significantly increase the value-added capacity of domestic companies with robust growth potential. Since 2010, the growth rate of domestic companies has been steadily on the rise. These companies can reach new levels by continuously increasing their value added and export capacity. The government is committed to ensuring that the Hungarian SME sector is capable of continuous technological and organisational renewal, that it is part of the digital and green transition, and that it can increase its competitiveness and crisis resilience. The state will play a vital role in creating a modern and predictable framework to stimulate entrepreneurial activity. This will ensure that Hungarian entrepreneurs and their companies will be the winners in the years to come.

This report is a great tool to help us assess where we are at the moment and where we want to be in the coming years!



Foreword



Prof. Dr. Balázs Heidrich

Rector, Budapest Business School

Budapest Business School, as the largest business higher education institution in Hungary, contributes to the development of the Hungarian economy and society through education and research. The university pays special attention to entrepreneurship in both education and research. We reached an important milestone in our research efforts when BBS joined the Global Entrepreneurship Monitor (GEM) research community. After a long break, the data regarding Hungarian businesses were included in the world's largest entrepreneurship survey for the second time in 2022–2023.

As we are a university of applied sciences, joining the GEM will not only further strengthen our role in international business research but also provide an excellent opportunity to increase the economic and social impact of our research activities through the broad dissemination of our results. Besides being an excellent source of scientific knowledge on business, the GEM can support policy and informed business decisions.

For the 2022–2023 research cycle, we have expanded the range of topics to include two areas of particular interest.

The inclusion of a block on family businesses gives even greater, appropriate weight to this specific type of business and an opportunity to further deepen our knowledge in this area.

It has long been clear to us at BBS that we, as a university, have a key role to play in preparing young people for entrepreneurship, and last year's research further confirmed the prominent role of entrepreneurship education and training in the development of the ecosystem. This important area for us and for the economy has thus been given even greater prominence in this year's survey. Indeed, the results show that entrepreneurship

education has a measurable impact: there is a reduction in the fear of failure, and people who have been taught entrepreneurship education are more than twice as likely to feel that they have the knowledge and skills to start a business. Hence, improving and expanding entrepreneurial education will contribute to closing the gap between Hungary and the EU average.

Executive summary

Understanding the attitudes of entrepreneurs, how enterprises work and how society perceives entrepreneurship and identifying the factors that help or hinder entrepreneurship are important issues for not only those involved in entrepreneurship but also the whole economy. After all, enterprises create value, both directly and indirectly, which is a necessity for all societies. Many economic, environmental and social problems can be addressed through the successful operation and development of enterprises. An in-depth understanding of the current state of entrepreneurship and the business environment is useful as not only an overview but also an input for policymakers. Since 1999, the Global Entrepreneurship Monitor (GEM), the world's largest entrepreneurship survey, has provided reliable data on entrepreneurial activity and the state of the entrepreneurial ecosystem in the economies participating in the survey.

As of 2020, Budapest Business School has been representing Hungary in the global survey, in which renowned universities take part from all over the world. This is the second year that BBS Budapest LAB - Office for Entrepreneurship has overseen the data collection in Hungary. The survey involved a representative questionnaire sent to 2015 adults aged 18–64 and interviews with 36 experts selected according to strict criteria. The present report summarises the Hungarian results of the research, providing information on the state of the entrepreneurial climate, activity and ecosystem in Hungary and placing it on the international map.

Volatile environment, stable atmosphere

The latest data show that the public's assessment of the business climate is broadly stable. **The majority of Hungarians who have expressed an opinion on this issue consider entrepreneurship to be a desirable, high-status career option.** The global, EU and Central and Eastern European averages for the proportion of people holding this view are almost identical. The perception toward entrepreneurship is more favourable than average among young people and those with up to secondary education.

One in two people still know someone who started a business in the last two years, and almost as many (47.4%) believe that it is easy to start a business in Hungary. There has been no change in the proportion of people who believe that they have the necessary knowledge to start a business – it is still low (36.8%). Hungarians thus rank second last in the European Union in terms of willingness to start a business as perceived by themselves. However, the results show **a strong correlation between entrepreneurship and participation in entrepreneurship education**, with those who already have a business being almost twice as likely as non-entrepreneurs to have participated in entrepreneurship education, although the direction of causality cannot be determined from this research. Participation in entrepreneurship education is positively correlated with the ratings of all characteristics of the entrepreneurial climate: those who have participated in such education know more entrepreneurs, are more confident in their abilities and find it easier to start a business. The results suggest that improving and expanding entrepreneurship education can be an appropriate means of bringing average skill levels in Hungary closer to the EU average.

Presumably due to the COVID-19 pandemic, the Russian-Ukrainian war and other macro-economic events, the proportion of those who see good opportunities to start a business in the next six months has **significantly fallen compared to last year's results (from 36.5% to 27.2%)**. **The number of people who are deterred from starting a business due to the fear of failure has also increased** (43.5% compared to 38.2% last year). Fear of failure is less prevalent among young people, men and those with higher education. Moreover, men are more optimistic than women regarding all aspects of the entrepreneurial climate.

Despite the decrease in the perception of opportunities, the entrepreneurial activity of the Hungarian population has not significantly changed in comparison with the previous year. Currently, 10.7% of the adult population plans to start a business (including self-employment) in the next three years, which is almost the same as that in 2021 (10.4%). In terms of the number of active, early-stage enterprises in operation, the Hungarian figure is rather high by European standards, being the sixth highest among the 17 EU member states and the eighth highest among the 21 European countries. At 6.9%, the share of established enterprises in Hungary is in line with the European average. The proportion of enterprises in Hungary that have ceased to exist is also similar to that of the previous year. The most common reasons given for the cessation of a business were family or personal reasons, the emergence of another job or business opportunity, or the impact of the COVID-19 pandemic.

BBS has long paid special attention to family firms. An additional block of questions in this year's GEM survey provided further information on this important and specialised group. The results show that the majority of enterprises with multiple owners are family enterprises, where family members are typically part of the management team. In

family enterprises, family members account for the majority of employees, while among non-family enterprises and sole proprietorships, the ratio of enterprises employing family members is above 10%.

They are better educated and want to contribute

In the most entrepreneurial age brackets, 35–44 and 45–54, men are more active as entrepreneurs. However, regardless of gender, entrepreneurs tend to be better educated on average than non-entrepreneurs.

For early-stage enterprises, ‘wanting to do something worthwhile’ was the strongest motivator for becoming an entrepreneur (66.9%). For established enterprises, although earning a living predominated (71.8%), the desire to do something worthwhile also appeared as a strong motivator (52.8%). Notably, the motivation to earn a living was significantly higher for early-stage female entrepreneurs than for male ones. In other words, women are more likely to start a business because of the need to earn a living.

Hungarian enterprises tend to be active in the non- or low-tech sectors and their level of innovation activity is, as in the previous year, low. Most early-stage enterprises (78.8%) and established enterprises (91.6%) use only established technologies and processes. The vast majority of entrepreneurs continue to operate in national or local markets, while only one-fifth of both early-stage and mature enterprises are active in foreign markets.

The key role of entrepreneurship education

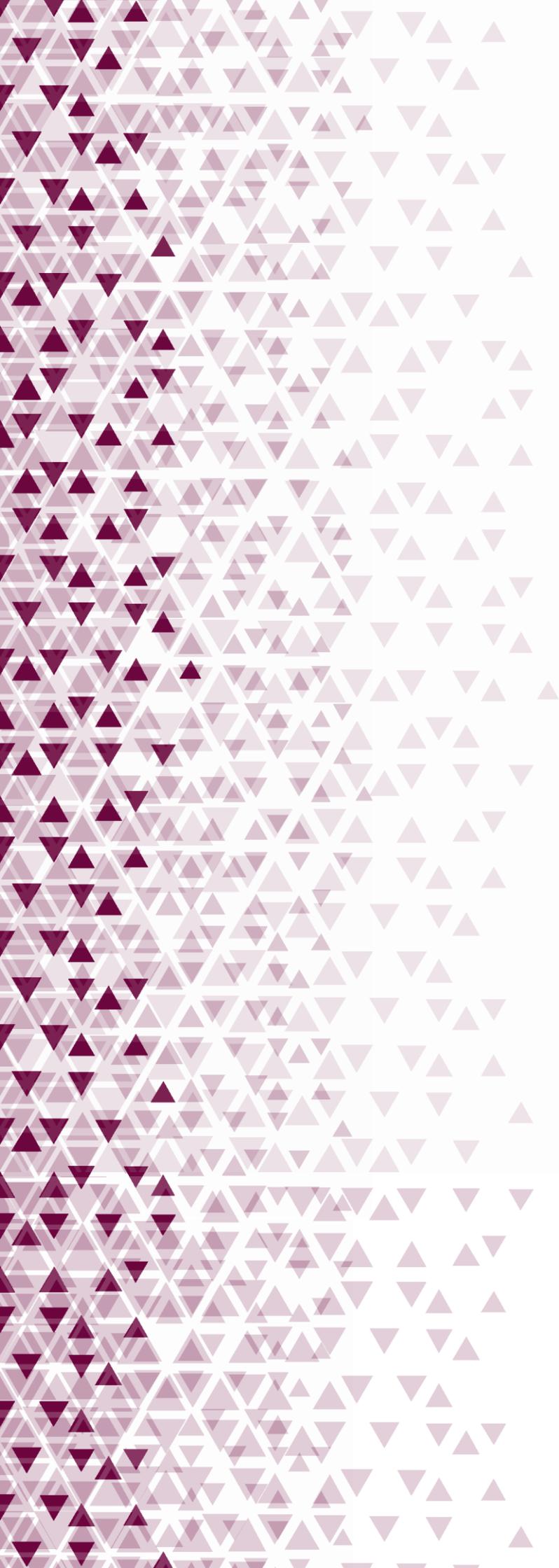
Based on the 2022 expert evaluations, the National Entrepreneurship Context Index (NECI) for Hungary has increased to 4.7 from 4.5 in the previous year. In the national context, the assessment of the (1) physical infrastructure, (2) commercial and professional infrastructure, (3) government policy: taxes and bureaucracy and (4) ease of access to entrepreneurial finance ecosystem elements exceed the satisfactory level of 5. As in the previous year, entrepreneurship education in the public education system received the lowest score. The score for the factor ‘Easy access: free, open, growing markets’, which was 3.5 the previous year, improved to 4.5 in 2022.

At a tenth of a point below the GEM average, Hungary’s NECI is rated medium in global terms. Although Hungary’s business ecosystem is below the highest-scoring countries in the region, Lithuania and Latvia, it is higher than most countries in the region. Ratings for the amount and availability of finance for business and government

policies on taxes and red tape are above both global and regional levels. It lags behind, both globally and regionally, in terms of entrepreneurship education in public schools and ease of access to markets and market growth.

Entrepreneurship education in public schools has the lowest score among the surveyed countries, both globally (3.4) and in Central and Eastern Europe (3.1). Hungary's score of 2.2 is well below both the global and regional averages. The rating of higher education business schools in terms of preparing students to start a business was close to a satisfactory level in 2022, and the Hungarian score was on par with the international average. The quality of entrepreneurship education is a priority due to its spill-over effects, as shown by the relationship between the rating of entrepreneurship education and entrepreneurial activity. A linear relationship exists between the value of early-stage entrepreneurial activity and the level of entrepreneurial training at both levels. High levels of entrepreneurship education are usually associated with higher Total Early-stage Entrepreneurial Activity (TEA) scores, while lower levels are usually associated with lower TEA scores.

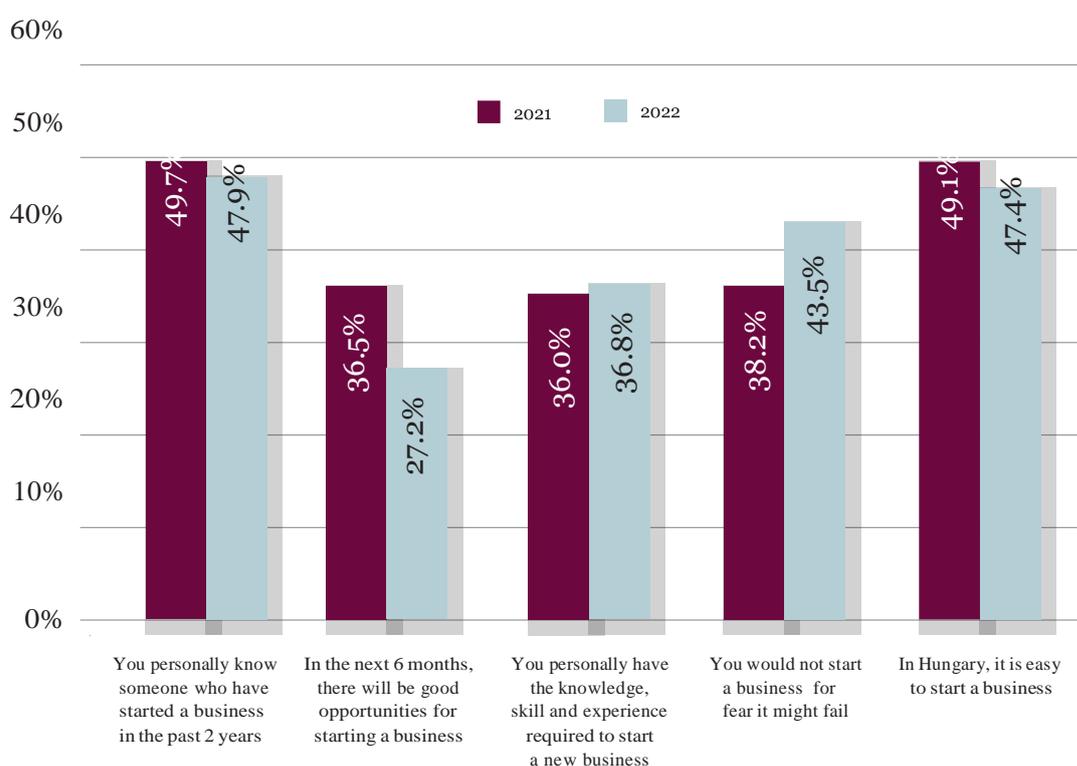




THE GENERAL ENTREPRENEURIAL CLIMATE

An assessment of the entrepreneurial climate in each country and comparisons across countries and over time are possible thanks to the annual data collection of the GEM (Figure 1). As in 2021, one in two (49.7% in 2021 and 47.9% in 2022) adults aged 18 to 64 knows someone who started a business in the last two years. The proportion of people who think it is easy to start a business in Hungary (47.4%) also remained within the margin of error, and last year, just over a third (36.8%) of adults said that they have the knowledge, skills and experience to start a new business.

Figure 1. Entrepreneurial climate in Hungary

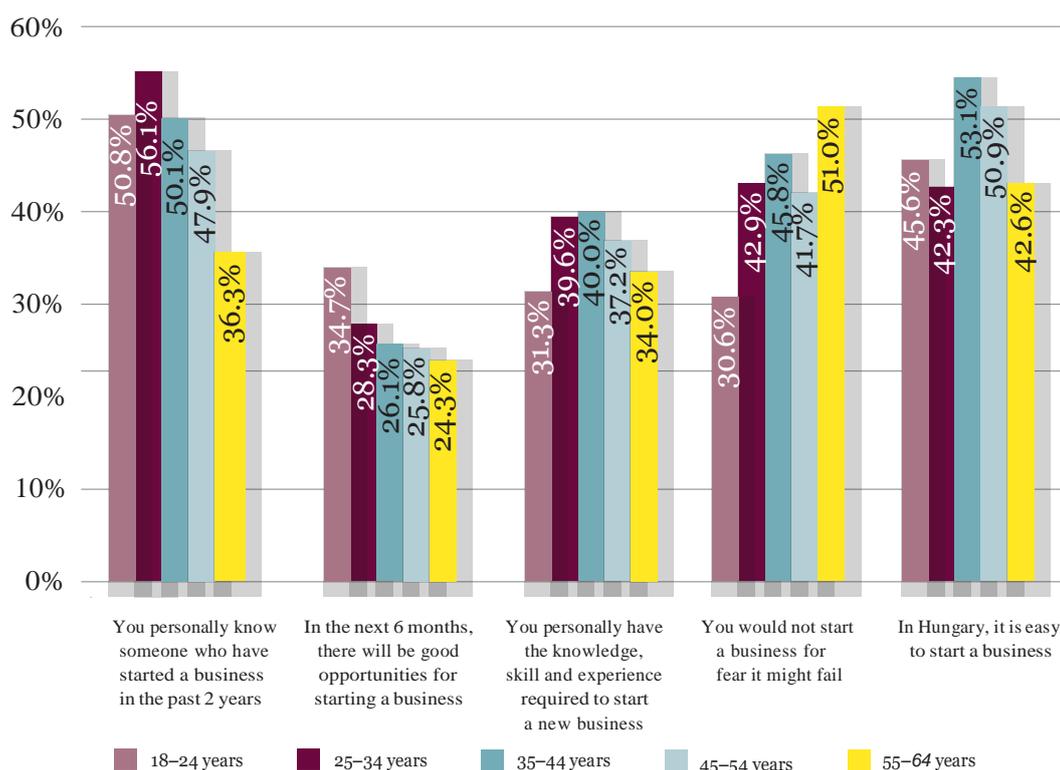


Compared with last year's results, the proportion of respondents who believe excellent opportunities to start a business will emerge in the next six months fell significantly, from 36.5% to 27.2%. The decline may have occurred due to changes in the external environment¹, including the COVID-19 pandemic and its aftermath in 2020, the Russian-Ukrainian war that started in February 2022, soaring energy prices and rising inflation. The proportion of those deterred from starting a business for fear of failure increased from 38.2% in the previous year to 43.5% in the current year. **According to the latest GEM data, Hungarians expect fewer business opportunities to open up in the next six months and are more afraid of failure than they were a year ago.**

The effect of age and gender on the entrepreneurial climate

Different age groups assess the entrepreneurial climate differently (Figure 2). However, these differences are not always statistically significant².

Figure 2. Assessment of the entrepreneurial climate by age



1 The survey was conducted before the changes to the KATA law (Act CXLVII of 2012 on the Fixed-rate Tax of Small Taxpayer Enterprises and Small Company Tax) and residential rent reduction, as well as before the continued rise of inflation.

2 The p-value of the χ^2 tests shows a value of less than 0.05 in three out of the five variables tested. These variables are: (1) You personally know someone who started a business in the last 2 years; (2) Your fear of failure would prevent you from starting a business; (3) It is easy to start a business in Hungary. However, in all three cases, the associated eta values indicate a markedly weak relationship.



Jankó Kállai

Founder, Forever Hands

Forever Hands sells do-it-yourself kits for making hand sculptures – a whole new way of creating and preserving memories. The company, which is only a few years old, has already entered the international market, and two investors saw an opportunity in it when it appeared on the Hungarian version of Shark Tank.

I never doubted that I would become an entrepreneur. Out of adolescent stupidity, I decided to move out of my parents' house at the age of 17. To make the necessary money, I became a party organiser. When the owner of the venue paid me at the end of my first event, I had the urge to start my own project to earn money. Then, in my first year at university, I had to write an essay in a course about where I saw myself in five years' time. My essay consisted of one sentence: I'll be a businessperson. I worked for several companies before starting my own. But what I found most interesting about working for others was thinking about how I would run that business. The challenge of whether I could run a successful business was part of the appeal for me. Finally, I decided it was time to try out some of my ideas when we were locked up because of the COVID-19 pandemic.

I wasn't afraid of failure. I had nothing to lose. Now that I'm responsible for the brand, the employees and my investors, I sometimes wonder if it would be easier if I didn't have to do all that 'math'. But overcoming fear is an attractive challenge in itself. So is when things don't go as planned. It drives me to prove that I can do it. In exchange for more responsibility, I have more freedom to decide how I want to live my life, how I want to spend my time, or even what and how much risk I am comfortable with or motivated by. For example, the weight of a huge financial investment that helps many start-ups grow would probably overbear me. Instead, I have chosen to ask for predictable financial support as well as a tremendous amount of mentoring and knowledge from my investors. This way the growth of the business is more in line with my personality.

The age groups in the middle are the most likely to think that it is easy to start a business in Hungary.

Younger people are more likely to know entrepreneurs and less likely to be afraid of failure and see more opportunities, while the people in the 35–44 and 45–54 age groups are the most likely to think that it is easy to start a business in Hungary.

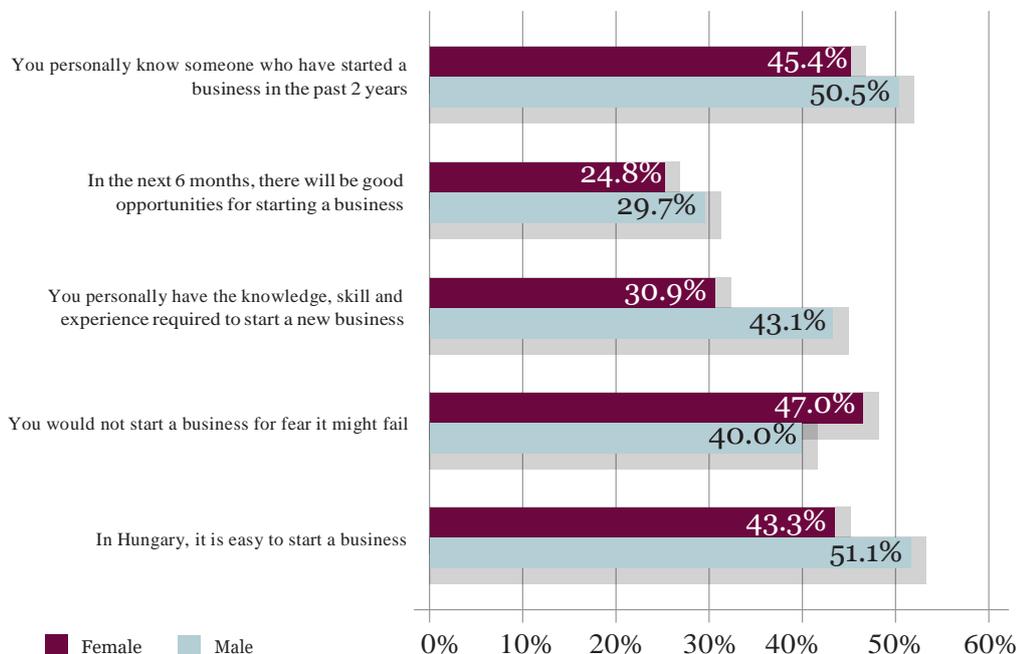
Those aged 25 to 34 are the most likely to know someone who started a business in the past two years (56.1%), but the proportion is higher than average in all age groups under 45.

The youngest age group, aged 18–24, is the most optimistic (34.7%) about the prospects of starting a business in the next six months, with a steady decline in optimism as age increases. The 25–54 age group has higher than average levels of knowledge, skills and experience needed to start a business.

Fear of failure considerably varies across the age groups - the least likely to be deterred by the prospect of failure are those aged 18–24 (30.6%), but people aged 25–34 and 45–54 (42.9% and 41.7%, respectively) are also less deterred than the average. Half of those aged 35–44 and 45–54 think it is easy to start a business in Hungary, whereas both younger and older respondents agree to this notion to a lesser degree.

Men are consistently more optimistic than women on all elements of the entrepreneurial climate surveyed³. They are more likely to know entrepreneurs, perceive the chances of starting a business as more favourable and be more confident in their knowledge of entrepreneurship, while fear of failure has less influence on their propensity to start a business (Figure 3).

Figure 3. Assessment of the entrepreneurial climate by gender



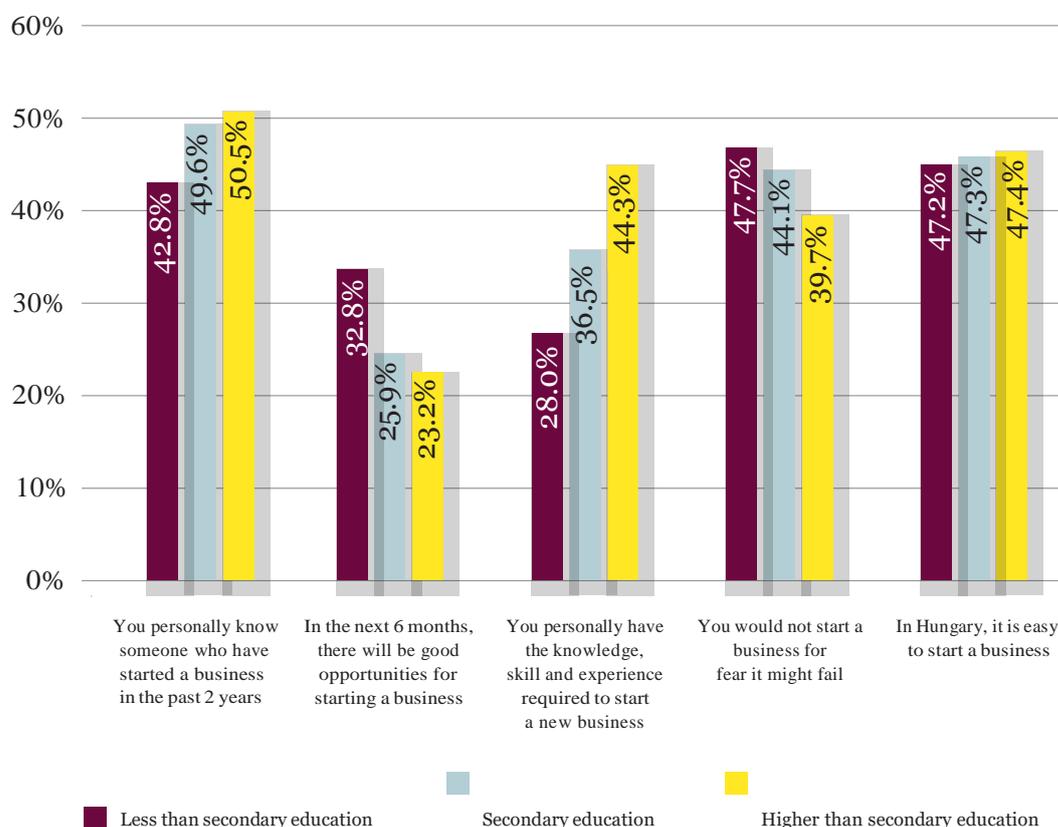
3 The p-value of the χ^2 tests is less than 0.05 for all five variables tested, but the eta values for the closeness of the relationship strongly suggest a weak relationship in this respect.

The effect of education on the perception of the entrepreneurial climate

We examined whether educational attainment affects perceptions of the entrepreneurial climate (Figure 4). Our results show that people with higher educational attainment are more likely to know people who are starting a new business. While this proportion is 50.5% for those having education above the secondary level, it is only 32.8% for those with primary education. Education also has positive correlations with knowledge, skills, experience and fear of failure associated with starting a business. **The more educated one is, the more confident one feels about one's knowledge, skills and experience and the less deterred one feels from starting a business, due to the possibility of failure.**

Yet, higher educational attainment is not associated with higher levels of opportunity perception. While a third (32.8%) of those with a primary or vocational school education think good business opportunities will emerge in the next six months, a quarter (25.9% and 23.2%, respectively) of those with a secondary or tertiary education share this opinion. In all four cases, there is a statistically plausible, albeit weak, relationship. Perceptions of the difficulty of starting a business are not affected by education.

Figure 4. Assessment of entrepreneurial climate by educational attainment





Gigi Timár

Budapest LAB - Office for Entrepreneurship Development

Head of the Office at Budapest Business School

Entrepreneurial skills in a broad sense are among the key competencies defined by the European Union. Taking initiative, identifying opportunities, and creative problem solving or the ability to deal with failure are not beneficial for not just entrepreneurs or those planning to start a business. A study on employers' expectations shows that these skills also increase the chances of success for employees.

However, according to recent data, just over a third of Hungarians believe that they have the skills to start a business. Internationally, this puts us at the bottom of the list. Moreover, among the components of a complex indicator measuring the state of the entrepreneurial ecosystem, entrepreneurship education in public education has again been ranked as the weakest area this year. The extent to which business higher education prepares people to start a business is, let's say, acceptable – a dubious glory – albeit this year, it only came close to satisfactory, which occupies the middle section of the scale.

Developing entrepreneurial skills with a precise focus and well-chosen methodologies is effective at all levels of education. Based on international examples, it can be particularly effective in laying the foundations for entrepreneurship at an early age. However, our experience in Hungary today is that much of what is happening is taking place in higher education, with some excellent exceptions.

Therefore, as a higher education institution, not only in line with our commitment to students – i.e., preparing them for success in the labour market – but also because of our recognition of and commitment to our wider societal impact, we believe it is important to devote considerable energy and innovation capacity to this area. The development of broad and diverse partnerships is essential, alongside ongoing internal development, in response to changing needs. It is through such partnerships that real impact can be achieved.

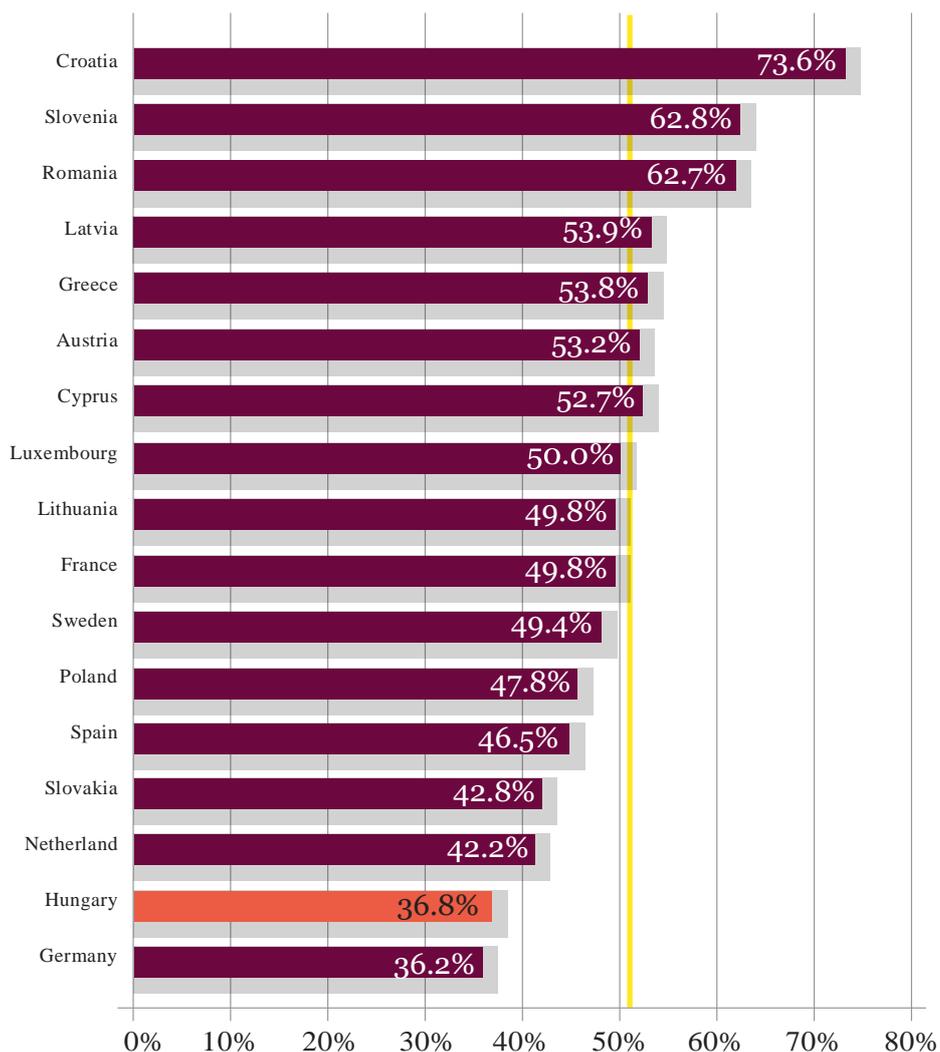
Entrepreneurship education

Entrepreneurship education is one of the main research areas of BBS Budapest LAB. Therefore, the relationship between entrepreneurship education and the factors of the entrepreneurial climate studied by the GEM and its relationship to business creation will be analysed in more detail below.

The Hungarian self-assessment of knowledge related to starting a business is among the lowest in the world (36.8%). Among the European countries participating in the GEM, only Germany (36.2%) has a lower proportion of people who consider themselves sufficiently knowledgeable, skilled and experienced to start a business. Both figures are significantly lower than the average for the GEM countries (51.7%) or EU member states (52.2%). In contrast, more than half of the population (55.2%) in the Central and Eastern European region, with similar socio-cultural and historical backgrounds, claims to have the knowledge needed to start a business (Figure 5).

The Hungarian self-assessment of knowledge related to starting a business is among the lowest in the world.

Figure 5. International comparison - Ratio of people aged 18-64 with sufficient knowledge, skills and experience to start a business

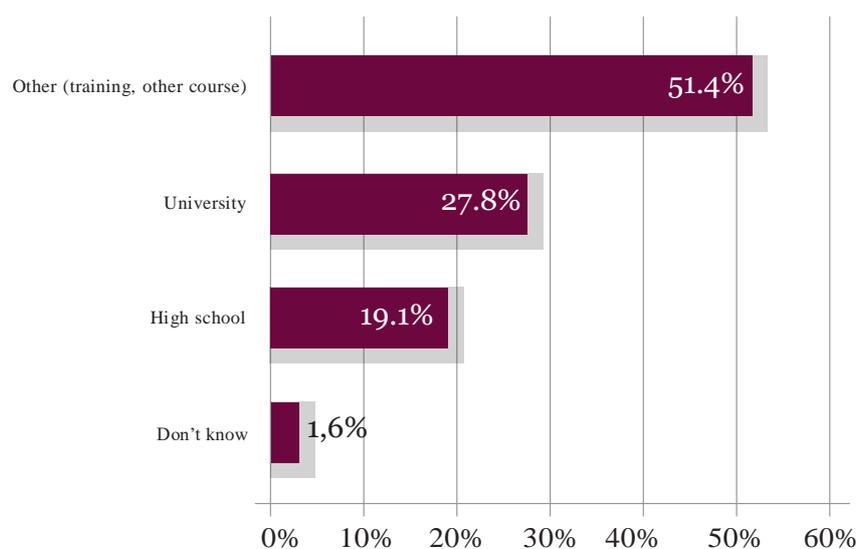


Among the EU Member States, Croatia, Slovenia and Romania have the highest proportions of people who believe that they have the necessary skills to start a business (73.6%, 62.8% and 62.7%, respectively). Meanwhile, in the old EU Member States, except the Netherlands and the above example of Germany, around half of the population usually gave the same answer.

The GEM 2022 team in Hungary added more questions on entrepreneurship education to the core questionnaire to better understand the situation in Hungary and explain the results.

Our results show that 18.1% of the adult population aged 18–64 in Hungary had received some form of business education in the course of their life, most of which (51.4%) was outside the school system, through apprenticeships or other forms of training. More than a quarter (27.8%) of the population, who had received business education at university, and just under a fifth (19.1%), who had received secondary business education, had been taught how to set up a business (Figure 6).

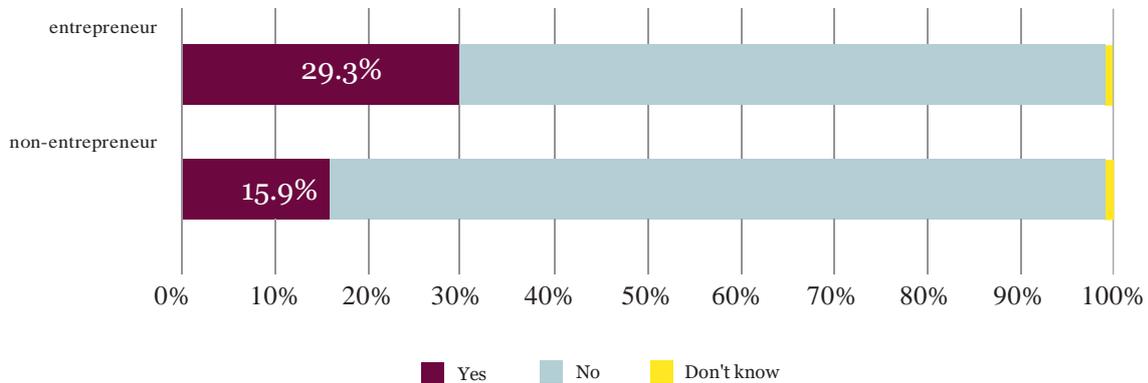
Figure 6. The level of entrepreneurship education as a percentage of the population aged 18-64 with entrepreneurship education



There is a strong correlation between entrepreneurship and participation in entrepreneurship education.

Almost 70% of those who have become entrepreneurs run their businesses without ever having participated in any form of business education, which is likely to harm their operational efficiency and competitiveness. **A strong correlation exists between entrepreneurship and participation in entrepreneurship education, with those who already have a business being almost twice as likely as non-entrepreneurs to have participated in entrepreneurship education** (Figure 7). However, the direction of the causal relationship cannot be determined. It is possible that those with genuine entrepreneurial intentions consciously seek to acquire the necessary skills to achieve their goals, but this cannot be demonstrated by the data.

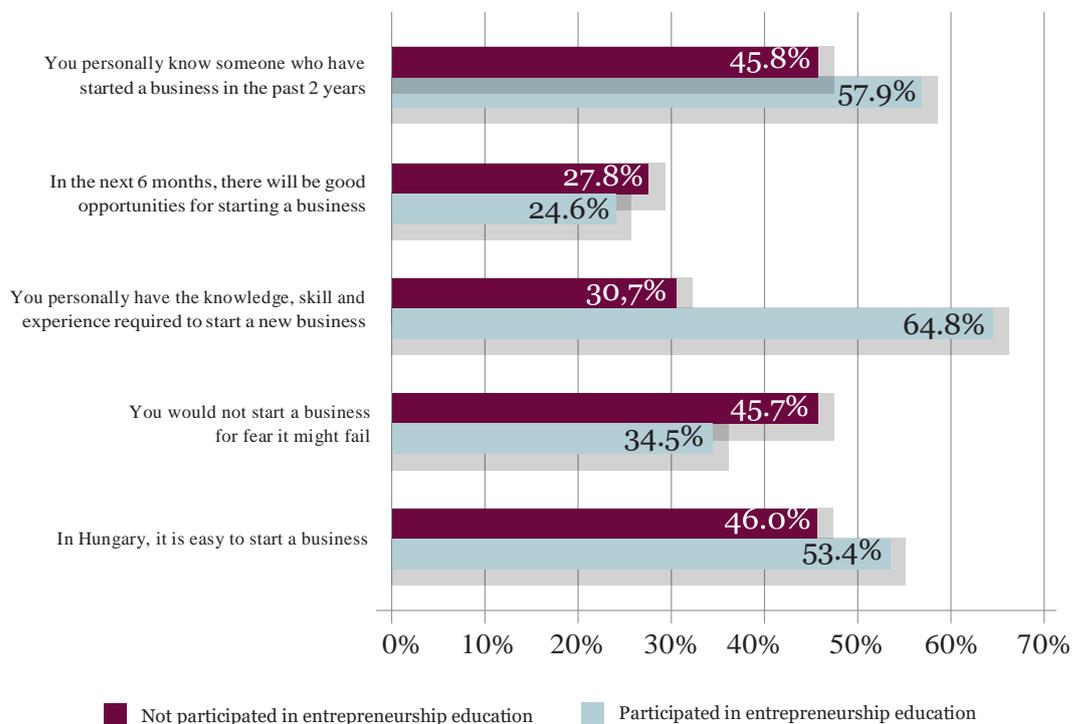
Figure 7. Percentage of entrepreneurs and non-entrepreneurs who have received entrepreneurship education



The two series can be summed to 100% per series

A positive correlation exists between the rating of entrepreneurship education and all the characteristics of the business climate (Figure 8). However, only three of the five correlations are statistically significant⁴.

Figure 8. Assessment of the entrepreneurial climate according to participation in entrepreneurship education



4 The p value of the χ^2 tests is less than 0.05 in the following three cases:
 · You personally know someone who started a business in the past 2 years;
 · You have the knowledge, skills and experience needed to start a new business;
 · Fear of failure would prevent you from starting a business.

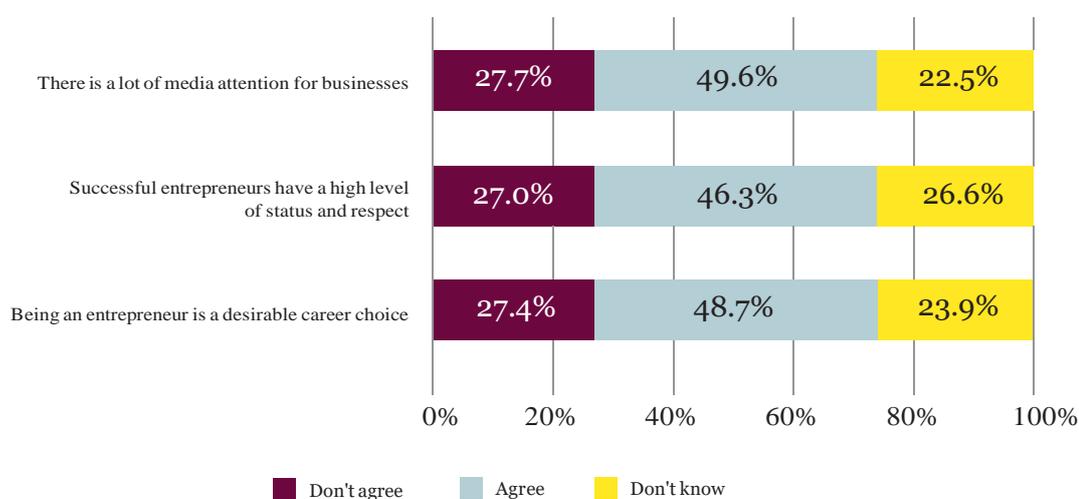
However, the eta values for the closeness of the relationship are weak for knowledge, skills and experience needed to start a business and very weak for the other two variables.

Those who have previously participated in entrepreneurship education are slightly more likely to know someone who started a business in the past two years and more than twice as likely to say they have the knowledge, skills and experience to start a business. This suggests that developing and **expanding entrepreneurship education could be an appropriate means of bringing the Hungarian population's self-assessed average skills and knowledge up to the EU level.** Entrepreneurship education and fear of failure seem to have an inverse relationship: while just over a third (34.5%) of those who received entrepreneurship education were deterred from starting a business by fear of failure, almost half (45.7%) of those who did not receive entrepreneurship education.

The attractiveness of entrepreneurship

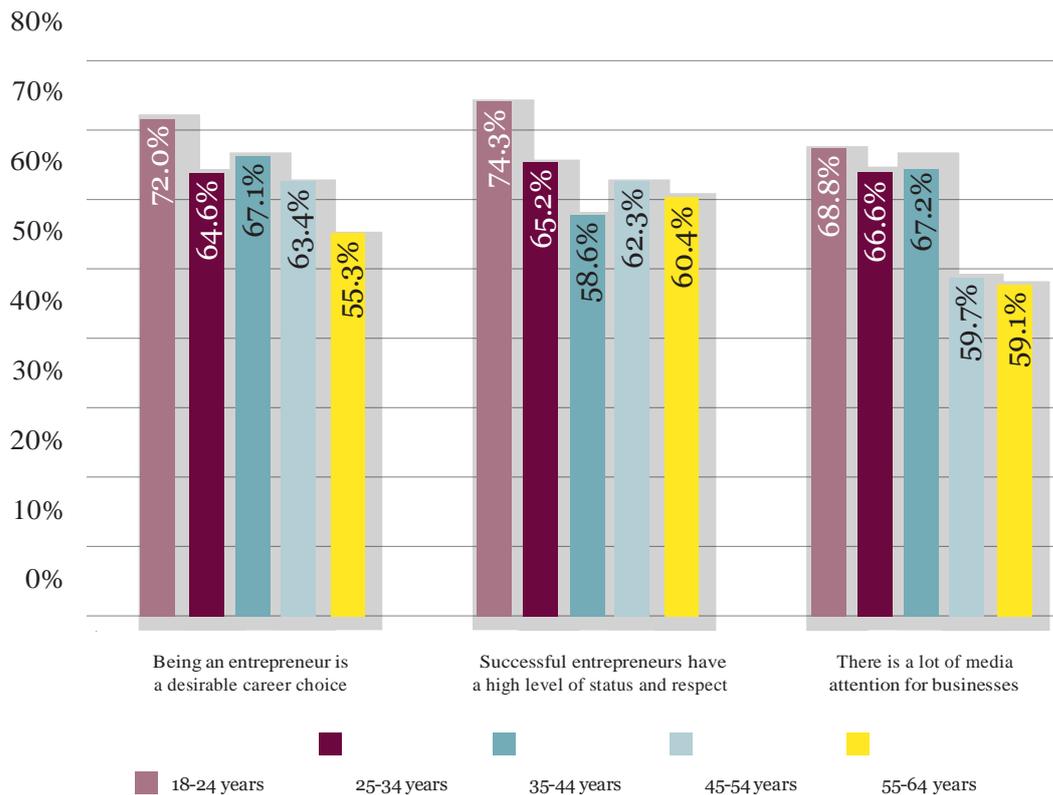
The general social perception of entrepreneurs may influence the propensity to start a business. This issue is explored in the GEM through three questions (Figure 9) that look at the following: (1) media coverage of entrepreneurs, (2) the social status of successful entrepreneurs and (3) entrepreneurship as a desirable career option. Almost half of the respondents agree with all three statements, i.e., entrepreneurship receives a lot of media attention (49.6%), successful entrepreneurs have a high status (46.3%) and entrepreneurship is a desirable career option in Hungary (48.7%). Notably, the percentage of those who disagree with these statements is in a much narrower range – between 27.0% and 27.7%. It is striking though, that as in the 2021 survey, a sizeable proportion of the economically active population (around a quarter per question) does not have an opinion on this issue.

Figure 9. Evaluation of entrepreneurship



In the case of Hungarian respondents, the perceptions of entrepreneurship vary by age⁵: for all three factors, the higher is the age, the lower are the scores (Figure 10). In other words, the youngest age group, 18–24, is the most positive about entrepreneurship, while the oldest age group, 55–64, is the most negative. In the intermediate age groups, we see ratings that fall in between, but not necessarily in a linear decline. This can be explained by the emergence of a market economy in Hungary and the different experiences associated with its development, which varies according to the age of the population⁶.

Figure 10. Evaluation of entrepreneurship by age



However, the picture is less consistent when we look at educational attainment levels.⁷ The results show that entrepreneurship is a less desirable career option for those with higher education: over half (57.3%) of those who have more than a secondary education, 68.1% of those with a secondary school leaving exam and 67.4% of those with less than a secondary education consider entrepreneurship a desirable option (Figure 11). According to the GEM report on global data for 2022–23, the trend observed in Hungary is also characteristic of advanced market economies. The secure income earned as an

5 The p-value of the χ^2 tests is less than 0.05 for all three variables tested, but the eta values for the closeness of the relationship are also strongly suggestive of a weak relationship.

6 The p-value of the χ^2 tests takes a value of less than 0.05 for only one of the three variables, but the eta values for the closeness of the relationship show an extremely weak relationship in this case as well.

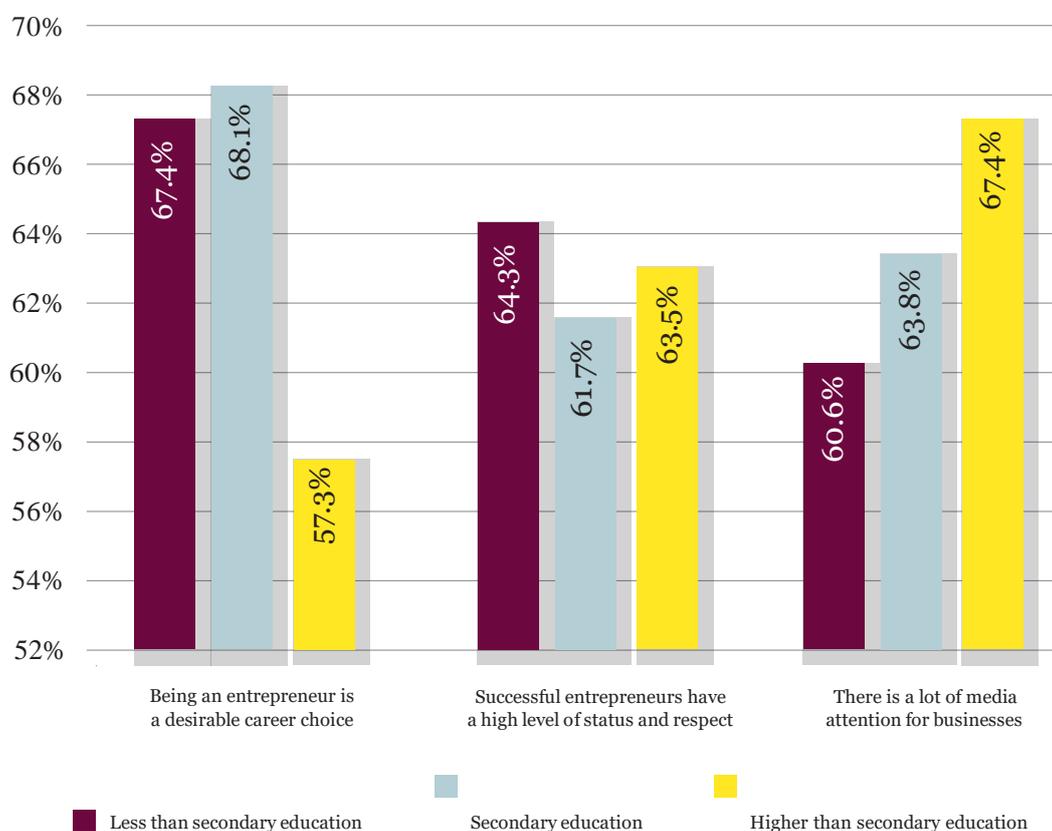
7 Several studies have examined the media coverage and context of entrepreneurs after the regime change. Recent evidence suggests that the image of entrepreneurs in the media is changing and that the previous, often negative, image of entrepreneurs is no longer sustainable (see: Virág E. A., & Szepesi

eprezentációja a főáramú online médiában Magyarországon. Szociológiai szemle, 32(3), 24–56.
<https://doi.org/10.51624/SzocSzemle.2022.3.2>

Entrepreneurship is a less desirable career choice for those with a higher education.

employee with higher education is more attractive to many than becoming an entrepreneur. In terms of respect for entrepreneurs and media attention, there appears to be a slight difference in the perceptions of people with various levels of education, but this difference is not significant.

Figure 11. Evaluation of entrepreneurship according to educational attainment



The social perception of entrepreneurs in Hungary is somewhat below the international average.

Among those who have formed an opinion about media attention, the rating varies widely across EU countries (Figure 12); while only 38.0% of the population in Poland thinks that entrepreneurs receive a lot of media attention, 85.2% of the Slovenian population think the same. The Hungarian figure of 64.1% is close to the global, EU and CEE averages (64.2%, 63.3% and 64.3%, respectively).



Veronika Pistyur

Managing Director, Bridge Budapest /

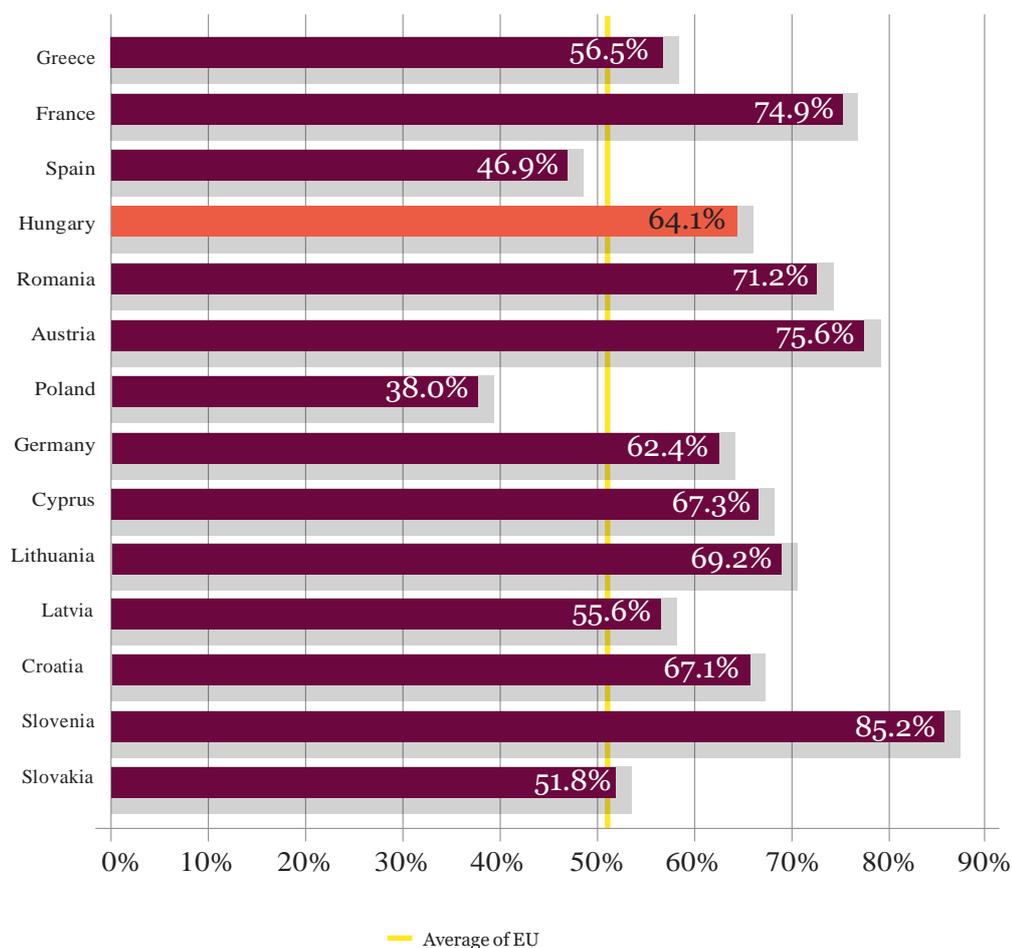
Partner, Oktogon Ventures

Bridge Budapest has a decade-long history of building a business ecosystem with a long-term, value-driven commitment. They connect and inspire businesses, managers and children to work together, as well as educational initiatives that prepare people to work in the 21st century.

I've been an entrepreneur since I started working – first by necessity, then by becoming accustomed to it, learning it, gaining confidence, pride and commitment.

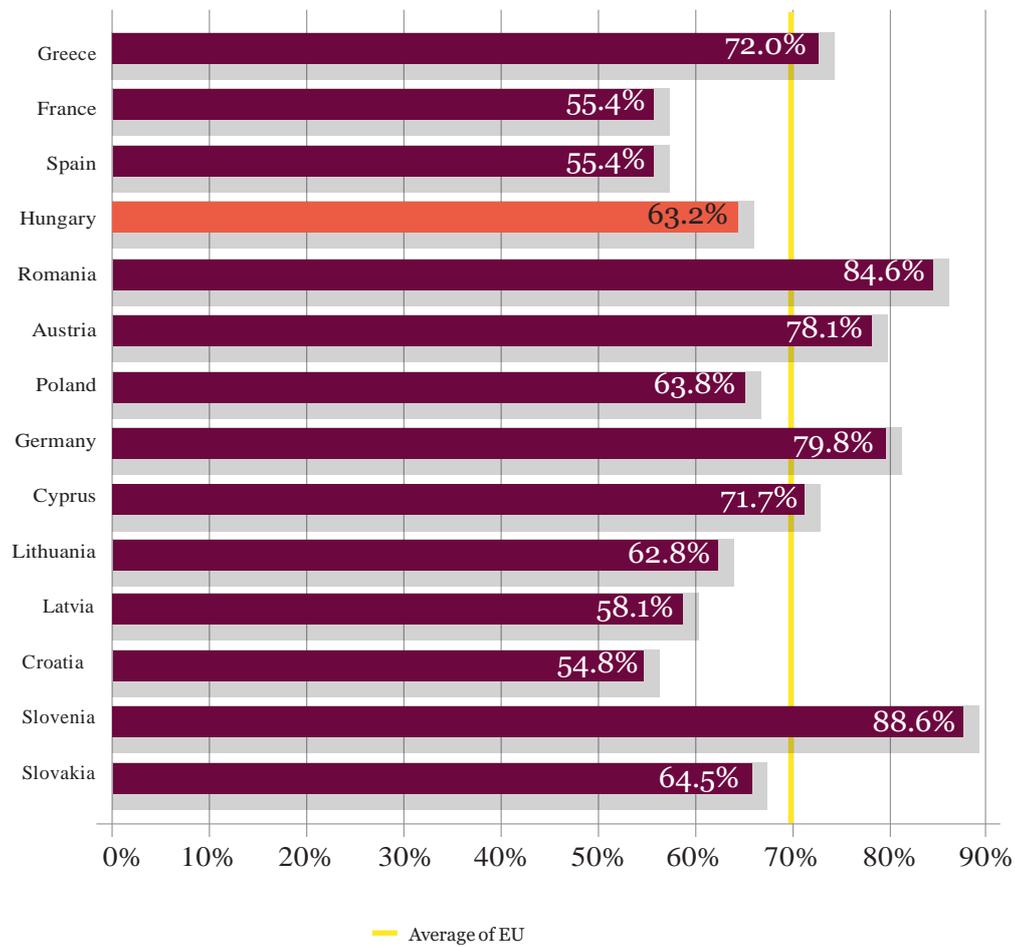
Today, they call me a social entrepreneur, for whom business is not an end in itself, but a means to make a difference, among young people too. The more people the earlier can experience what it means to develop solutions for the problems in their environment and know that it is up to them to influence their future. The more they see the attraction of this way of life, they become entrepreneurs of their own free will, not out of necessity. This also requires young people to experience that success in Hungary today is not only about connections, but also about knowledge and achievement. This contributes to the self-confidence and belief that is essential for an entrepreneur, and indeed for any businessperson who believes that business is about value creation, both in terms of sustainability and long-term impact. At Bridge, we work for a business ecosystem that can contribute to a world of meaningful work. Our vision is of a world where corporate social responsibility is not only important for a minority, but the norm for business managers, where managers have a conscious, long-term strategy for their legacy. Such a business community is more likeable and more competitive: it builds companies that our children will want to work for in the future, and it does so by making choices that are not embarrassing even to them.

Figure 12. Evaluating entrepreneurship, international comparison - there is lots of media attention for entrepreneurship



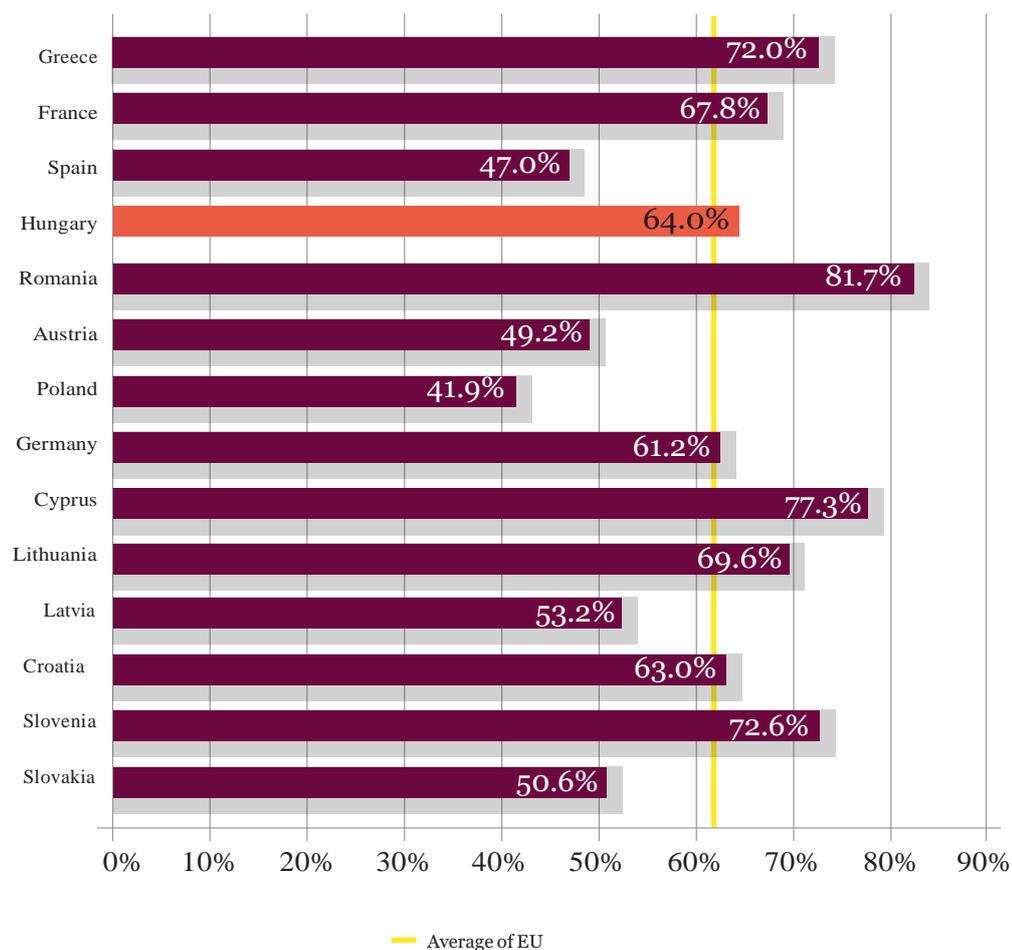
The social perception of successful entrepreneurs varies over a much smaller range (Figure 13). While the lowest values are found in Croatia, France and Spain (54.8%, 55.4% and 55.4%, respectively), the highest value in this case is also found in Slovenia (88.6%). The responses of the V4 GEM countries are almost identical; 63.2% of the population in Hungary, 63.8% in Poland and 64.5% in Slovakia believe that successful entrepreneurs are respected. This is slightly below both the global GEM average (68.9%) and the EU average (68.1%).

Figure 13. Evaluating entrepreneurship, international comparison - people attach high status to successful entrepreneurs



The assessment of entrepreneurship as a career option received extreme ratings (similar to the assessment of media coverage) (Figure 14), with the lowest rating also found in Poland (41.9%) and the highest in Romania (81.7%). The global GEM, EU and CEE averages (63.1%, 62.2% and 63.5%, respectively) are almost identical to the assessment of the Hungarian population (64.0%).

Figure 14. Evaluating entrepreneurship, international comparison - people consider starting business as good career choice



Perceptions of entrepreneurship in Hungary are close to the world and European averages, with almost one in two people having a positive view of entrepreneurship, although a strikingly high number of people have no opinion on the matter. Positive perceptions are above average among young people and those having a secondary or lower level of education.

CHARACTERISTICS OF ENTREPRENEURS

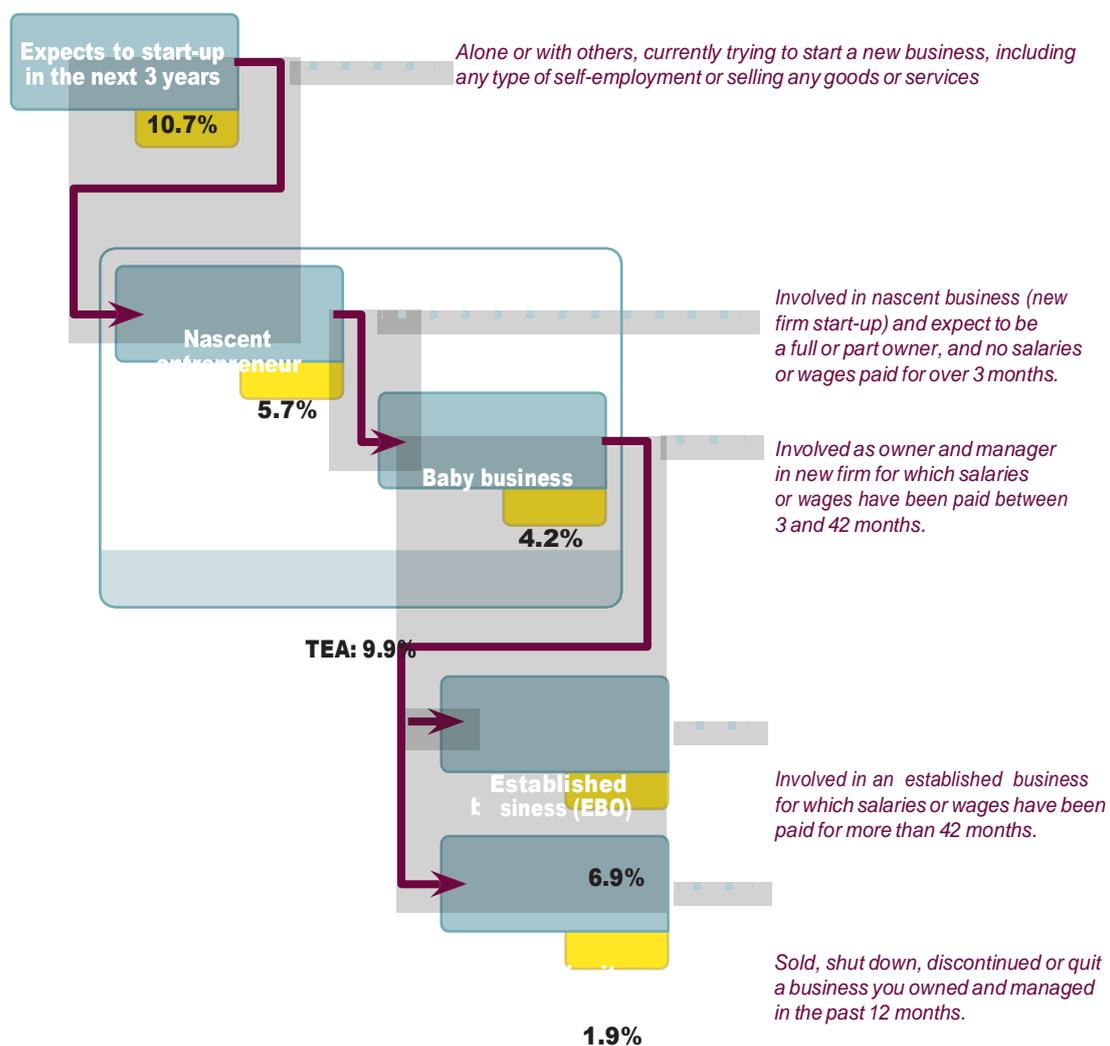
The data from the GEM survey present an opportunity to estimate the ratio of entrepreneurial activity among the population at different stages, compare it at the international level and analyse the trends over time.

Based on the 2022 survey, the entrepreneurial activity of the Hungarian population has not changed significantly in comparison with the previous year (Figure 15). Currently, 10.7% of the adult population has plans to start a business (including self-employment) in the next three years, which is virtually unchanged from 2021, when the percentage was 10.4%. The share of total early-stage entrepreneurial activity (TEA) is similarly stable, with a minimal increase from 9.8% in 2021 to 9.9% in 2022. Within this group, the share of so-called nascent enterprises, which have been paying wages for up to three months, rose from 5.3% to 5.7%, while the share of new enterprises, which have been paying wages for at least three months but not more than 3.5 years, fell from 4.5% to 4.2%.

THE GEM METHODOLOGY distinguishes three phases of the entrepreneurial process. It considers nascent enterprises as those initiatives or existing enterprises where a business is actively being set up, but wages and salaries have been paid for only up to three months. The activities of new enterprises are more established, and they have been paying wages and salaries for a minimum of 3 and a maximum of 42 months (3.5 years). In GEM terminology, a longer period of operation with more than 42 months (3.5 years) of wage and salary payments is the criterion for an established enterprise.

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

Figure 15. Entrepreneurial activity indicators in Hungary

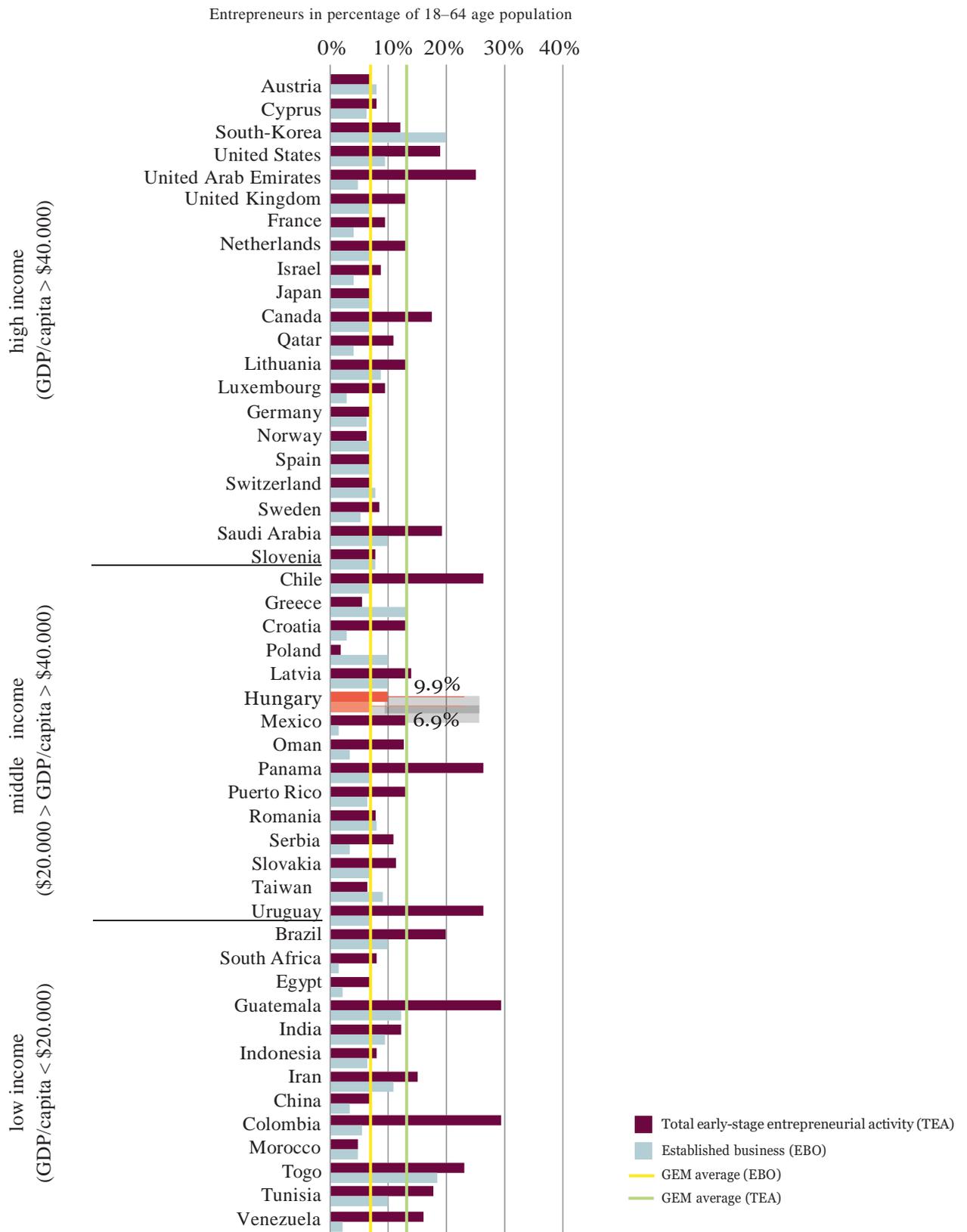


In 2021, 2.1% of the adult population said they had sold, ceased, closed down or retired from a business they owned and managed in the past year, compared to the 1.9% in 2022, indicating relative stability in the ratio of people who suspended their business in the 12 months prior to the survey.

However, the ratio of those who owned and managed a business for three and a half years or more fell from 8.4% in 2021 to 6.9% in 2022.

Based on the above global comparison, Hungary ranks at the top of the last third block of the middle-income GEM countries for early-stage enterprises and at the top of the middle block for established enterprises (Figure 16). Notably, **while the ratio of early-stage enterprises (9.9%) is below the international GEM average (12.9%), the ratio of established enterprises is essentially the same: 6.9% in Hungary compared to the GEM average of 7.0%.**

Figure 16. International comparison of total early-stage entrepreneurial activity and established business activity



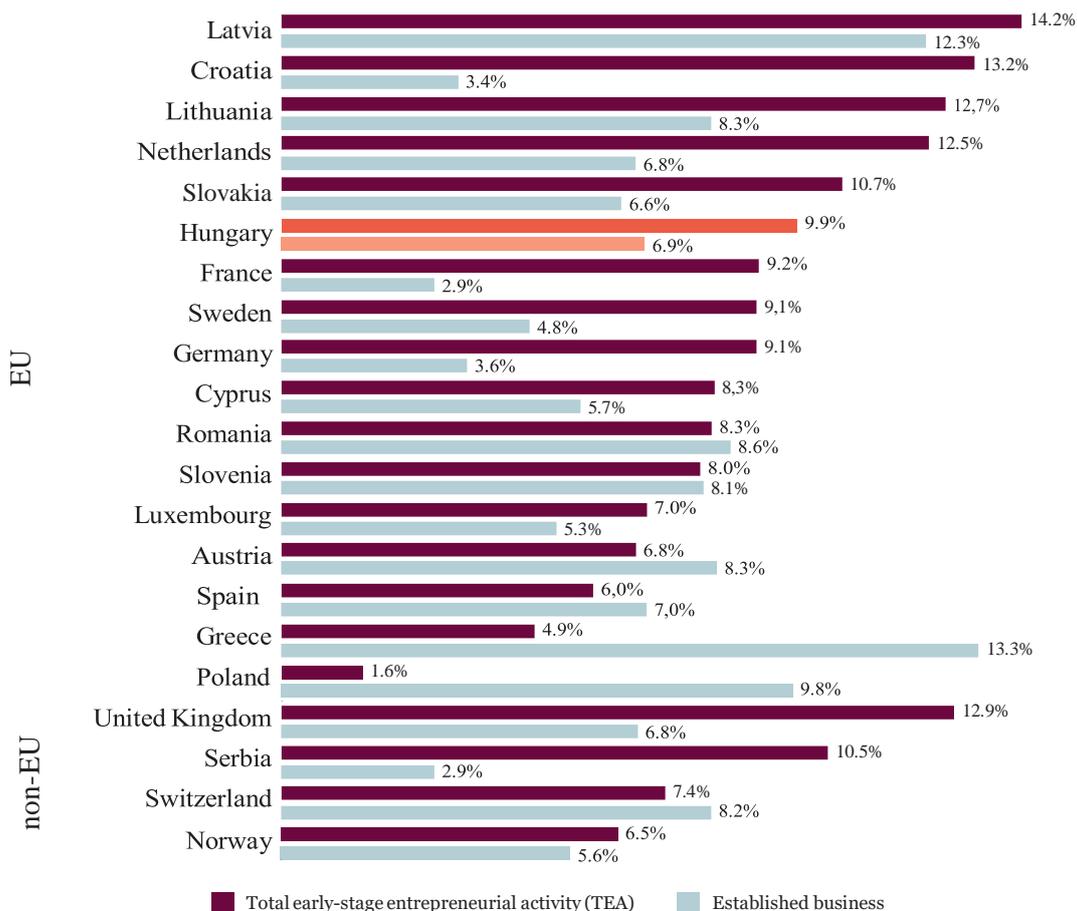
Countries are grouped in the ascending order of early-stage entrepreneurial activity (TEA) and economic development (GDP per capita)

Entrepreneurial activity in high-income countries is slightly below the GEM average.

Entrepreneurial activity in high-income countries is slightly below the GEM average. Early-stage entrepreneurial activity averages 12.9% for all GEM countries, with both low-income (12.6%) and middle-income (16.4%) countries averaging higher than high-income countries (12.2%). However, with two exceptions (Brazil and Guatemala), established entrepreneurial activity in middle-income countries is extremely low, averaging only 4.9%, compared to the GEM average of 7.0%.

In Europe, early-stage entrepreneurial activity fluctuates within a much narrower range. This may be explained by a more stable economic environment and the availability of a large number of jobs with higher added value and predictable livelihoods (Figure 17). In this comparison, the Hungarian value can be considered rather high, being the sixth highest among the 17 EU member states and the eighth highest among the 21 European CEECs. By contrast, the domestic share of established enterprises (6.9%) is broadly in line with, though slightly lower than, the EU average (7.2%), but it is the same as the European

Figure 17. Proportion of total early-stage entrepreneurial activity and established business activity in international comparison - Europe



Entrepreneurs in percentage of 18-64 age population

The countries are grouped in the ascending order of early-stage entrepreneurial activity (TEA) and EU membership.

average (6.9%), which includes the UK, Serbia, Switzerland and Norway, besides the EU member states.

The entrepreneurial structure, i.e., the ratio of early-stage enterprises (TEAs) and established businesses according to GEM terminology, remained similar to that in the previous year. Domestic results did not significantly differ from the global average or the average of the European countries participating in the GEM.

Family enterprises – A special group

Family enterprises are the backbone of the economy and their role in employment and added value is undisputed. Given the importance of family-owned enterprises, the GEM has created a centrally developed family enterprise block, and the GEM team in Hungary used it in its 2022 data collection. The methodology used to classify family enterprises differs from that used in the previous representative business survey, which provides an opportunity to typify and analyse family and non-family enterprises from a different perspective.

OUR METHOD OF ANALYSIS

applied to classify family businesses distinguishes six types of businesses, based on the involvement of the family in the management or ownership of the business, besides the ownership of the business by the respondent. **A business is considered to be in single ownership** if the respondent is the owner and manager of the business as a whole. We consider a business to be **a co-managed family business** if the respondent involves his/her family in the management, although the business is in the ownership of one person.

A co-owned and co-managed family business is defined as a business whose majority is owned by the respondent's family and in the management of which the family is involved. However, in **a co-owned family business**, the majority of the ownership is in the family, but the family members are not involved in the management. The enterprise is considered to be under family management when the majority owner of the enterprise is a non-family member and the respondent is only a minority owner, but the family is involved in the management. The enterprise is considered **a non-family business** if the majority owner is not a family member, and the family is not involved at all in the management.



Zsuzsanna Vanczer

Vivaco Ltd., founder

Founded 25 years ago, Vivaco is a family-owned company that provides quality building products and services to the building trade and investors, as well as supporting training for professionals.

I introduced my children to the company from an early age. They learned the values and developed a bond with the company by spending time here during their school holidays. Later, I brought them along for summer jobs, which helped them bond with their colleagues. Virág, my daughter, joined us at the age of 20 while she was still at university. She was needed when the position of sales manager became vacant. I really wanted her to learn about buying and selling. She already had an excellent command of English and Italian, and she was also very receptive to technical things and had a good knowledge of foreign manufacturers because I had taken her with me to several meetings since she was 17. Today, she is the company's sales manager, and thanks to her respect for her colleagues, her humility at work and her many years of experience, she took the position not as the boss's daughter, but as an asset in her own right.

Succession is not yet an issue, and we are both in agreement that the transfer of the business could be due in about ten years' time. However, the process is gradually underway, not only in terms of management, but also in terms of the transfer of ownership. I believe that the commitment of the family members who work in the company will be even stronger if they have a sense of ownership in the business, and the transfer of ownership is a way to express my confidence in them. My daughter was given 10% when she had been with the company for five years, and my son and I agreed to the same. My plan is to have a gradual transfer of ownership to my children by the time of my retirement. I think it is important that the company belongs to those who work in it.

Working with my family gives me a sense of security, and I find that the confidence of our partners and even the banks in the company increases when they see the presence of the next generation and the certainty of succession.

Table 1. Ratio of the different types of enterprises among total early-stage entrepreneurial activity and established businesses

Number of owners	Name	Characteristics	Total early-stage Entrepreneurial Activity (TEA)	Established business (EB)	Total	Majority of employees are family members of the entrepreneur or his/her relatives
Individual owner	Single ownership	Owned and managed by one person	57.5%	60.8%	58.9%	11.4%
	Co-managed family business	Owned by one person, and co-managed by the family	13.5%	14.0%	13.7%	63.3%
More than one owners	Non-family business	Independent ownership and management	12.0%	7.0%	9.9%	12.5%
	Family management	Independent ownership and family management	1.5%	0.0%	0.9%	0.0%
	Co-owned family business	Co-owned by the family but independent management	0.5%	2.8%	1.5%	25.0%
	Co-owned and co-managed family business	Family ownership and management	15.0%	15.4%	15.2%	79.4%

The data in the table can be summed up to 100% per column for the first three columns containing values.

Based on the classification, the highest proportion of businesses are in single ownership, which is in line with the data provided by the Hungarian Central Statistical Office.

Our results (see Table 1) show that among the four possible types of family enterprises, the share of family-managed and co-owned family enterprises is negligible. At the same time, the proportions of enterprises where family members are involved in management though the enterprise is in single ownership and where the family is the majority owner besides being involved in the management are significant – 13.7% and 15.2%, respectively. The application of these models may suggest that the operation of enterprises is not necessarily based on the decisions of one person, the founder, which may facilitate or even indicate the formalisation of operations.

In 2019, BBS Budapest LAB was the first to provide an estimate of the ratio of family businesses to domestic enterprises, which was validated in two further surveys. The latest results show that the ratio of family enterprises among enterprises with 3 to 99 employees is 67.4%⁸.

No significant difference was observed between the proportions of early-stage and established enterprises among family enterprises.

The analysis reviewed what proportion of enterprise employees were mainly relatives or family members. Interestingly, in more than a tenth of both non-family enterprises and enterprises in single ownership (12.5% and 11.4%, respectively), a family link exists between the entrepreneur and the employees, while this proportion rises to almost two-thirds (63.3%) for co-managed enterprises and four-fifths (79.4%) for co-owned and co-managed enterprises.

Overall, most multi-owner enterprises are family-owned, with family members typically being involved in managing the enterprise. In family enterprises, family members account for the majority of the employees and in non-family enterprises and single ownerships, the share of enterprises employing family members is also more than 10%.

Demography

A deeper analysis of the demographics of entrepreneurs can help to target measures at specific groups of enterprises, thus allowing an optimal allocation of available resources (Figure 18).

Although the entrepreneurial activity of men is higher than that of women in all age groups and enterprise types, as it was in the previous year, the difference is statistically significant in only three cases:

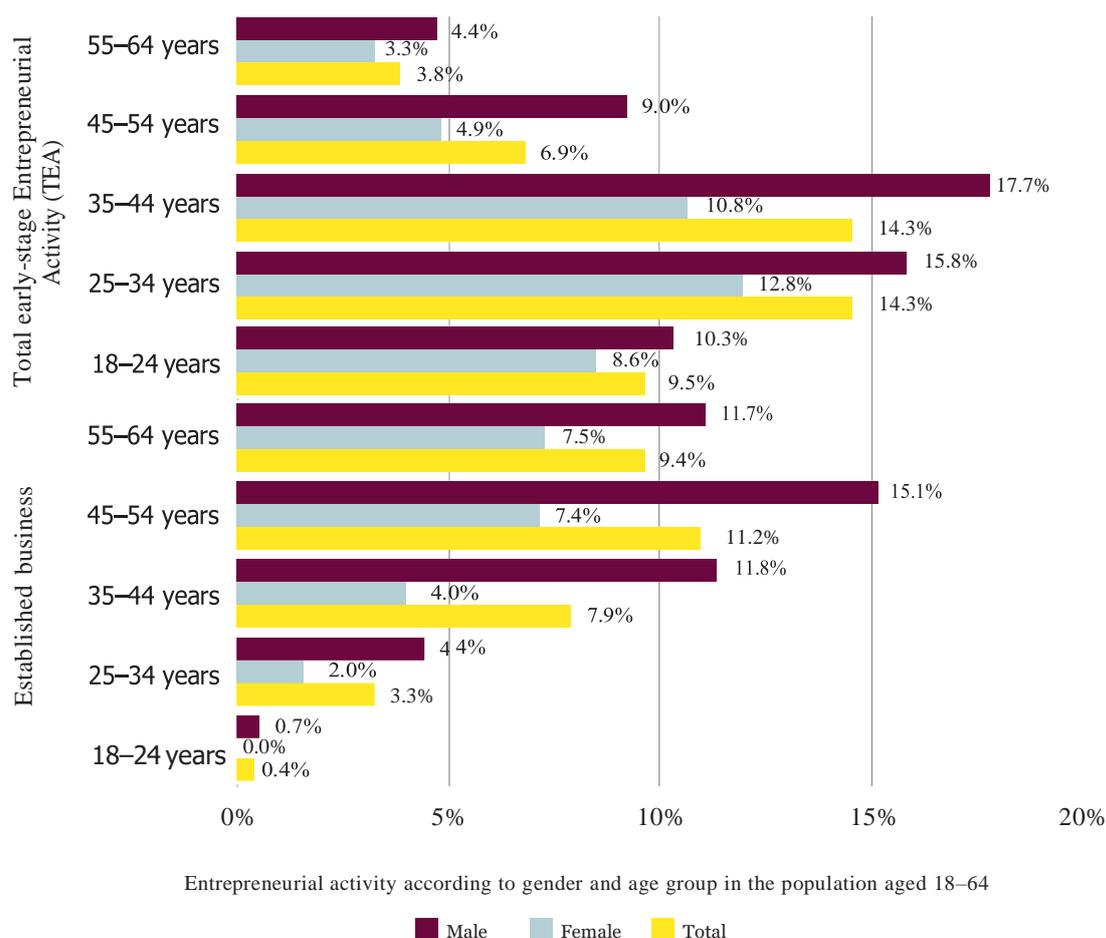
1. early-stage enterprises in the 35–44 age group,
2. established enterprises in the 35–44 age group, and
3. established enterprises in the 45–54 age group.

In other words, no gender differences were observed in the entrepreneurial activity of those under 35 and those aged 55 and above. This is also the case for early-stage enterprises of those aged 45 and above. On the one hand, this confirms last year's results, which showed only a few cases of statistically significant differences between the entrepreneurial activity of the two genders. On the other hand, **it suggests that within the most entrepreneurially active age groups of 35–44 and 45–54, a difference exists between the entrepreneurial activity of men and women.**

⁸ Kása, R., Radácsi, L., & Csákné Filep, J. (2019). Családi vállalkozások definíciós operacionalizálása és hazai arányuk becslése a kkv-szektoron belül. Statisztikai Szemle, 97(2), 146–174. <https://doi.org/10.20311/stat2019.2.hu0146>

Men are more active in the most entrepreneurially active age groups.

Figure 18. Entrepreneurial activity according to gender and age group in the population aged 18-64



Irrespective of gender, the level of entrepreneurial activity in early-stage enterprises is significantly lower for those aged 55–64 than for those aged 25–44. Moreover, women in the 25–34 age group are significantly more active in early-stage entrepreneurship than women in the 45–54 age group.

For established enterprises, the ratio of younger age groups is (unsurprisingly) lower regardless of gender – a significant difference is found between the 18–24 age group and the 35–64 age group. A significant difference was also found between men in the 25–35 and 35–54 age groups and between women in the 25–34 and 55–64 age groups.

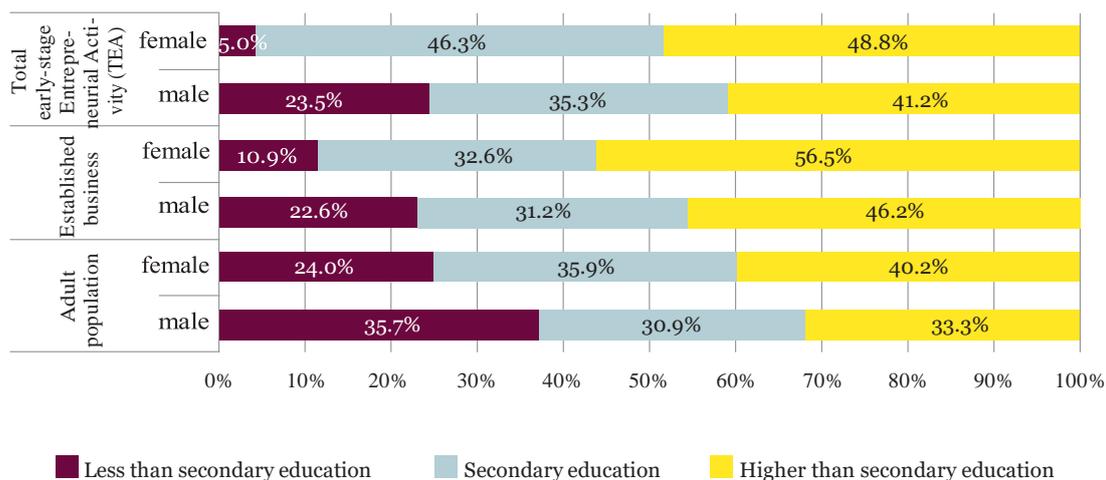
This means that members of the economically active oldest age group are now less active as entrepreneurs, while members of the youngest group are not yet setting up businesses that can pay stable wages for a longer period of time.

According to the GEM data, both male and female entrepreneurs – both early-stage and established – have, on average, a higher level of education than non-entrepreneurs⁹. While two-fifths of women in the total population have obtained higher

⁹ The p-value takes a value of less than 0.05 for both men and women when examining the association between highest educational attainment and activity in an early-stage or established business.

than secondary education, this is the case for almost half (48.8%) of the women with an early-stage enterprise and 56.5% of women with an established enterprise. The trend is similar for men. While only one in three men in the total population has higher than secondary education, this rises to four-fifths (41.2%) among those with an early-stage enterprise and even higher (46.2%) among those with an established enterprise.

Figure 19. Distribution of total early-stage entrepreneurial activity and established businesses and the adult population in the sample by educational attainment



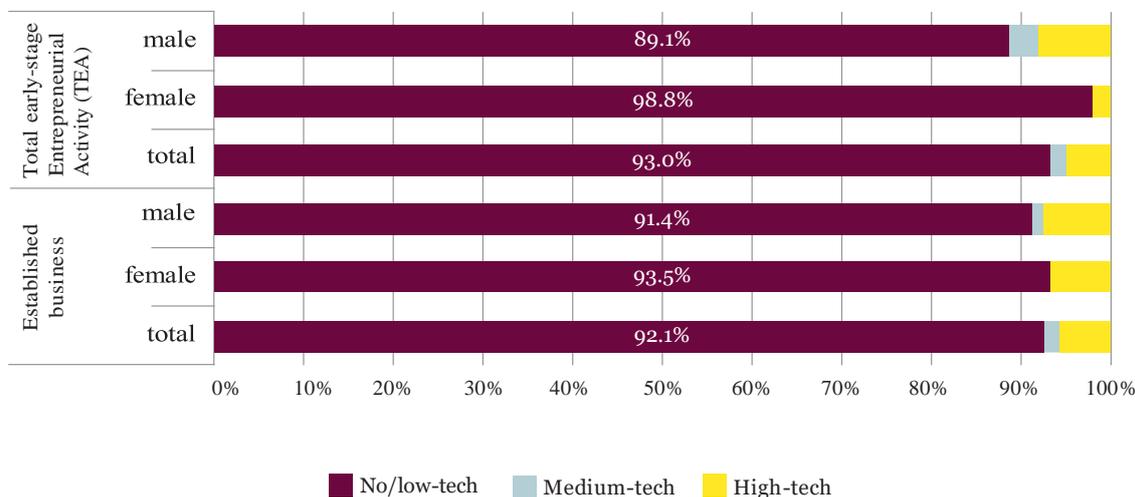
Breakdown by the level of technology

A good indicator of the value added by an activity carried out by enterprises is the technological level of the activity. The GEM research divides the technological level into three categories based on the sectoral classification of the activity, namely (1) no/low tech; (2) medium-tech; and (3) high-tech. In this classification, the high-tech sector includes pharmaceuticals, telecommunications, precision medical instruments and research and development, while the medium-tech sector includes chemical and various engineering and design companies. Notably, while internationally recognised start-ups and companies with high added value and know-how in the field of custom engineering employ many people and are often in the media, the vast majority of the companies are in traditional industries; yet they also often use advanced technology.

Our results show that the vast majority of both early-stage and established businesses in Hungary operate in low or non-technology-intensive sectors (Figure 20). Interestingly, medium-technology sectors are essentially invisible. This may be due to the non-representative character of the sub-sample of firms. Although a significant gender difference exists at the technological level of early-stage enterprises, a robust

conclusion can only be drawn for similar reasons if the phenomenon is observed over a number of years.

Figure 20. Distribution of total early-stage entrepreneurial activity and established businesses by gender and technological level of activity

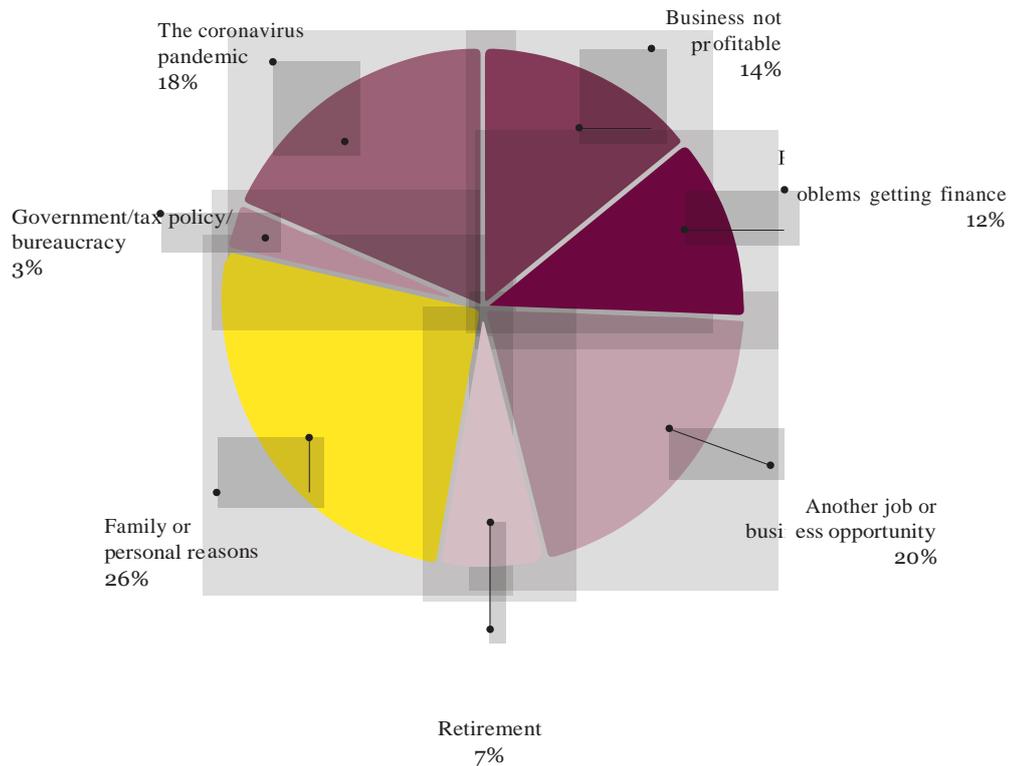


Exiting entrepreneurship

The ratio of people leaving entrepreneurship for any reason fell from 2.1% in the previous year to 1.9% in the 12 months prior to the survey, which means that **the proportion of people leaving the entrepreneurial sphere in the current year is similar to that in the previous year.** In almost one in three cases, the reason given was personal (Figure 21), such as a personal or family problem (26%) or the retirement of the respondent (7%). The impact of the external environment, such as the COVID-19 pandemic (18%), difficulties in raising finance (12%) and government tax policies and red tape (3%), also accounted for a similar proportion of exits. One in five (20%) of those who left their business cited a new job or business opportunity as the reason for quitting, while only 14% cited a lack of profitability. In more than a quarter of cases (26.1%), the business continued in some form, despite the exit of the respondent.

The reason given for the cessation of a business activity was of a personal nature in almost one out of three cases.

Figure 21. Reasons for the cessation of the enterprise



The most common reasons given for quitting a business are family or personal reasons, the emergence of another job or business opportunity or the effects of the COVID-19 pandemic.

Motivations

To better understand the trends in the entrepreneurship ecosystem, the GEM methodology focuses on the motivations for becoming an entrepreneur.

The most recent data for Hungary (Table 2) show that one of the main motives for becoming an entrepreneur is to do something worthwhile – 66.9% and 52.8%, respectively, for early-stage and established enterprises. Another is to earn a living (57.9% and 71.8%, respectively). The former is more important for early-stage enterprises and the latter for established ones. It is important to note that **the livelihood motive is significantly higher for women entrepreneurs in the early stage (65.7%) than for men (52.6%). In other words, women are more likely to start a business because of the need to earn a living.**

The continuation of family tradition as a motivation for entrepreneurship is much less emphasised, with over a fifth (21.6%) of early-stage entrepreneurs and just over a quarter (25.7%) of established entrepreneurs mentioning this aspect. Family tradition seems to be slightly more important for men. However, no statistically significant difference was found between the two genders on this point. The motivation to acquire wealth is

slightly stronger for early-stage enterprises (37.0%), especially for men (42.2%) than for women (29.3%)

Table 2. Motivations for starting an enterprise

	Total early-stage Entrepreneurial Activity (TEA)			Established business (EB)		
	Male	Female	Total	Male	Female	Total
To make a difference in the world	63.6%	71.6%	66.9%	49.1%	60.4%	52.8%
To build great wealth or a very high income	42.2%	29.3%	37.0%	20.0%	17.5%	19.2%
To continue a family tradition	23.4%	19.0%	21.6%	27.8%	21.6%	25.7%
To earn a living because jobs are scarce	52.6%	65.7%	57.9%	68.2%	78.9%	71.8%

As in the previous year, the main motivation for a founder to start a business remains the same: ‘to make a difference’ and ‘to earn a living’. Acquiring wealth is the most common motivation for men with early-stage enterprises but is much less common for established enterprises. Continuing the family tradition is more prevalent only in established businesses.

Employment

The role of entrepreneurs in employment is unquestionable. For this reason, the GEM examines the number of people currently employed by entrepreneurs and the number expected to be employed by entrepreneurs in five years (Table 3).

Almost a third (30%) of the early-stage enterprises do not currently employ staff, and two-thirds (66.7%) expect this to remain the case in five years. However, three out of five early-stage enterprises employ between one and five people, and 26.1% plan to expand in the future. The number of early-stage enterprises employing more than five people is relatively low (13%). However, most of them also plan to grow¹⁰.

¹⁰ The sample includes two early-stage enterprises with more than 20 employees, so the entrepreneur planning to downsize has a 50% weighting. However, the number of elements does not allow us to draw any deeper conclusions.

Most established enterprises (56%) also employ between one and five persons, and even among them, a considerable proportion of enterprises do not create jobs (28%). However, in contrast to early-stage enterprises, established enterprises are slightly more negative about the future, with a smaller proportion planning to create more jobs.

Table 3. Distribution of total early-stage entrepreneurial activity and established businesses by the number of current and planned future employees

	Current number of jobs	Expected number of jobs				Total
		No job	1-5 jobs	6-19 jobs	20+ jobs	
Total early-stage Entrepreneurial Activity (TEA)	No jobs	66.7%	25.0%	8.3%	0.0%	30.0%
	1-5 jobs	2.2%	71.7%	19.6%	6.5%	57.5%
	6-19 jobs	0.0%	0.0%	50.0%	50.0%	10.0%
	20+ jobs	0.0%	0.0%	50.0%	50.0%	2.5%
	Total	21.3%	48.7%	20.0%	10.0%	100.0%
Established business	No jobs	73.3%	26.7%	0.0%	0.0%	27.8%
	1-5 jobs	8.3%	83.4%	8.3%	0.0%	55.6%
	6-19 jobs	0.0%	0.0%	92.3%	7.7%	12.0%
	20+ jobs	0.0%	0.0%	0.0%	100.0%	4.6%
	Total	25.0%	53.7%	15.7%	5.6%	100.0%

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

Similar to last year, the majority of both early-stage and established enterprises plan to retain existing jobs, with early-stage entrepreneurs being mainly the ones planning to create additional jobs. The proportion of those in the sample planning to downsize is also negligible.

Innovation

The GEM looks at two aspects of entrepreneurial innovation: the product or service itself and the novelty of the technology or process used to produce it. It is simple and easy to understand and can be an indicator of the ability of entrepreneurs to identify and exploit market opportunities.

As it was in the previous year, the vast majority of Hungarian entrepreneurs sells products or services already on the market and uses existing technologies and processes to produce them.

Almost four-fifths (78.8%) of early-stage enterprises and 91.6% of established enterprises are selling products or services already present on the market (Figure 22).

Only a fraction of businesses use a technology or process that could be considered new.



Ádám Bengyel

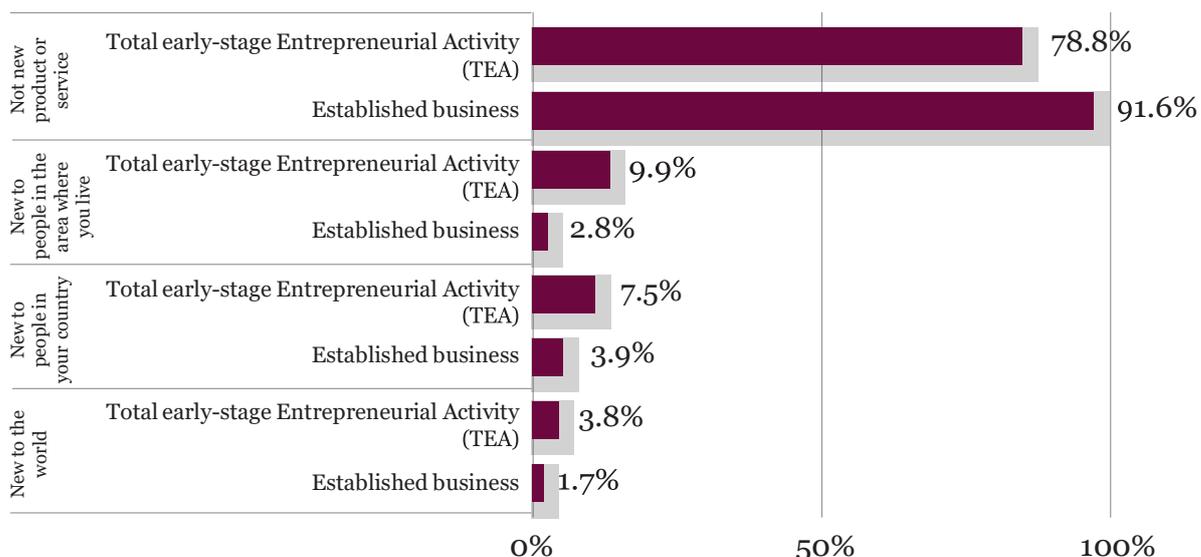
CEO and Co-Founder, FoxPost Ltd.

FoxPost, which began as a parcel locker start-up, is a service provider specialising in the delivery of small parcels, enabling individuals and businesses to collect and dispatch parcels in a convenient and environmentally friendly way.

Looking for a new challenge, I became one of the founders of a start-up business with experience in managing large companies. With FoxPost, we remained in the logistics business as a specialist area, at a time when the parcel locker market in Europe was still in its infancy. Our aim was to revolutionise last-mile delivery and make it sustainable. When the parcel locker solution was still in its early days, no one had any idea of the size of the market to plan for. Today, the Hungarian parcel locker market is one of the most competitive markets in Europe. Not even Poland and the Czech Republic, where the market is a bit more developed, have as many players in the last-mile sector as Hungary.

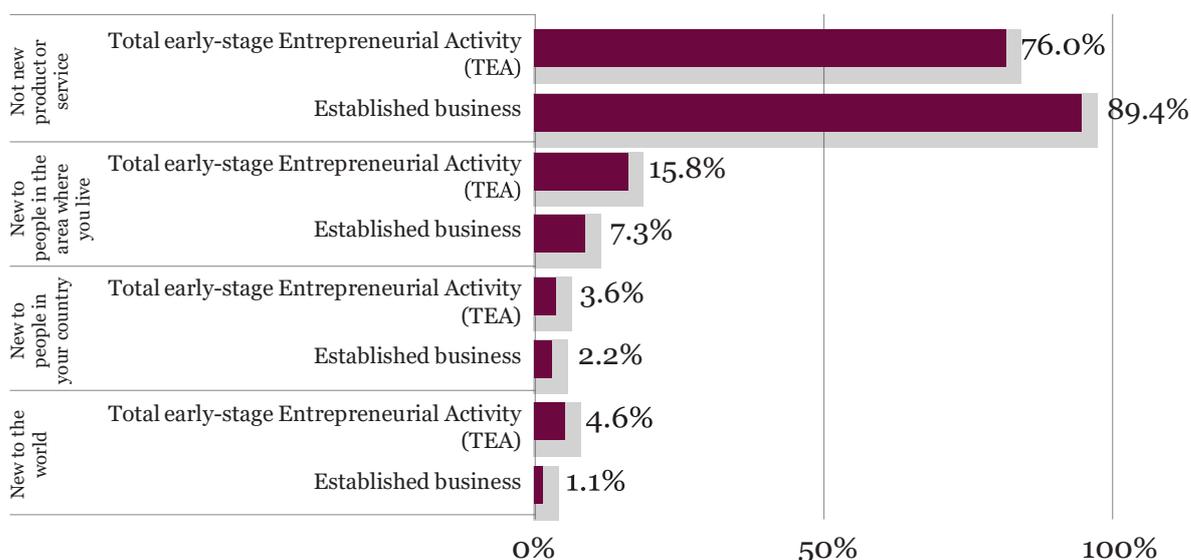
Although we are a parcel delivery company, we also see ourselves as a technology company in its own right. One of the key pillars of our success is the fact that our IT solutions are proprietary so that we can be even more responsive to market changes as a true logistics technology company. The real innovation in this area is not in the business model, but in the implementation. It's in data-driven process improvement, contactless and thus secure and discreet delivery, outstanding operational stability and the ability to help reduce the environmental impact of parcel delivery by increasing our efficiency. All of this is in line with our mission statement: to support quality e-commerce with our innovative logistics solutions. I also see a potential for further development, particularly in IT development. This is what will keep us ahead of the competition.

Figure 22. Percentage of enterprises with a product or service considered new



As with the marketing of a new product or service, the associated innovative technology or process is applied by only a fraction of businesses – just over three-quarters (76%) of early-stage enterprises and almost nine-tenths (89.4%) of established enterprises do not use any new technology or process (Figure 23). In this respect, the usage of even nationally new solutions is low, with 8.2% of early-stage enterprises and 3.3% of established enterprises using some technology or process considered new at least at the national level.

Figure 23. Percentage of enterprises using new technology or process for their product or service

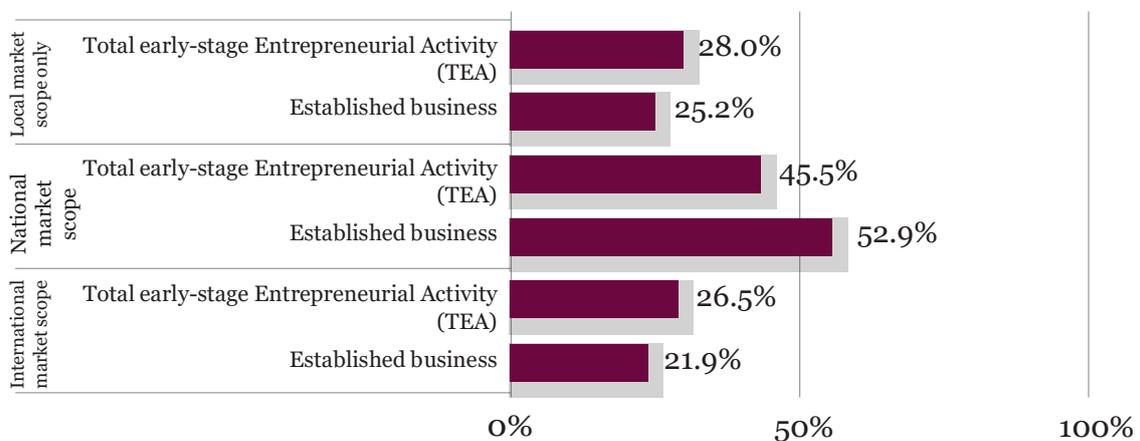


Location and export activity

The GEM measures the market reach of companies based on their activity and turnover in foreign markets. The benefits of export activity are twofold. On the one hand, increased competition leads to streamlined operations and continuous improvement of the product or service. On the other hand, a larger market can mean higher revenues. This increases the economies of scale of the activity. It is important to note, however, that some activities, notably personal services such as catering and tourism, are location-dependent. It means that having a market close to where one lives is not necessarily a negative phenomenon.

Our results show that the highest proportion of enterprises, 45.5% of early-stage enterprises and 52.9% of established enterprises, are active on the national market, i.e., they do not only sell their products or services in the immediate area of their location but are also active nationally (Figure 24). One in four (26.5%) early-stage enterprises is active on the international market, compared to one in five (21.9%) established enterprises. These enterprises may have had a competitive advantage that enabled them to enter the international market successfully.

Figure 24. Market scope of total early-stage entrepreneurial activity and established businesses



The vast majority of entrepreneurs are thus active in national or local markets, while a fifth of both early-stage and established enterprises are active in foreign markets.

ENTREPRENEURIAL ECOSYSTEM

The GEM National Expert Survey (NES) provides a comprehensive picture of the business environment in each country. The assessment of the experts is used to determine the scores that characterise the framework conditions for entrepreneurship, which are averaged to produce the National Entrepreneurship Context Index (NECI) for each economy. International comparisons of entrepreneurship ecosystems can be made by aggregating the experts' assessments into a single indicator¹¹.

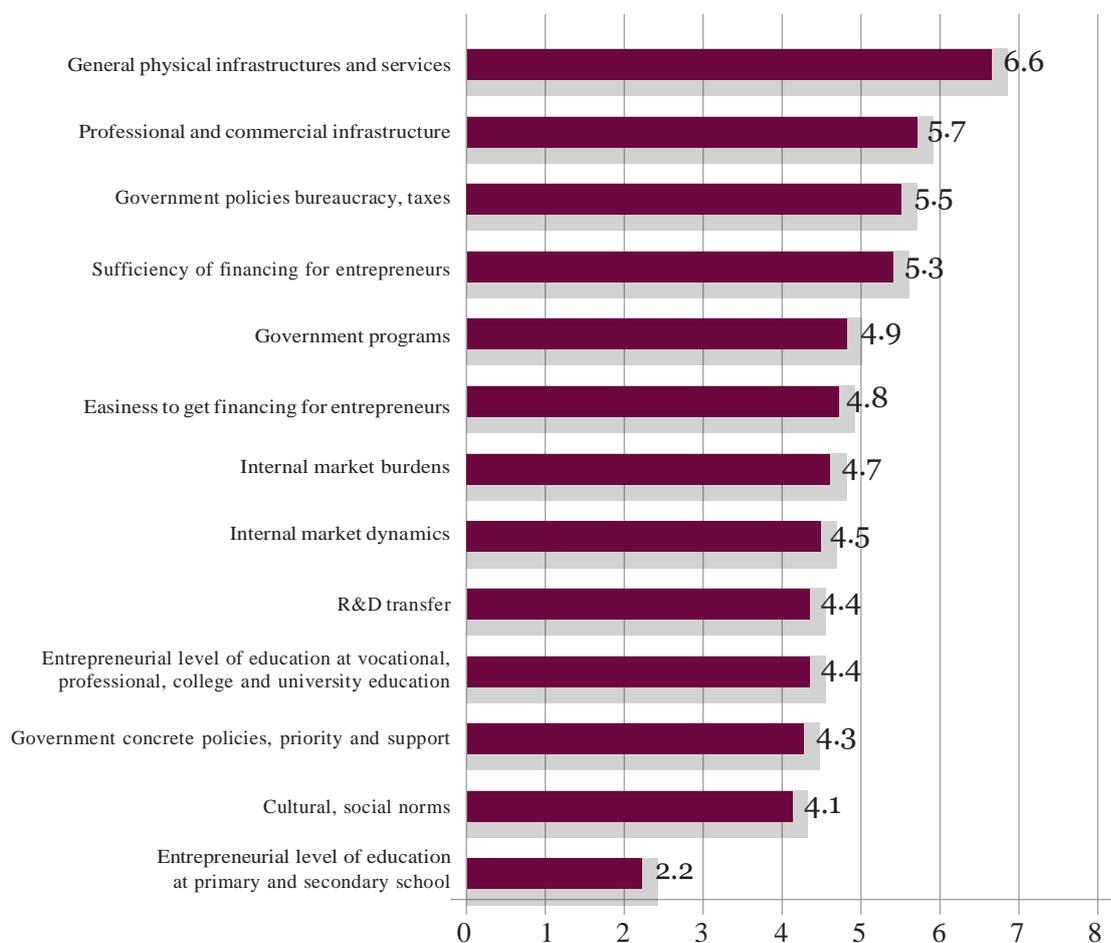
The elements that make up the index are shown in Figure 25.

The business environment is rated on a scale of 0–10, with a score of 5 indicating that the area is considered acceptable and its level of development is satisfactory.

Hungary's NECI has risen to 4.7 from 4.5 in the previous year, according to the 2022 survey. Domestically, general physical infrastructures and services; professional and commercial infrastructure; government policies bureaucracy, taxes; and sufficiency of financing for entrepreneurs ecosystem elements score above 5. Entrepreneurship education at primary and secondary school received the lowest score, as it did last year. Last year's score of 3.5 for internal market dynamics improved to 4.5 in 2022.

¹¹ Entrepreneurship or entrepreneurial ecosystem is the umbrella term for the independent actors and relationships that directly or indirectly support the creation and growth of new businesses. According to Isenberg (2010), one of the best known categorisations, the most important dimensions of the ecosystem are policy/government support, financial services, social norms and cultural environment related to entrepreneurship, support systems (NGOs, infrastructure, availability of experts), human capital (school system, qualifications) and the market (entrepreneurial networks, customers/consumers). (Isenberg, D. J. (2010). How to start an entrepreneurial revolution. *Harvard Business Review*, 88(6), 40–50.)

Figure 25. Assessment of the elements of the entrepreneurial ecosystem



Based on the 2022 data, the NECI ranking of the 51 countries participating in the National Expert Survey is shown in Figure 26.

In global terms, the Hungarian NECI of 4.7 qualifies as average, one-tenth of a point below the GEM average of 4.8. Among the Visegrad countries, Hungary has the most favourable assessment of the ecosystem, surpassing the Slovakian score of 4.4 and the Polish score of 3.8. Experts gave the highest score to the business environment in the United Arab Emirates, while Venezuela is at the bottom of the list.

We should also take a closer look at the business environment in Hungary in the context of a regional comparison. The average NECI scores of the nine Central and Eastern European countries in the survey are similar to the average score for Hungary. Of the countries in the region, Lithuania, Latvia and Slovenia have a more favourable ecosystem situation than Hungary. The Lithuanian and Latvian scores (also above the GEM average) were markedly better than the Hungarian result. The overall ecosystem status in



Bernadett Dancsné Engler

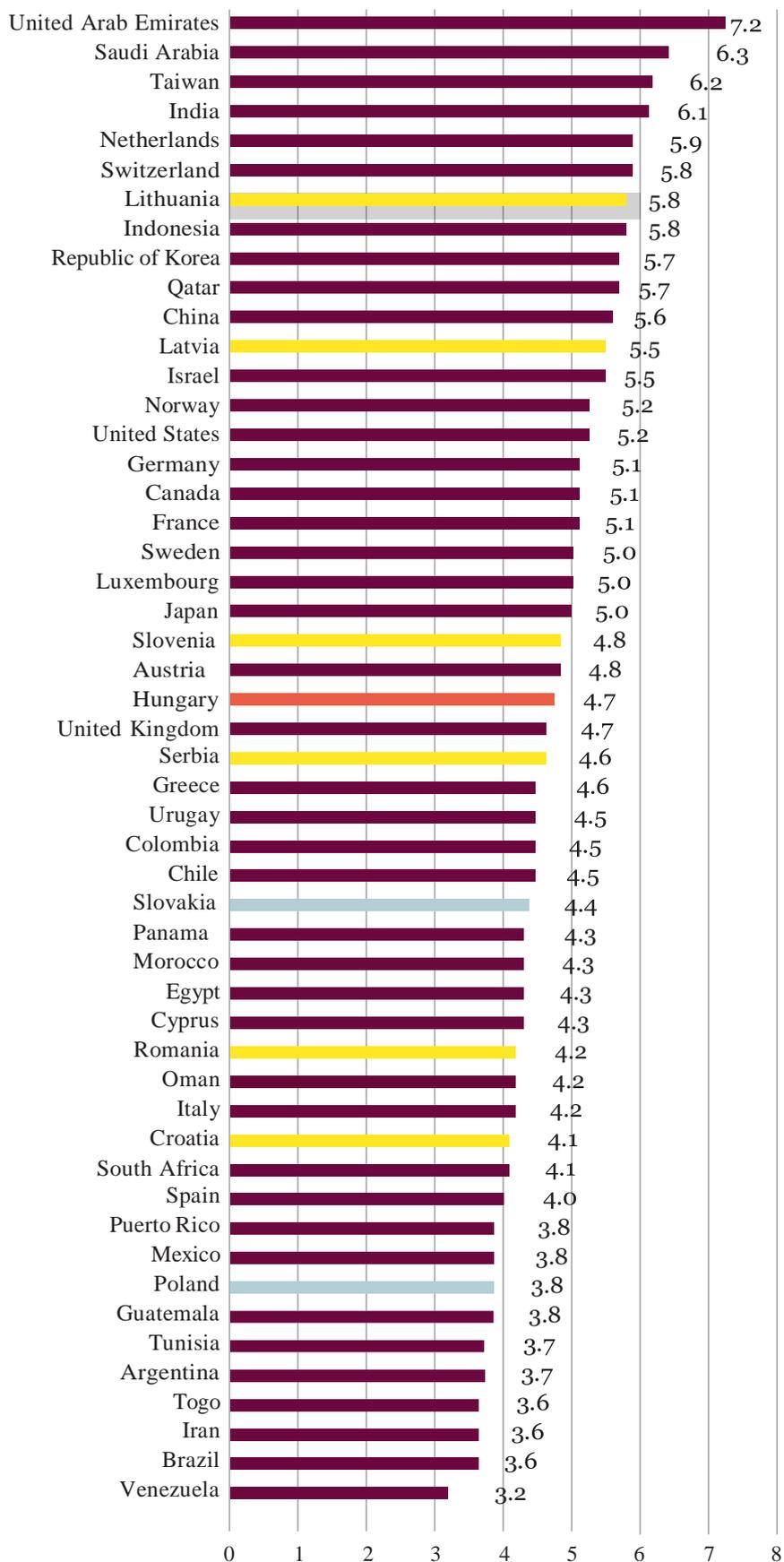
Head of Micro and Small Business Field, OTP Bank

OTP Bank Plc. is the largest commercial bank in Hungary. The OTP Group operates nearly 1,400 branches in Central and Eastern Europe, serving approximately 16 million customers in eleven countries. Besides Hungary, OTP is the market leader in loan portfolios in four other countries: Bulgaria, Slovenia, Serbia, and Montenegro.

A company will be successful if it can focus on its strengths: its business activities, customer acquisition, human resources management, conscious business practices and sustainability. Over the past 10 years, the Hungarian SME sector has experienced dynamic growth, with companies expanding their current and fixed assets and increasing their willingness to invest. The next period will be about the efficient operation of these assets and the increase of their revenue-generating capacity, all in a dynamic economic and regulatory environment, where predictability, reserve role and availability and responsiveness are key. Financing can play a part in this and is now widely available in Hungary through government-sponsored schemes, which are adapted by banks to different lending objectives, on favourable terms.

Access to credit is no longer a bottleneck for the success of a business. However, to achieve and maintain creditworthiness, it is necessary to ensure transparent operations, regular income from the sale of products and services, profitability and the fulfilment of payment obligations. Many aspects need to be considered if bank finance is to provide real support for a business. The type of loan should be adapted to the purpose of the loan and the period of implementation and repayment. The expected benefits and additional costs must be considered, as they determine the return on the loan and the profit margin. It is preferable to seek expert advice before making such a decision to mitigate the risks and assess the options as fully as possible.

Figure 26. NECI ranking of countries participating in the NES survey

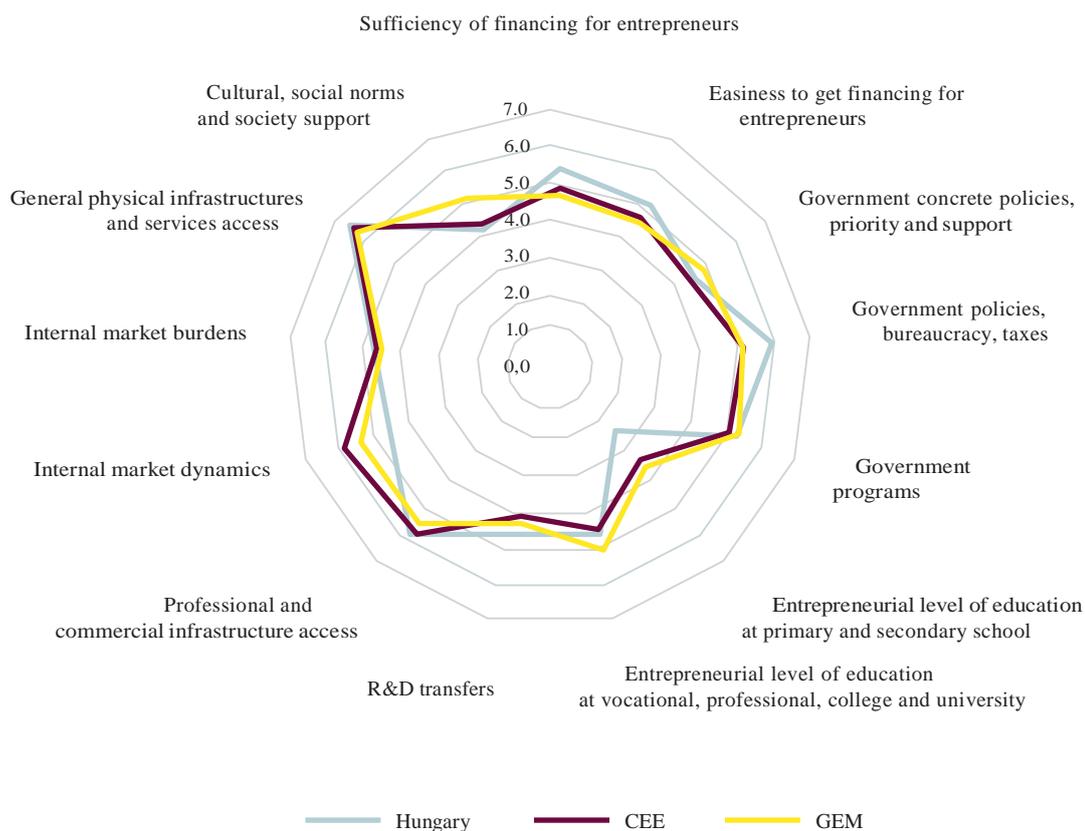


The countries of Central and Eastern Europe are highlighted in yellow, the Visegrad countries in blue and Hungary in red.

Slovenia is similar to the situation in Hungary. Among the survey countries in the region, Serbia, Slovakia, Romania, Croatia and Poland have ecosystem assessments by experts that are below the Hungarian level.

A comprehensive assessment of the business environment can be achieved through a detailed examination of the framework indicators. (Figure 27)

Figure 27. Comparison of business framework indicators (Hungary, Central and Eastern Europe, GEM)



In an international comparison, the current business environment in Hungary presents a picture similar to that of last year. Above-average scores are given to (1) sufficiency of financing for entrepreneurs, (2) easiness to get financing for entrepreneurs and (3) government policies, bureaucracy, taxes. The national ecosystem is below the international average in terms of (1) entrepreneurial level of education at primary and secondary school and (2) internal market dynamics, although the latter shows the greatest positive change from the previous year.

The performance of the countries in the Central and Eastern European region, broken down by specific business framework indicators, is presented in Table 4.

Table 4. Entrepreneurial framework indicators in Central and Eastern Europe

Entrepreneurial framework condition	Country	
Sufficiency of financing for entrepreneurs	Hungary	Hungary (5.3)
	High	Lithuania (5.7)
	Low	Serbia (3.7)
Easiness to get financing for entrepreneurs	Hungary	Hungary (4.8)
	High	Latvia (5.6)
	Low	Poland (3.4)
Government concrete policies, priority and support	Hungary	Hungary (4.3)
	High	Lithuania (5.6)
	Low	Poland (2.7)
Government policies, bureaucracy, taxes	Hungary	Hungary (5.5)
	High	Serbia (6.0)
	Low	Poland (3.5)
Government programs	Hungary	Hungary (4.9)
	High	Latvia (6.0)
	Low	Poland (3.4)
Entrepreneurial level of education at primary and secondary school	Hungary	Hungary (2.2)
	High	Latvia (5.6)
	Low	Poland (1.8)
Entrepreneurial level of education at vocational, professional, college and university	Hungary	Hungary (4.4)
	High	Lithuania (5.4)
	Low	Poland (3.1)
R&D transfers	Hungary	Hungary (4.4)
	High	Lithuania (5.3)
	Low	Poland (2.8)
Professional and commercial infrastructure access	Hungary	Hungary (5.7)
	High	Latvia (6.6)
	Low	Poland (4.4)
Internal market dynamics	Hungary	Hungary (4.5)
	High	Latvia (7.1)
	Low	Hungary (4.5)
Internal market burdens	Hungary	Hungary (4.7)
	High	Lithuania (5.5)
	Low	Croatia (3.8)
General physical infrastructures and services access	Hungary	Hungary (6.6)
	High	Lithuania (7.7)
	Low	Poland (5.5)
Cultural, social norms and society support	Hungary	Hungary (4.1)
	High	Lithuania (6.4)
	Low	Slovakia (3.2)

As expected from the NECI score, Lithuania and Latvia have the highest scores for the vast majority of business framework indicators. The exception is the government policies, bureaucracy, taxes, which was rated most favourably by Serbian experts. Poland is

the worst performer in the region in nine framework indicators. According to the experts, Serbia is the country most in need of improvement in terms of business financing, Hungary in terms of ease of market access and market growth, Croatia in terms of market access barriers and regulation and Slovakia in terms of social and cultural standards.

According to the experts, Hungary's business ecosystem is below the highest-ranked countries in the region, i.e., Lithuania and Latvia, but higher than most countries in the region. In terms of the amount and accessibility of finance available to businesses and government policies, bureaucracy, taxes Hungary is above both global and regional levels. Entrepreneurship education in public education and ease of access to markets and market growth lag behind at both global and regional levels.

Entrepreneurship education through the eyes of experts

Entrepreneurship education in public education is the framework indicator, with the lowest average score among the surveyed countries, both globally (3.4) and in Central and Eastern Europe (3.1). Hungary's score of 2.2 is well below both the global and regional averages, with only Poland (1.8) scoring lower in the region. Entrepreneurship education in higher education and vocational training are rated more favourably globally (4.3), regionally (4.8) and domestically (4.4). The components of the two frameworks for entrepreneurship education should be examined in detail, given their below-average ratings and long-term spill-over effects.

Hungary continues to score low regarding entrepreneurship education according to the experts (Figure 28). Public education is rated as the weakest condition in preparing students for entrepreneurship, while higher education is considered more sufficient in preparing students for entrepreneurship. This means, that higher education's rating reached a satisfactory level last year and is close to satisfactory in 2022. While the Hungarian score for entrepreneurship education in higher education is around the international average, the score for entrepreneurship education in public education is below both global and regional averages, indicating a gap in the quality of entrepreneurship education at different levels of the education system.

Education has a multifaceted role in the process of becoming an entrepreneur. It can stimulate entrepreneurial inclination and motivation by providing an individual with the knowledge needed to start and run a business and developing the skills and competencies needed to succeed in business. To illustrate the link between entrepreneurship education and entrepreneurial activity, we looked at the scores for early entrepreneurial activity (TEA) and the assessment of the educational framework indicators in Central and Eastern European countries (Figure 29).

The assessment of entrepreneurship education is significantly below both the global and regional average.

Figure 28. Assessment of the state of entrepreneurship education based on GEM NES 2021 and 2022 data

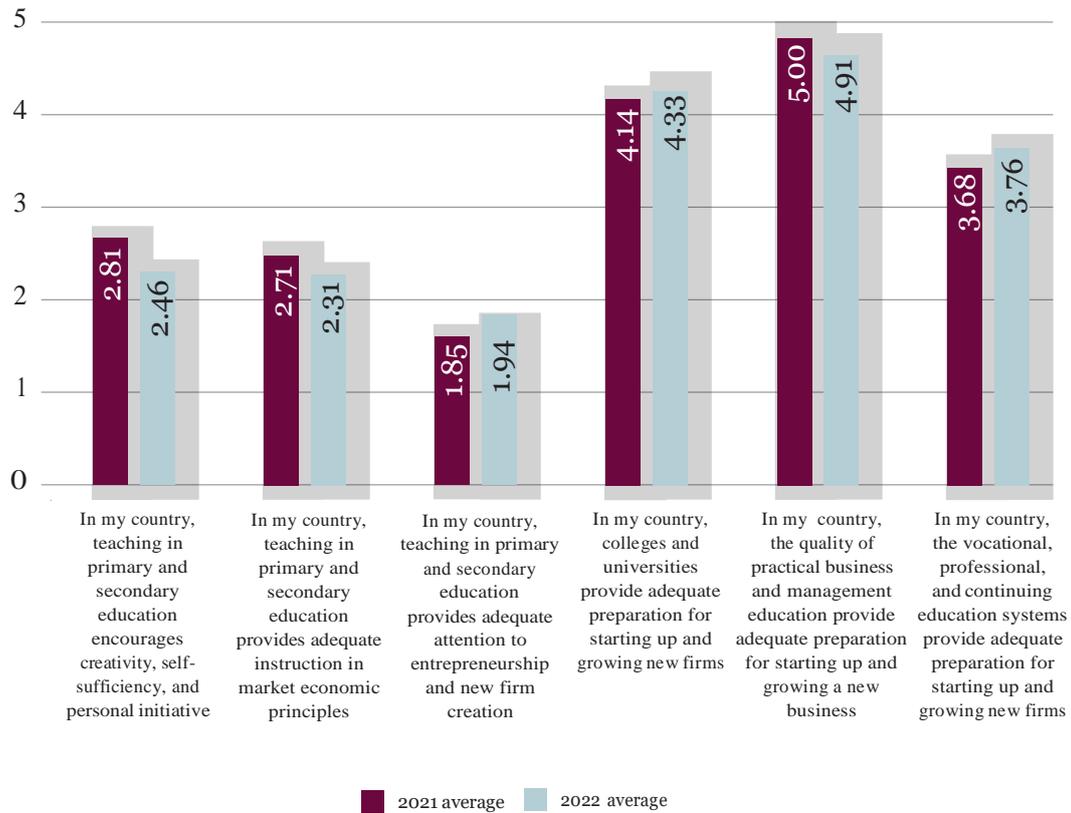
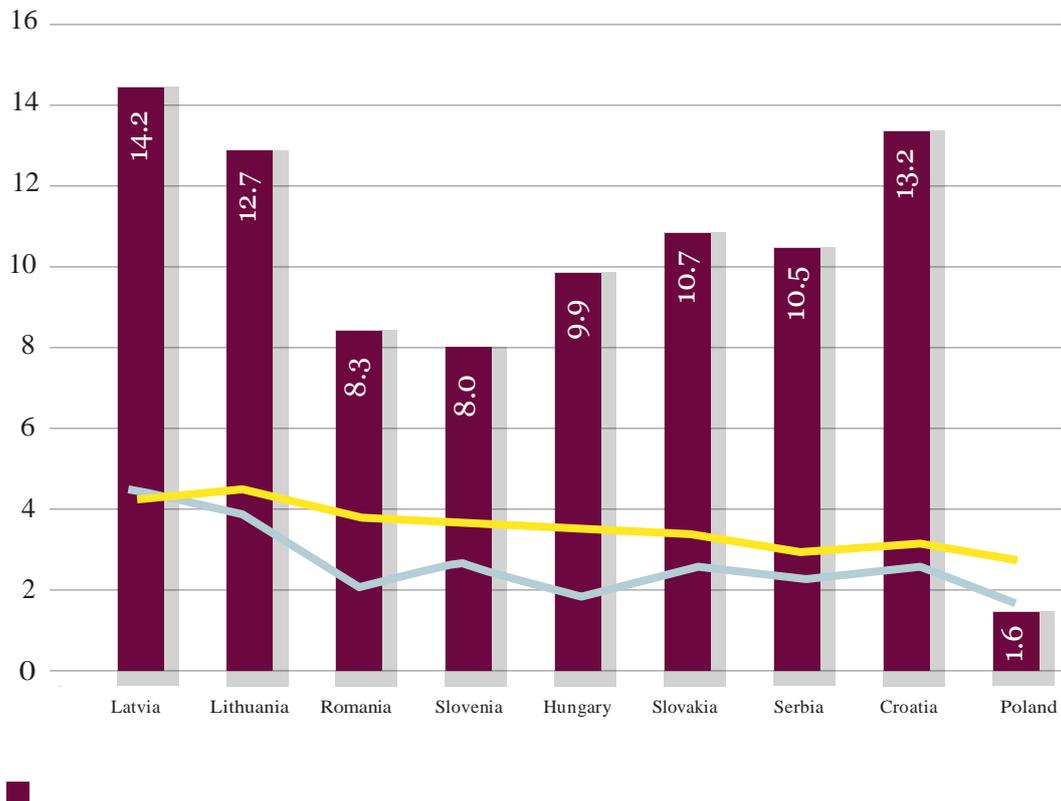


Figure 29. Ratio of total early-stage activity in relation to entrepreneurship education



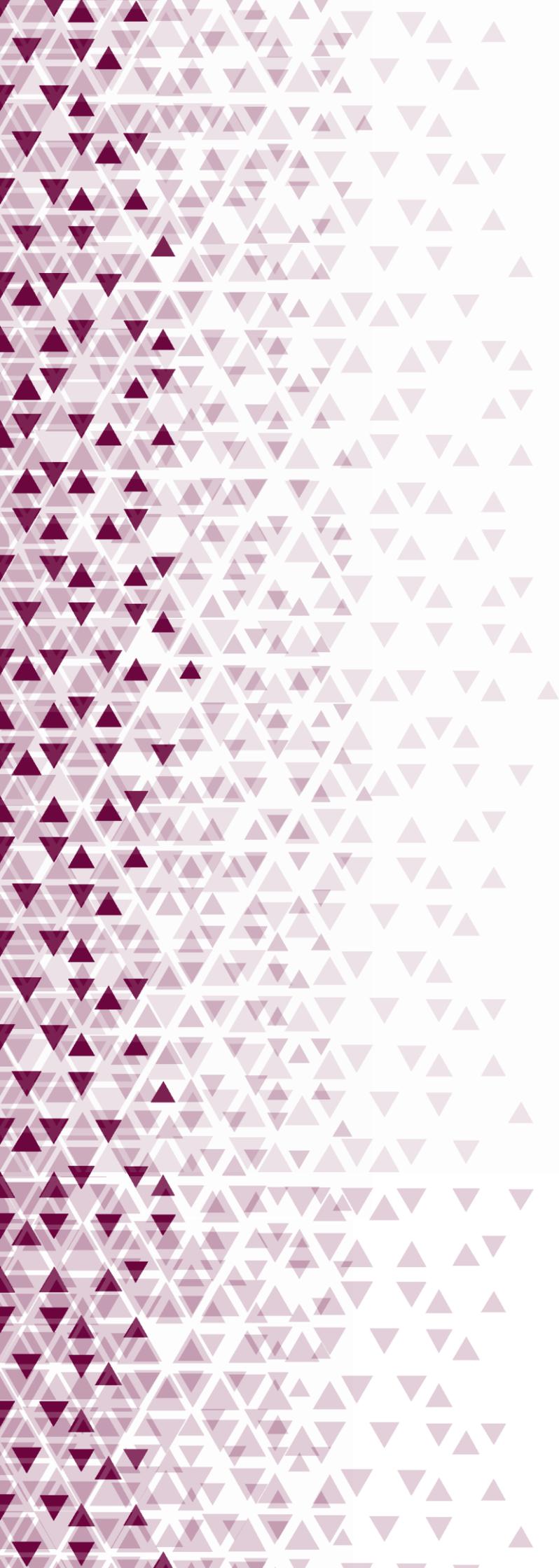
Entrepreneurial level of education at higher education

Entrepreneurial level of education at primary and secondary school



A linear relationship exists between the early-stage entrepreneurship activity (TEA) score and the level of entrepreneurship education in public and higher education. Higher levels of entrepreneurship education are usually associated with higher TEA scores, while lower levels are usually associated with lower TEA scores. Good examples of this are Latvia and Lithuania, where high levels of entrepreneurship education and high rates of new businesses are typical. Poland is an example of the region with the lowest quality of entrepreneurship education and an abnormally low TEA. Romania, Slovenia, Hungary, Slovakia and Serbia have similar TEA scores and a similar structure of entrepreneurship education – low-rated entrepreneurship education in public education and much higher-rated entrepreneurship education in higher education and vocational training. However, the strength of the linear correlation is tempered by the example of Croatia, which has a high TEA score by regional standards and a level of entrepreneurship typical of most Central and Eastern European countries.





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, 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 18–64 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 18–64 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 three months.

New Business Ownership Rate: The percentage of the adult population aged 18–64 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 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 who are currently 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 (National Expert Survey) and are as follows:

- A1.** Entrepreneurial Finance
- A2.** Ease of Access to Entrepreneurial Finance
- B1.** Government Policy: Support and Relevance
- B2.** Government Policy: Taxes and Bureaucracy
- C.** Government Entrepreneurial Programs
- D1.** Entrepreneurial Education at School
- D2.** Entrepreneurial Education Post-School
- E.** Research and Development Transfers
- F.** Commercial and Professional Infrastructure
- G1.** Ease of Entry – Market Dynamics
- G2.** Ease of Entry – Burdens and Regulations
- H.** Physical Infrastructure
- I.** Social and Cultural Norms

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 the 13 national entrepreneurship framework conditions identified by GEM researchers as the most reliable determinants of a favourable environment for entrepreneurship into a single number. 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, with a solid methodological basis and many countries of the world involved in collecting data every year since 1999. In 2022, a total of 51 countries participated in the survey (with representative population surveys conducted in 49 countries and expert interviews in 51 countries).

From the outset, GEM countries have helped to understand the link between entrepreneurship and national economic development by answering the following questions:

- Does the level of entrepreneurial activity differ 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?

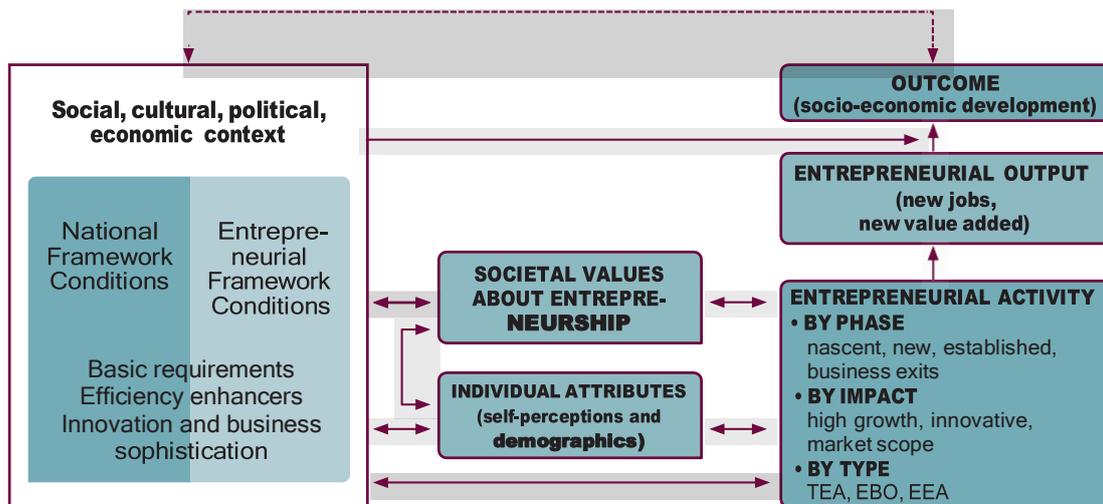
To uncover the link between entrepreneurship and national economic development, the GEM has developed a conceptual framework along the following objectives (Figure 30):

The model should achieve the following:

- 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, social 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; and
- 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 an individual's ability to identify and seize business opportunities. An individual's decision to start an entrepreneurial activity is influenced by environmental factors besides personal skills and knowledge. The determinants of starting an entrepreneurial activity are the individual's perception of opportunity and ability (motivation and skills) to take advantage of that opportunity and the environment around the individual. Within the conceptual framework of GEM, the entrepreneurial framework describes the environment that influences entrepreneurial activity, which then feeds back into the environment through social values and economic development (Source: <https://gemuae.uae.ac.ae/en/framework.shtml>)

Figure 30 GEM conceptual framework (Source: GEM Global Report 2022/23)



(Forrás: GEM Global Report 2022/23)

The GEM provides a clear and consistent definition of entrepreneurship and has a well-established methodology for measuring and evaluating entrepreneurship, laid down in the conceptual framework. In each of the countries participating in the survey, the National Team is responsible for conducting the data collection and analysing the data. The data collection consists of two complementary surveys. The Adult Population Survey (APS) examines the characteristics, motivations, ambitions and social attitudes towards the entrepreneurship of those who start a business. The National Expert Survey (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 in the GEM data collection are categorised according to World Bank data, based on the income thresholds defined by the GEM (Table 5):

- **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 and USD 40 000, and**
- **high-income countries with a GDP per capita higher than USD 40 000.**

Table 5. Categorisation of countries in the GEM survey
(Source: GEM Global Report 2022/23)

Low-income countries < USD 20 000	Middle-income countries USD 20 000–40 000	High-income countries > USD 40 000
Brazil	Argentina	Austria
Republic of South Africa	Chile	Cyprus
Egypt	Greece	United States
Guatemala	Croatia	United Arab Emirates
India	Poland	United Kingdom
Indonesia	Latvia	France
Iran	Hungary	Netherlands
China	Mexico	Israel
Colombia	Oman	Japan
Morocco	Panama	Canada
Togo	Puerto Rico	Qatar
Tunisia	Romania	Republic of Korea
Venezuela	Serbia	Lithuania
	Slovakia	Luxembourg
	Taiwan	Germany
	Uruguay	Norway
		Italy
		Spain
		Switzerland
		Sweden
		Saudi Arabia
		Slovenia

(Forrás: GEM Global Report 2022/23)

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 6. 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	2.015
Sampling design	Multiple strata – each sampled at an identical rate
Type of sample	Random
Sampling period	2022.06.07. – 2022.07.02.
Interview method	Telephone
Sampling methodology	Random dial from a list
Fieldwork carried out by	TÁRKI Social Research Institute
Data recording, SPSS database creation	TÁRKI Social Research Institute
Monitoring, quality control and final verification	GEM Hungary National Team
NES	
Target population	Business development experts, entrepreneurs
Sample	36 experts
Type of sample	Convenience sample
Sampling period	2022.04.08. – 2022.05.30.
Interview method	Telephone interview
Fieldwork carried out by	Budapest Business School – University of Applied Sciences
Data recording, SPSS database creation	GEM Hungary National Team

