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PERCEIVED OBSTACLES TO THE EARLY-STAGE ENTREPRENEURIAL ACTIVITY OF YOUTH

ABSTRACT

Purpose: The fundamental driving force of entrepreneurship is the individual with their ambitions and entrepreneurial spirit, but also with their obstacles that prevent them from following an entrepreneurial path. These obstacles can be of a personal nature, but also factors of the immediate living environment, the prevailing cultural values, the general attitude of society towards entrepreneurship, etc. The purpose of this paper is to discuss the known barriers to early-stage youth entrepreneurship compared to the total population based on the Global Entrepreneurship Monitor (GEM) data for the 34 countries studied.

Methodology: The methodology includes frequency distribution, descriptive statistics and linear regression analysis. Data from GEM 2016-2020 on early-stage entrepreneurial activity, perceived skills, and fear of failure were used.

Results: We showed that there are differences in perceived entrepreneurial skills between youth and the total population, namely that youth perceive lower levels of entrepreneurial knowledge, experience, and skills. We confirmed that perceived entrepreneurial skills have a positive, statistically significant impact on total early-stage entrepreneurial activity, which is true for both the total population and youth. The test of the influence of fear of failure on total early-stage entrepreneurial activity for a sample of the total population and youth indicates a negative influence, but it is not statistically significant.

Conclusion: From the study, recommendations emerge for policymakers regarding entrepreneurship education as a key intervention to help youth acquire and develop relevant entrepreneurial skills that are thus beneficial for the youth to better overcome obstacles in the business environment as well as in various life situations.

Keywords: Early-stage entrepreneurial activity, self-employment, youth, perceived entrepreneurial knowledge, fear of failure

1. Introduction

Entrepreneurship is the most powerful driver of economic growth and development that has a very large impact on overall social development. It is a complex system of interdependence of economic, social and cultural connections (Spigel, 2017). It is neither nationally self-sufficient nor limited to individual states. Therefore, it should also be researched and recognized as such, and those factors that could hinder or encourage it should be extracted. Since entrepreneurship is international and globally interdependent, it is important to research and learn about it in cooperation and comparison with other countries (Rebernik et al., 2021, p. 15). In general, youth remained one of the most vulnerable groups on the labor market (Kluve, 2014) since this age group is largely subjected to precarious forms of employment, such as employment in the form of reduced working hours, part-time and student employment, employment through self-employment contracts, etc., as noted in the *Resolution on the National Youth Program 2013–2022* (Lavrič & Deželan, 2021). This issue led us to investigate the entrepreneurial activities of youth. It is important to note that, according to Eurostat, youth is defined as individuals between the ages of 15 and 24. Other sources define youth differently, such as the Global Entrepreneurship Monitor, which conducts surveys of those 18–64 years old and consequently defines youth differently. The Global Entrepreneurship Monitor defines youth as the age group from 18 to 30 years old (OECD & European Union, 2017). Since the data used in the research were from the GEM database, the age group from 18 to 30 years old was considered youth.

The world depends on youth is a statement we are very fond of using. At the same time, we are perhaps too little aware that without a suitable environment, youth will also be unable to develop their diverse potential and meet the challenges of the future. Youth can significantly influence the development of economies through their own participation. The education system as well as cultural and social norms contribute to the development of an entrepreneurial mindset (Hopp & Ute, 2012). This can easily lead to entrepreneurial engagement, which we examine in our study.

In the paper, we discuss and present the basic starting points of youth entrepreneurial activity. Since entrepreneurship is one of the possible ex-

its from the labor market, we present the levels of self-employment and early-stage entrepreneurial activities of youth according to Eurostat data and the Global Entrepreneurship Monitor (GEM) survey. The fact is that traditional jobs are becoming increasingly rare, so it is necessary to understand youth entrepreneurship (including self-employment) as an additional way to boost employment and create new jobs. Many studies (Kim et al., 2020; Tubadji et al., 2021) emphasize the positive effects of promoting youth entrepreneurship. They point out that youth are particularly responsive to new economic opportunities and trends. There are many challenges that youth face when they decide to pursue an entrepreneurial career. Research on entrepreneurship also shows that youth around the world cite lack of appropriate skills as the most common barrier to entrepreneurship, i.e., lack of entrepreneurial education through formal and informal education systems (Schött et al., 2015; Green, 2013). They also point to the lack of mentoring, business culture, and appropriate support structures, as well as difficult access to financial resources. In general, lack of entrepreneurial knowledge is one of the most frequently cited barriers to successful entrepreneurial participation, and this barrier is even more intensely expressed among youth, as they have less experience in the labor market than older people.

The next inhibiting factor to entrepreneurial participation that youth frequently mention is the fear of failure. The latter is largely related to the risk they take in becoming self-employed compared to a perceived safer work environment or employment in an established firm. In this paper, we therefore examine the relationship between early-stage entrepreneurial activity among youth and two fundamental barriers to entrepreneurial engagement, namely perceived entrepreneurial knowledge, experience, and skills, and fear of failure.

In what follows, we first present the theoretical starting points for the variables under consideration, and based on previous research, we propose research hypotheses, which we test in the third section using selected statistical methods, and present the conclusions of our findings. We conclude the paper with a description of government policies aimed at promoting youth entrepreneurship and point out the main assumptions and limitations referring to the topic under study.

2. Theoretical starting points and research hypotheses

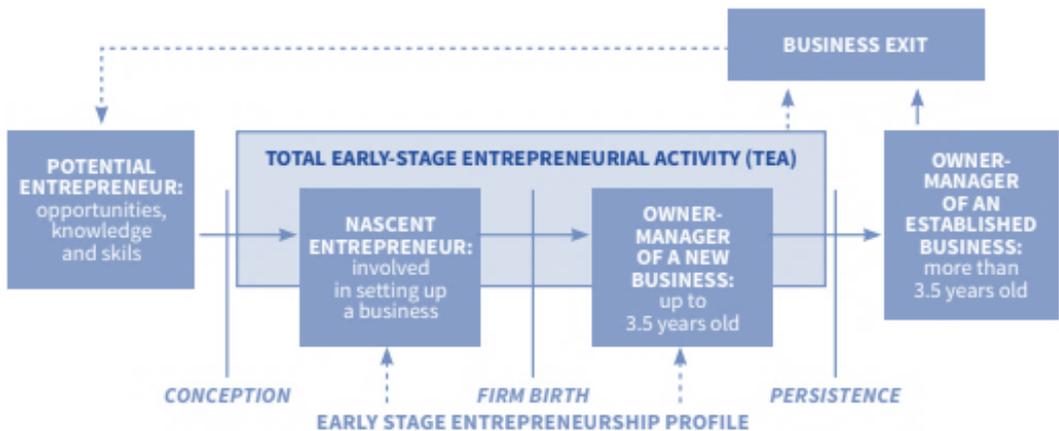
2.1 Youth self-employment and their early-stage entrepreneurial activity

Young people’s entrepreneurial activity is expressed in their entrepreneurial participation and interest in self-employment. Although youth interest in self-employment has increased in the EU over the past decade, the share of self-employed youth remains relatively low. In 2020, there were about 2 million self-employed youth (20-29 years old) in the EU. This represented 7% of working youth (ages 20-29), half of the total share of working people (ages 15-64) who were self-employed (14%) (OECD & European Commission, 2021, p. 130). The highest rate of self-employed youth was found in Greece (12.8%), followed by Italy (12.1%), and the lowest rate was recorded in Germany (2.7%). At the same time, it should be noted that there are significant differences in the motivation of young entrepreneurs who decide to follow an independent entrepreneurial path.

High youth unemployment leads to entrepreneurial engagement motivated by the need or desire to survive. Those who choose a self-employment path and were not previously unemployed are mostly motivated by a desire for greater independence, but also by the opportunity to become their own boss (OECD & European Union, 2019).

In what follows, early entrepreneurial activity among youth is presented using data from the Global Entrepreneurship Monitor (GEM), the world’s largest longitudinal study of entrepreneurship. Starting from the perception of an entrepreneurial opportunity, the entrepreneurial process goes through several successive stages initiated by potential entrepreneurs, then by nascent entrepreneurs, and finally by new entrepreneurs. Nascent and new entrepreneurs together constitute total early-stage entrepreneurial activity (Bosma et al., 2020; Rebernik et al., 2021), one of the fundamental measures of GEM research that will be analyzed in our paper. To understand the entrepreneurial process, we present it in Figure 1.

Figure 1 Entrepreneurial process

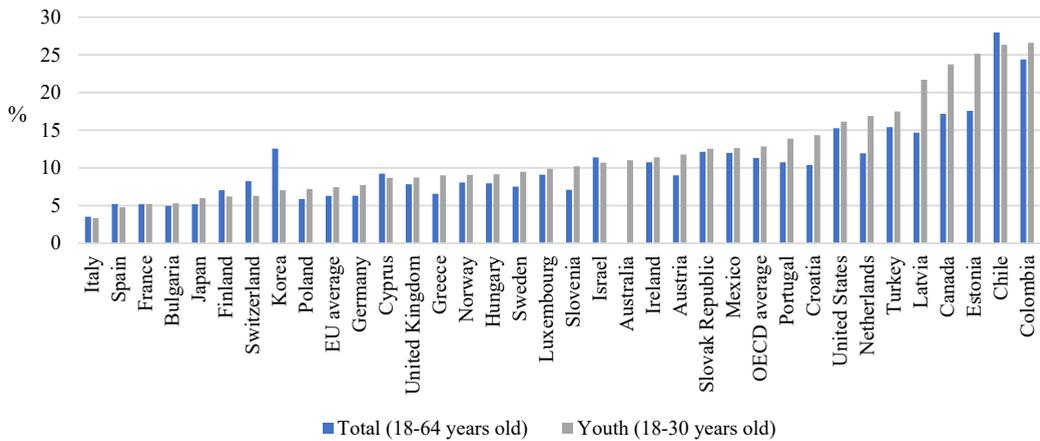


Source: Rebernik et al., 2021, p. 20

In what follows, we will look at the comparison between European countries and OECD countries. In 2016-2020, the level of early-stage entrepreneurial activity among youth differed eightfold between EU and OECD countries (Figure 2). The percentage of youth involved in starting a business varied from about 3.3% in Italy to 26.6% in Colombia. These differences can be explained by many factors, including societal attitudes toward entrepreneurship and risk, the power of enterprise policy, market

dynamics, the relative size of the public sector, an economic structure, and others (OECD & European Commission, 2021, p. 140). A comparison of the share of early-stage entrepreneurial activity among youth compared to the total population also shows significant differences across countries. In Slovenia, youth were, on average, more entrepreneurially active (10.2%) than the adult population (7.1%), while in Korea their share lagged far behind the adult population average (7% vs. 12.6%).

Figure 2 Early-stage entrepreneurial activity of the total population and youth



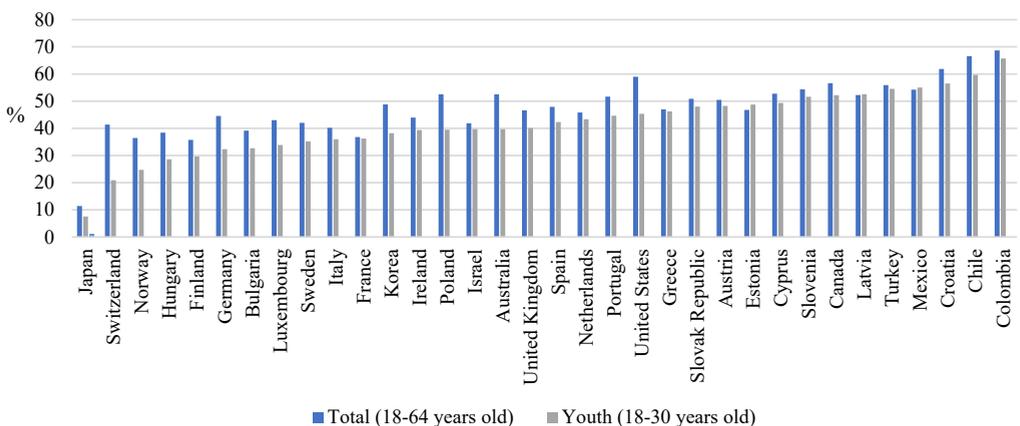
Source: Adapted from GEM (2021), Special Tables for OECD Adult Surveys Global Entrepreneurship Monitor (GEM) for the years 2016 to 2020

2.2 Perceived knowledge, experience and skills for entrepreneurship

According to the data from the *Mladina 2020* survey, youth in Slovenia report that they have the knowledge to start and run their own business based on their previous education. As many as 31.0% of youth fully agree with this statement. In 2010, the figure was still at 27.0%. The data on self-perception of their ability to identify business opportunities

also show that youth are equipped with knowledge and skills necessary for entrepreneurial activity. No less than 50.9% of youth agree with the statement that they have enough knowledge to identify a good business opportunity (Lavrič & Deželan, 2021). Figure 3 also shows that youth in Slovenia are certain about their own entrepreneurial knowledge and skills, as Slovenia ranks third among the European countries studied.

Figure 3 Perceived entrepreneurial knowledge, experience and skills of the total population and youth



Source: Adapted from GEM (2021), Special Tables for OECD Adult Surveys Global Entrepreneurship Monitor (GEM) for the years 2016 to 2020

According to the GEM survey data, a comparison of perceived entrepreneurial knowledge, experience and skills shows that there are significant differences between countries. For example, in some countries, youth are significantly more confident about their entrepreneurial skills; on the other hand, the comparison shows that youth are less likely than adults to report entrepreneurial skills. Differences in perceptions of one's knowledge and skills can be explained by societal attitudes toward entrepreneurship and work, as well as by the value that national policies place on entrepreneurship education and the degree to which entrepreneurship education is integrated into the formal education system (Rebernik et al., 2020). An important trend in intergroup research explains the generation theory. The generation theory (Mannheim, 1969) refers to historical changes in generations of young people and how today's youth differ from those who grew up in earlier times. Considering this, the older generation grew up when experience, especially experience of working in a business, was seen as the way to acquire entrepreneurial skills. In contrast, today's younger generation tends to grow up seeing training and education as ways to develop entrepreneurial skills. Education and training are seen as a pathway to entrepreneurship. As a result, today's budding entrepreneurs are often younger than previous generations (Schött et al., 2015). Entrepreneurship, however, shows a long-term positive relationship with age, but there is also a point at which the relationship inverts into an inverted U-curve (Blanchflower, 2004; Caliendo et al., 2014; Tubadji et al., 2021).

There are many studies that confirm that students who participate in entrepreneurial training/education have higher levels of entrepreneurial capacity and motivation to start a business than untrained individuals (Rasheed & Rasheed, 2003). Entrepreneurial training and entrepreneurial behaviours can have a significant impact on entrepreneurial traits and engagement in entrepreneurship, implying that policy makers should allocate more resources in the field of entrepreneurial education (Rudawska & Kowalik, 2019; Campo et al., 2021; Olugbola, 2017).

In what follows, we analyzed the relationships between early-stage entrepreneurial activity and perceived entrepreneurial skills at the global level. In doing so, we are interested in the differences between the studied groups of the total population

and youth. Consistent with the above, we test the following two hypotheses:

H1: Perceived entrepreneurial skills have a positive, statistically significant impact on total early-stage entrepreneurial activity.

H2: Perceived entrepreneurial skills of youth have a positive, statistically significant impact on early-stage entrepreneurial activity of youth.

2.3 Fear of failure

Research shows that intention to engage in entrepreneurship is strongly negatively related to perceived fear of failure (Vodá et al., 2020), and results also show that fear of failure is, on average, lower in environments and cultures with a family tradition of entrepreneurship and with a developed business network. In the environments where the fear of failure is strong, the perception and exploitation of business opportunities can be easily affected.

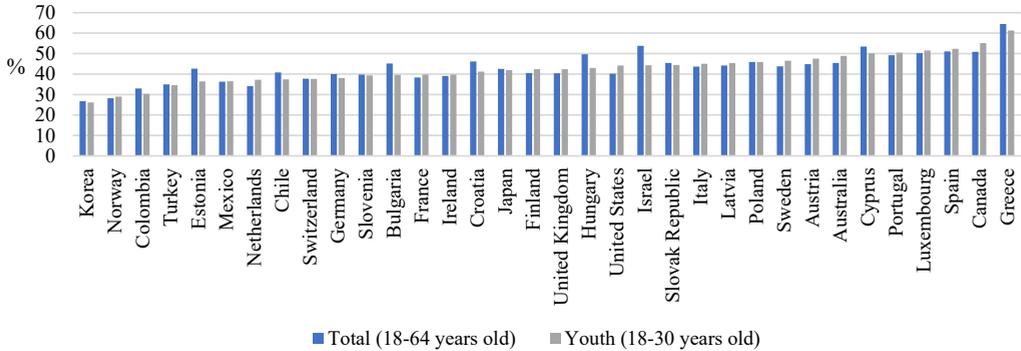
Using GEM data, Wennberg et al. (2013) found that the negative effect of fear of failure on entrepreneurial entry is moderated by the cultural practices of institutional collectivism and uncertainty avoidance. Tubadji et al. (2021) also found that country-specific differences in perceptions have the greatest impact on entrepreneurial propensity. They examined the sensitivity of young people's fear of failure to local culture in Germany and Greece and found that young people aged 15-24 years are less entrepreneurial in both Greece and Germany. According to Cacciotti et al. (2014), fear of failure not only represents an experience resulting from environmental influences, but also defines fear of failure as risk aversion considered as a personal trait (Hessels et al., 2011; Arenius & Minniti, 2005; Nefzi, 2018). Using a sample of students, Nefzi (2018) confirmed that trait fear is significantly related to a higher entrepreneurial risk perception and that this relationship is mediated by cognitive appraisal dimensions, particularly the theme of certainty. We acknowledge that fear of failure is an integral part of the entrepreneurial experience (Cacciotti et al., 2020), but its influence in the early stages of entrepreneurial activity may be more important than when it exists as an integral part of entrepreneurial practice.

Approximately four in ten youth (18-30 years old) in the EU in 2016-2020 reported that fear of failure was a barrier to starting a business. In general, fear of failure is the most frequently cited barrier to successful business creation, but in the EU, young peo-

ple were slightly less likely than the general average to report this barrier (39% vs. 44%). Interestingly, Slovenia had the lowest percentage of youth citing

this obstacle among EU countries (39.3%), as shown in Figure 4.

Figure 4 Fear of failure in the total population and among youth



Source: Adapted from GEM (2021), Special Tables for OECD Adult Surveys Global Entrepreneurship Monitor (GEM) for the years 2016 to 2020

In addition, we analyze the relationships between early-stage entrepreneurial activity and the fear of failure at the global level. We are interested in the difference between the studied groups of the total population and youth. Consistent with the above, we test the following two hypotheses:

H3: Fear of failure has a statistically significant negative impact on total early-stage entrepreneurial activity.

H4: Fear of failure among youth has a statistically significant negative impact on the early-stage entrepreneurial activity of youth.

3. Methodology and data

This study is based on secondary data analysis, meaning that we based our findings on data analyses that are publicly available and collected by credible research institutions. We extracted data on youth self-employment from EUROSTAT databases. The central theme - early-stage entrepreneurial activity among youth - is based on data from the GEM survey.

We conducted a macroeconomic analysis of self-employment and entrepreneurial activity among youth and the total population. Research in this area is dynamic, as we study youth entrepreneurship over time, or how it changes over time. We

used frequencies and descriptive methods where we described theories and concepts, as well as compilations where we summarized the viewpoints of other authors and combined their findings into a whole. Based on this whole picture, we formed our own positions. We also applied the comparative method of work, in which we compared the phenomena under study (self-employment, entrepreneurial activity, etc.). This was followed by an analysis and synthesis of the relationships between the theoretical starting points of the phenomena and the empirical results.

To test the hypotheses, we used the following variables:

Dependent variables:

- *TEA index* - indicates the number of persons per 100 adult inhabitants, aged 18 to 64, who are personally involved in the creation of new ventures, but are employed as owners/managers of new enterprises, which are not older than 42 months.
- *TEA index of youth* - indicates the number of persons per 100 adult inhabitants, aged 18 to 30, who are personally involved in the creation of new ventures, but are employed as owners/managers of new enterprises, which are not older than 42 months.

Independent variables:

- *Perceived entrepreneurial skills* - refers to the share of the adult population ages 18-64 who believe that they have knowledge, experience and skills for entrepreneurship.
- *Perceived entrepreneurial skills of youth* - refers to the share of youth ages 18-30 who think they have knowledge, experience and abilities for entrepreneurship.
- *Fear of failure* - refers to the share of the adult population ages 18-64 who believe that fear of failure would deter them from entrepreneurship.
- *Fear of failure in youth* - refers to the share of youth ages 18-30 who say that fear of failure would deter them from entrepreneurship.

Hypotheses H1, H2, H3, and H4 were tested using regression analysis to estimate the relationship between the dependent variable and the independent variable (Janssens et al., 2008), that is, the extent to which the independent variables can explain or pre-

dict the dependent variable and the contribution of the independent variables to explaining variations in the dependent variable. IBM SPSS Statistics 28.0 software was used for the analysis. The regression model in stochastic form used to test the hypotheses is as follows:

$$y = \beta_0 + \beta_n x_n + e,$$

where: y – dependent variable; β_0, β_n – value of regression coefficients; n=1, 2, 3; x_n – independent variable; n=1, 2, 3; e – residual.

For data processing, we also used the software tool Excel, which enabled us to prepare clear visual representations of some key findings.

4. Analysis results

Table 1 shows the descriptive statistics of the variables studied. The results show that, on average, youth has higher levels of entrepreneurial activity than the total population, perceived fear of failure is almost the same, while perceived entrepreneurial skills are significantly lower.

Table 1 Descriptive statistics

Statistics	TEA index	TEA index of youth	Fear of failure	Fear of failure in youth	Perceived entrepreneurial skills	Perceived entrepreneurial skills of youth
N	34	34	34	34	34	34
Mean	10.2	11.9	43.0	42.5	47.6	41.7
Standard error	0.9	1.1	1.3	1.3	1.8	2.0
Standard deviation	5.6	6.4	7.5	7.4	10.4	11.8
Kurtosis	2.5	0.3	1.2	0.6	3.5	1.0
Skewness	1.3	1.1	0.3	0.1	-0.9	-0.6
Minimum	0.0	3.3	26.7	26.2	11.4	7.6
Maximum	28.0	26.6	64.5	61.3	68.7	65.7

Source: Authors

According to Table 1, interestingly, the average TEA index of youth is higher than the average TEA index, while the average perceived entrepreneurial skills of youth are lower compared to average perceived entrepreneurial skills. This relationship may be due to the enthusiasm of youth, and willingness or desire to start a business or take on entrepreneurial opportunities. The rapid pace of technological change has also created new entrepreneur-

ial opportunities that are particularly attractive to young people, who are often more technically savvy than older generations. This may also reflect the growing global entrepreneurial culture, where entrepreneurship is increasingly seen as a positive, viable and achievable career choice (Schött et al., 2015; OECD & European Union, 2020). Despite this higher level of early-stage entrepreneurial activity, perceived entrepreneurial skills of youth are lower

compared to the average perceived entrepreneurial skills of the population. The difference in perceived entrepreneurial skills between youth and the total population may be due to different perspectives and life experiences, with older individuals having more experience and knowledge of the realities of entrepreneurship. Young entrepreneurs often mention lack of experience, education or training in entrepreneurial skills as barriers to a successful entrepreneurial mindset (OECD & European Union, 2020). They typically have less work experience than their older counterparts, which may lead to a lower perception of skills, or they may perceive themselves as less mature and less capable than older entrepreneurs. In addition, young entrepreneurs often have fewer resources, such as funding, support and a small professional network, which can limit their ability to demonstrate their capabilities.

We tested *hypothesis H1* with model I. The results of the regression model related to *the influence of perceived skills on the index TEA* show a positive and statistically significant influence, which we assumed in hypothesis H1. The regression coefficient ($\beta_1 = 0.336$) of the perceived skill variable is positive and statistically significant ($p = 0.000$; $p < 0.05$). The correlation coefficient between the dependent variable (TEA index) and the independent variable (perceived skills) is 0.613, indicating a medium-strong correlation. Moreover, the coefficient of determination ($R^2 = 0.376$) states that 37.6% of the variance of the TEA index is explained by the perceived skills variable, included in this model. Moreover, the F-statistic of the model ($F = 20.446$; $p = 0.000$; $p < 0.05$) states that the model is valid. We can easily *accept* hypothesis H1. The results of the test are also shown graphically in Figure 5.

Table 2 Regression model I - impact of perceived skills on the TEA index

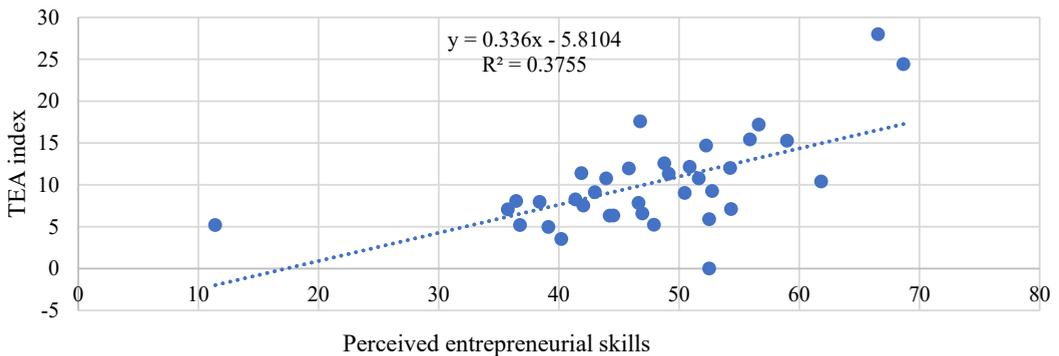
Model I	B	Std. error	Beta	t	Sig.
(Constant)	-5.810	3.609		-1.610	0.117
Perceived skills	0.336	0.074	0.613	4.522	0.000
R	0.613				
R square	0.376				
Std. error of the estimate	4.445				
F-test (Sig.)	20.446*				

Dependent variable: TEA index

*Note: statistically significant at $p = 0.000$

Source: Authors

Figure 5 Impact of perceived skills on the TEA index



Source: Authors

We tested *hypothesis H2* with model II. The presented results of the regression model related to the *influence of perceived skills of youth on the TEA index of youth* are positive and statistically significant (Figure 6). In particular, the regression coefficient ($\beta_1 = 0.384$) of the perceived skills of youth variable is positive and statistically significant ($p = 0.000$; $p < 0.05$). The correlation coefficient between the dependent variable (*TEA index of youth*) and the independent variable (*perceived skills of youth*) is 0.703, indicating a medium-strong correlation. The coefficient of determination ($R^2 = 0.494$) states that

49.4% of the variance of the TEA index of youth is explained by the perceived skills of youth variable included in this model. As for the F-statistic of the model, the value of the F-test is high ($F = 33.217$), which also means that most of the variance of the dependent variable is explained by the regression equation, and the significance of the F-factor is 0, which means that the model is valid as a whole. We can easily *confirm hypothesis H2*, which assumes that perceived entrepreneurial skills of youth have a positive, statistically significant impact on youth early-stage entrepreneurial activity.

Table 3 Regression model II - influence of perceived skills of youth on the TEA index of youth

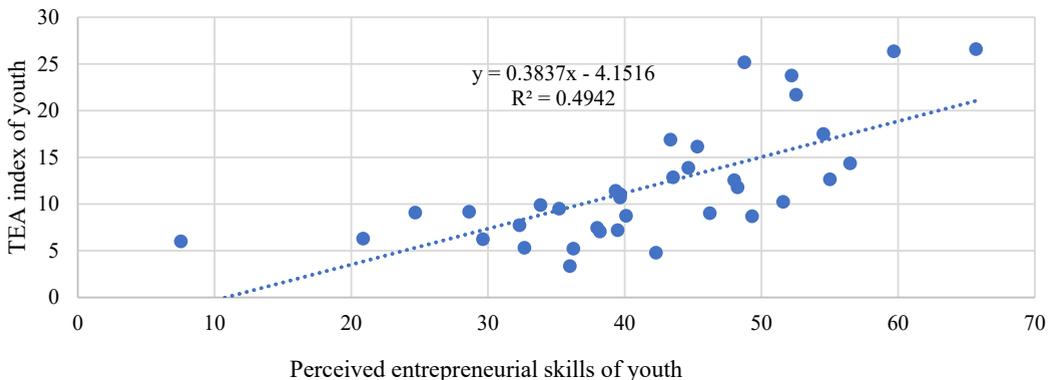
Model II	B	Std. error	Beta	t	Sig.
(Constant)	-4.152	2.878		-1.444	0.158
Perceived skills of youth	0.384	0.067	0.703	5.763	0.000
R	0.703				
R square	0.494				
Std. error of the estimate	4.522				
F-test (Sig.)	33.217*				

Dependent variable: TEA index

*Note: statistically significant at $p = 0.000$

Source: Authors

Figure 6 Influence of perceived skills of youth on the TEA index of youth



Source: Authors

We tested *hypothesis H3* using regression model III, in which we tested the *influence of perceived fear of failure on the index TEA*. The results show that *perceived fear of failure has a negative influence on the*

TEA index. The regression coefficient ($\beta_1 = -0.179$) is negative and too small to be statistically significant ($p = 0.163$; $p > 0.05$). The correlation coefficient between the dependent variable (*TEA index*) and

the independent variable (*fear of failure*) is 0.238, indicating a weak correlation. The coefficient of determination ($R^2 = 0.056$) states that only 5.6% of the variance of the TEA index (dependent variable) is explained by the fear of failure variable included in the model. Furthermore, the F-statistic of the model

($F = 2.034$; $p = 0.163$) states that the model as a whole is neither statistically significant nor valid. So we *reject* hypothesis H3. The direction of influence is as hypothesized, but it is not statistically significant. The results of the test are also shown graphically in Figure 7.

Table 4 Regression model III - influence of perceived fear of failure on the TEA index

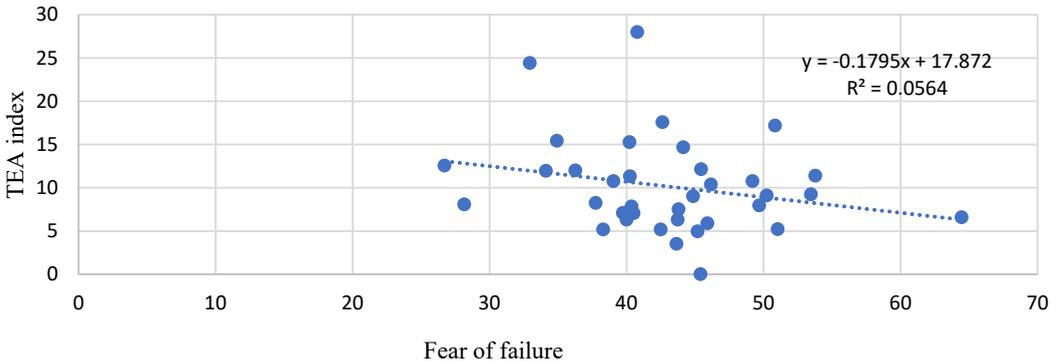
Model III	B	Std. error	Beta	t	Sig.
(Constant)	17.872	5.485		3.260	0.003
Perceived fear of failure	-0.179	0.126	-0.230	-1.426	0.163
R	0.238				
R square	0.056				
Std. error of the estimate	5.464				
F-test (Sig.)	2.034*				

Dependent variable: TEA index

*Note: statistically not significant at $p = 0.163$

Source: Authors

Figure 7 Influence of perceived fear of failure on the TEA index



Source: Authors

We tested *hypothesis H4* with regression model IV. The results show that the regression coefficient for the fear of failure in youth variable ($\beta_1 = -0.116$) is negative and not statistically significant ($p = 0.440$; $p > 0.05$). The correlation coefficient (R) between the dependent variable (TEA index of youth) and the independent variable (fear of failure in youth) is 0.133, indicating a weak correlation between the observed variables. The coefficient of determination ($R^2 = 0.018$) states that only 1.8% of the variance of the TEA index of youth is explained by the inde-

pendent variable (fear of failure in youth) included in the observed model. In addition, the F-statistic for the regression model is 0.612, which also indicates that only a small portion of the variance of the dependent variable is explained by the regression equation. The F-statistic of the model also states that the proposed model is not valid, so we *reject* hypothesis H4. The direction of influence is as hypothesized, but it is not statistically significant. The results are also illustrated graphically in Figure 8.

Table 5 Regression model IV - influence of perceived fear of failure in youth on the TEA index of youth

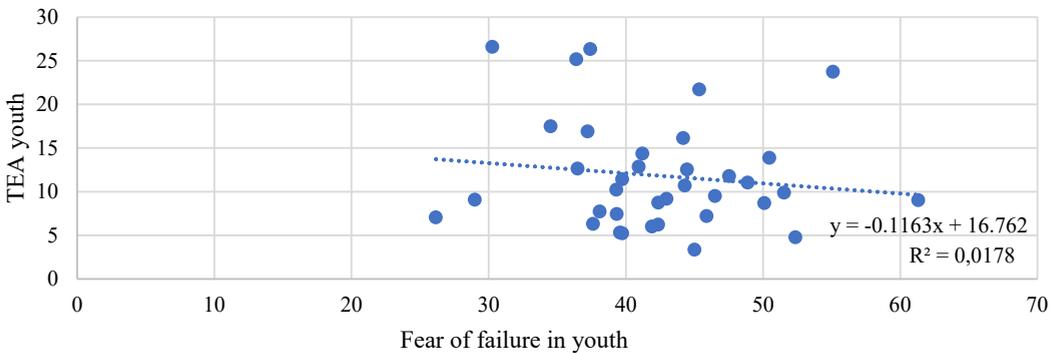
Model I	B	Std. error	Beta	t	Sig.
(Constant)	16.742	6.366		2.635	0.013
Perceived fear of failure	-0.116	0.148	-0.133	-0.786	0.440
R	0.133				
R square	0.018				
Std. error of the estimate	6.302				
F-test (Sig.)	0.612*				

Dependent variable: TEA index of youth

*Note: statistically not significant; p = 0.440

Source: Authors

Figure 8 Influence of fear of failure in youth on the TEA index of youth



Source: Authors

5. Discussion of the results

In the paper, we introduced the level of self-employment of youth in Slovenia and in the EU. We found that despite the fact that youth’s interest in self-employment has increased in the EU over the last decade, the percentage of self-employed youth remains relatively low (in Slovenia, it is 5.5%; the EU average is 6.6%). The presentation of early-stage entrepreneurial activity of youth for the period 2016-2020 showed that Slovenia ranks 18th among the 34 countries studied. Therefore, the influence of the two most common barriers to entrepreneurship, namely perceived entrepreneurial knowledge, experience and skills, and fear of failure was examined. Interestingly, youth in Slovenia indicate that their previous education has provided them with knowledge that enables them to start and run their own business. As many as 31% of youth strongly agree with this statement. In 2010, the figure was

27%. According to the GEM survey data, Slovenia ranks third among the 21 European countries surveyed in terms of the indicator of perception of one’s own knowledge and skills for entrepreneurship. Encouraging is also the fact that fear of failure, which is considered one of the strongest inhibiting factors for entrepreneurial activity, is relatively low. In Europe, a lower indicator was measured only in Germany, the Netherlands and Estonia.

The results show differences in perceived entrepreneurial skills between youth and the total population, with youth perceiving lower levels of entrepreneurial skills. In addition, we confirmed hypotheses H1 and H2, in which we found that perceived entrepreneurial skills have a positive, statistically significant influence on total early-stage entrepreneurial activity, which is true for both the total population and youth. Regarding the descriptive statistics, it is evident that youth are more likely be entrepreneurs

than the total population, but they have lower levels of entrepreneurial skills. The regression analysis results make a special contribution to this study. For model II, regression, correlation and determination coefficients are higher than for model I, suggesting that entrepreneurial skills required by youth (who typically have less work experience) have a stronger impact on entrepreneurial activity than the population as a whole. As entrepreneurial skills play a significant role in entrepreneurial activity of youth, they show great potential for future generations. This is why entrepreneurship education is a key measure that helps youth acquire and develop relevant skills. Entrepreneurial skills such as opportunity recognition, innovation, critical thinking, resilience, decision-making, teamwork and leadership are therefore beneficial for all youth to better overcome obstacles in the business environment as well as in different life situations.

In addition, the data also show that there are perceived differences in fear of failure between youth and the total population. We could not confirm hypotheses H3 and H4, which tested the impact of fear of failure on total early-stage entrepreneurial activity. We obtained a negative direction of the effect, but not statistically significant characteristics for the effect to be significant. Although fear of failure has often been cited in relation to previous findings on barriers to youth entrepreneurial activity, the data suggest almost the same level of fear in the total population. In this case, young people show even lower levels of fear of failure compared to the total population. The results also suggest that the current market situation makes entrepreneurship more accessible. Many young people today want to be their own bosses and have the freedom to work on projects they are passionate about. Entrepreneurship offers them side jobs, alternative options or the chance to create something of their own and be in control of their career. In addition, technology has made it easier and more cost-effective to set up and run a business, making entrepreneurship more attractive to young people.

6. Policy implications

According to the results, to encourage and support youth entrepreneurship, a wide range of policy instruments are used in the OECD/EU member states, including entrepreneurship education and teaching, various financial instruments and the de-

velopment of entrepreneurial networks, which have been strengthened through substantial investments by national and regional governments, often with the support of the European Union. The findings of *The Missing Entrepreneur* study (OECD & European Commission, 2021) show that the quality of youth entrepreneurship policies varies widely across regions and countries, so there is still little knowledge sharing about “what works”. In light of the severe consequences of the COVID-19 pandemic, governments have renewed their commitment to supporting youth, including increased attention to youth entrepreneurship policies. Evaluation findings show that youth entrepreneurship programs may play a role as part of government policy responses to growing youth unemployment during the economic crisis (Kajzer, 2020). However, it is less clear where governments should focus their efforts. Recent research shows that financial support typically has a greater impact on business sustainability, but evaluations show that young entrepreneurs often value training, coaching and mentorship more. In order to increase entrepreneurial skills for boosting entrepreneurial potential among youth, the government’s priority measures should therefore:

- provide young entrepreneurs with mentorship, networking opportunities, and tailored entrepreneurship education and training, connecting them with experienced business owners and investors who can offer guidance and support. For example, in Slovenia, training and coaching for youth are offered by the SPIRIT Slovenia national agency, which gives training and support for teachers and professors as well, provides incentives to schools to carry out activities with youth, and encourages the development of young people’s ideas with the support of mentors and funds in cooperation with support institutions at the national, regional and local level (Crnogaj, 2020). Such programs strengthen self-confidence in one’s own abilities, broaden perspectives and knowledge about entrepreneurship, and could also encourage youth to see failure as an opportunity for growth and learning rather than a setback, emphasizing the value of taking risks and trying new things. In addition, governments should work on incorporating a national strategy addressing entrepreneurship education, which would incorporate entrepreneurship education into

school curricula, starting from an early age, to give young people the skills and knowledge they need to start and run successful businesses. In addition, digital support (integrating digital literacy into national curricula) will benefit youth in acquiring digital skills and help them to start and grow businesses, including in digital markets;

- promote youth entrepreneurship, as it is very close to youth preferences in the world of work, if the pitfalls of job security and the tendency to be “forced into self-employment” are properly addressed, which only leads to further insecurity among youth (Lavrič & Deželan, 2021). Providing an enabling environment and appropriate entrepreneurship support policies and programs would help actualize the intentions and lower the fear of failure in youth; and
- improve the attractiveness of support initiatives by better-considering youth perspectives when designing initiatives (OECD & European Commission, 2021). Governments can invest in infrastructure development, such as building incubators, accelerators, and co-working spaces, which provide youth with the resources and facilities they need to start and grow their businesses.

7. Limitations and future research directions

Since the field of study of youth entrepreneurship is extensive, we set certain limitations to our research. The first limitation was that we compared data for Slovenia and other countries studied based on panel data for the period 2016-2020. Between 2016 and 2020, all EU member states participated in the GEM survey, with the exception of Belgium, the Czech Republic, Denmark, Lithuania, Malta and Romania. However, the following countries did not participate in the survey every year (participation years indicated): Austria (2016, 2018, 2020), Bulgaria (2016-18), Estonia (2016-17), Finland (2016), France (2016-18), Hungary (2016), Ireland (2016-19), Latvia (2016-17, 2019-20), and Portugal (2016, 2019). The following OECD countries did not participate in the GEM survey between 2016 and 2020: Belgium, the Czech Republic, Denmark, Iceland, Lithuania, and New Zealand. The following countries did not participate in the survey every year (years of participation indicated): Australia

(2016-17, 2019), Austria (2016, 2018, 2020), Estonia (2016-17), Finland (2016), France (2016-18), Hungary (2016), Ireland (2016-19), Japan (2017-19), Latvia (2016-17, 2018-19), Mexico (2016-17, 2019), Norway (2019-20), Portugal (2016, 2019), and Turkey (2016, 2018) (OECD & European Commission, 2021). In addition, youth entrepreneurship refers to youth of different age groups. In international studies, the term “youth” refers to people aged 15-24 years, but in the GEM survey, they are defined as the age group between 18 and 30.

In addition, the results suggest some possible directions for future research that could provide a more comprehensive understanding of the impact of perceived entrepreneurial skills and fear of failure on youth entrepreneurial activity. The study found that perceived skills have a positive impact on the TEA index of youth, but lacks an examination of the underlying mechanisms (indirect effects) that would explain this relationship. Future studies could explore the specific factors (including a wider range of independent variables) that contribute to the development of perceived skills and their impact on youth entrepreneurial intentions and activities. The same applies to factors that influence fear of failure. In addition, the relative prevalence of motivation for entrepreneurial activity would provide useful insights into the quality of early-stage entrepreneurial activity, i.e., whether youth early-stage entrepreneurial activity was driven by necessity or opportunity motives. The GEM has shown that enterprises founded by opportunity-driven entrepreneurs are much more likely to survive and employ people than firms founded by necessity-driven entrepreneurs (Schött et al., 2015).

Moreover, additional factors influencing the TEA index could be explored. The study only examined the impact of perceived skills and fear of failure (two common barriers for youth) on the TEA index. Future research could examine the impact of other factors such as personality traits, access to resources, social networks, educational level, and perceived risks on the TEA index of young people.

This study focuses on youth in the EU, with a particular focus on Slovenia. Future research could investigate the relationship between perceived skills and fear of failure and the TEA index in other segments, for example, young people in high, middle, or lower-income countries or in different cultural contexts.

REFERENCES

1. Arenius, P. & Minniti, M. (2005). Perceptual variables and nascent entrepreneurship. *Small Business Economics*, 24(3). 233-247. <https://doi.org/10.1007/s11187-005-1984-x>
2. Blanchflower, D. G. & Oswald, A. J. (2009). What Makes a Young Entrepreneur?. In Furlong, A. (Ed.), *Handbook of Youth and Young Adulthood: New Perspectives and Agendas* (pp. 188-199). Routledge.
3. Bosma, N., Hill, S., Somers, A. I., Kelley, D., Levie, J. & Tarnawa, A. (2020). *Global Entrepreneurship Monitor: 2019/2020 Global Report*. Global Entrepreneurship Research Association & London Business School.
4. Cacciotti, G., Hayton, J. C., Mitchell, J. R. & Allen, D. G. (2020). Entrepreneurial fear of failure: Scale development and validation. *Journal of Business Venturing*, 35(5), 106041. <https://doi.org/10.1016/j.jbusvent.2020.106041>
5. Cacciotti, G. & Hayton, J. C. (2014). *Fear of Failure and Entrepreneurship: A Review and Direction for Future Research* (ERC Research Paper No. 24). Coventry: Enterprise Research Centre.
6. Caliendo, M., Fossen, F. & Kritikos, A. S. (2014). Personality characteristics and the decisions to become and stay self-employed. *Small Business Economics*, 42(4). 787-814. <https://doi.org/10.1007/s11187-013-9514-8>
7. Campo, L. A., Amar, P. & Olivero, E. (2021). Interaction of Potential and Effective Entrepreneurial Capabilities in Adolescents: Modeling Youth Entrepreneurship Structure Using Structural Equation Modeling. *Research Square preprint*. <https://doi.org/10.21203/rs.3.rs-537148/v1>
8. Crnogaj, K. (2020). *Inclusive Entrepreneurship Policies, Country Assessment Notes - Slovenia 2020*. OECD.
9. Green, F. (2013). *Youth entrepreneurship: A background paper for the OECD Centre for Entrepreneurship SMEs and Local Development*. OECD. http://www.oecd.org/cfe/leed/youth_bp_final.pdf
10. Hessels, J., Grilo, I., Thurik, R. & van der Zwan, P. (2011). Entrepreneurial exit and entrepreneurial engagement. *Journal of Evolutionary Economics*, 21, 447-471. <https://doi.org/10.1007/s00191-010-0190-4>
11. Hopp, C. & Ute, S. (2012). The influence of socio-cultural environments on the performance of nascent entrepreneurs: Community culture, motivation, self-efficacy and start-up success. *Entrepreneurship & Regional Development*, 24(9-10), 917-945. <https://doi.org/10.1080/08985626.2012.742326>
12. Janssens, W., Wijnen, K., De Pelsmacker, P. & Van Kenhove, P. (2008). *Marketing Research with SPSS*. Pearson Education.
13. Kajzer, A. (2020). *Vpliv epidemije na trg dela*. UMAR. https://www.umar.gov.si/fileadmin/user_upload/publikacije/kratke_analize/2020_12_Vpliv_epidemije_na_trg_dela/Vpliv_epidemije_na_trg_dela_v_EU_Kajzer_01.pdf
14. Kim, G., Kim, D., Lee, W. J. & Joung, S. (2020). The Effect of Youth Entrepreneurship Education Programs: Two Large-Scale Experimental Studies. *SAGE Open*, 10(3). <https://doi.org/10.1177/2158244020956976>
15. Kluge, J. (2014). *Youth labor market interventions*. IZA World of Labor. <https://wol.iza.org/articles/youth-labor-market-interventions-in-oecd-countries> <https://doi.org/10.15185/izawol.106>
16. Lavrič, M. & Deželan, T. (Eds.). (2021). *Mladina 2020: položaj mladih v Sloveniji*. Univerza v Mariboru, Univerzitetna založba & Založba Univerze v Ljubljani. <https://doi.org/10.18690/978-961-286-475-0>
17. Mannheim, K. (1969). The Sociological Problem of Generations. *Studies in Social Movements*.
18. Nefzi, N. (2018). Fear of failure and entrepreneurial risk perception. *International Journal of Entrepreneurial Knowledge*, 6(2), 45-58. <https://doi.org/10.37335/ijek.v6i2.77>

19. OECD & European Union (2017). Reader's guide. In *The Missing Entrepreneurs 2017: Policies for Inclusive Entrepreneurship*. OECD Publishing.
20. OECD & European Union (2019). *The Missing Entrepreneurs 2019: Policies for Inclusive Entrepreneurship*. OECD Publishing. <https://doi.org/10.1787/3ed84801-en>
21. OECD & European Commission (2020). *Policy brief on recent developments in youth entrepreneurship*.
22. OECD & European Commission (2021). *The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment*. OECD Publishing. <https://doi.org/10.1787/71b7a9bb-en>
23. Olugbola, S. A. (2017). Exploring entrepreneurial readiness of youth and startup success components: Entrepreneurship training as a moderator. *Journal of Innovation & Knowledge*, 2(3), 155-171. <https://doi.org/10.1016/j.jik.2016.12.004>
24. Rasheed, H. S. & Rasheed, B. Y. (2003). Developing entrepreneurial characteristics in minority youth: The effects of education and enterprise experience. In Stiles, C. H. & Galbraith, C. S. (Eds.), *Ethnic Entrepreneurship: Structure and Process*. Emerald Group Publishing Limited.
25. Rebernik, M., Širec, K., Bradač Hojnik, B., Crnogaj, K., Rus, R. & Tominc, P. (2021). *Podjetništvo v novi stvarnosti: GEM Slovenija 2020*. Univerza v Mariboru, Univerzitetna založba. <https://doi.org/10.18690/978-961-286-467-5>
26. Rebernik, M., Širec, K., Tominc, P., Crnogaj, K., Rus, R. & Bradač Hojnik, B. (2020). *Raznolikost podjetniških motivov: GEM Slovenija 2019*. Univerza v Mariboru. Univerzitetna založba. <https://doi.org/10.18690/978-961-286-153-7>
27. Rudawska, I. & Kowalik, J. (2019). Towards university-business cooperation: Key drivers, barriers and modes. *International Entrepreneurship Review*, 5(2), 91-105. <https://doi.org/10.15678/IER.2019.0502.06>
28. Schött, T., Kew, P. & Cheraghi, M. (2015). *Future Potential: A GEM perspective on youth entrepreneurship 2015*. GERA. <http://www.innovacion.cl/wp-content/uploads/2015/08/gem-2015-youth-report-1436523546.pdf>
29. Spigel, B. (2017). The relational organization of entrepreneurial ecosystems. *Entrepreneurship Theory and Practice*, 41(1), 49-72. <https://doi.org/10.1111/etap.12167>
30. Tubadji, A., Dietrich, H., Angelis, V., Haas, A. & Schels, B. (2021). Fear-of-failure and cultural persistence in youth entrepreneurship. *Journal of Small Business & Entrepreneurship*, 33(5), 513-538. <http://dx.doi.org/10.1080/08276331.2019.1692999>
31. Vodă, A. I., Haller, A., Anichiti, A. & Butnaru, G. I. (2020). Testing entrepreneurial intention determinants in post-transition economies. *Sustainability*, 12(24), 1-28. <https://doi.org/10.3390/su122410370>
32. Wennberg, K., Pathak, S. & Autio, E. (2013). How culture moulds the effects of self-efficacy and fear of failure on entrepreneurship. *Entrepreneurship & Regional Development*, 25(9-10), 756-780. <https://doi.org/10.1080/08985626.2013.862975>

