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Entrepreneurial intentions in a turbulent environment : the role of own perceptions versus objective consequences of socio-economic shocks

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Entrepreneurial intentions in a turbulent environment: the role of own perceptions versus objective consequences of socio-economic shocks.

ABSTRACT: Before acting, entrepreneur expresses the intention to create a new venture. Analyzing entrepreneurial intentions helps to predict the level of entrepreneurial activity. Following behavioral theory of entrepreneurship, this research aims to develop and test hypotheses about how individual's perceptions regarding own abilities and external environment together with objective consequences of socio-economic shocks affect entrepreneurial intentions. The research is based on individual-level data from 2019 and 2021 years from Global Entrepreneurship Monitor (GEM) in Belarus. The results show that personal perceptions regarding own abilities and social ties play major role in forming entrepreneurial intentions. It is also confirmed, that objective negative changes in the external environment before and after the crisis of 2020 year are positively related with entrepreneurial intentions of population. The study highlights the importance of educational perspective and expanding of network ties as a core part of entrepreneurship development policies for Belarus during a socio-economic downturn.

1. Introduction

Entrepreneurship is an effective tool in promoting economic growth. It is even more topical in the period of economic downturns. Entrepreneurship development promotes innovations, stimulates new employment, contributes to positive social changes (Drucker, 2014; Doern, 2019). Entrepreneurs are important actors of economic system, providing its improvement through stimulating innovations and creative thinking (OECD, 2021). However we still have little understanding of how does the crisis affect the decisions of individuals to choose entrepreneurial career. At the same time, intention to start a business is the first stage of entrepreneurial process, which is a key to understanding the whole phenomenon (Krueger & Carsrud, 1993).

The year 2020 brought to Belarus not only general problems caused by Pandemic crises, but also political instability, resulted in various negative effects in social and economic life. There is lack of data regarding impact of socio-political changes, however according to data from Global Entrepreneurship Monitor, 55.6% of Belarusians in 2021 were reporting that their household lost income as a result of the pandemic. At the same time early-stage entrepreneurial activity expanded from 5,8% in 2019 to 13,5% in 2021 and entrepreneurial intentions among population have risen from 9,7% to 30,1% respectively (Figure 1). The figures are still below average activity rates for middle income countries, however the loss of income could be one of the reasons, why the interest to entrepreneurship has risen so dramatically due to necessity reason. Moreover, only 25% of respondents saw good opportunities to start the business and 52,9% would not start a business due to fear that it might fail – which is one of the worst indicators among the surveyed economies with a similar income level (GEM 2021).
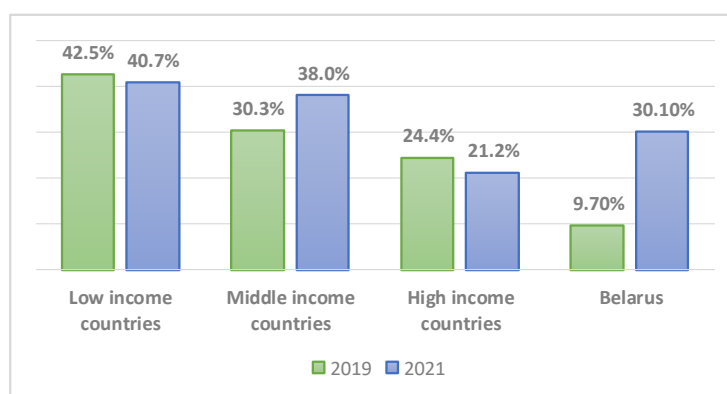

FIGURE 1: Average level of entrepreneurial intentions by groups of studied countries by income level and in Belarus in 2021 (% adults)

Source: Own calculations based on GEM 2021 global national level data

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The growth of entrepreneurial activity together with negative perceptions regarding current opportunities and fears of failure form rather paradoxical picture. On the one hand, unfavorable economic situation forces people to run a business due to necessity reasons, on the other hand, the share of established businesses' owners also increased from 2.7% in 2019 to 5.5% in 2021, which illustrates the rise in surviving rates of new businesses (Figure 2).
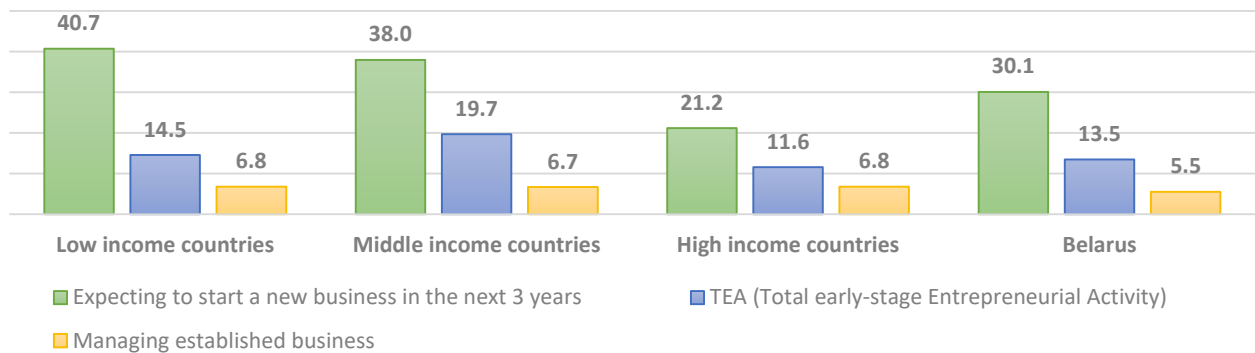

FIGURE 2: Average level of entrepreneurial activity in Belarus and groups of studied countries by income level in 2021 (% adults)

Source: Own calculations based on GEM 2021 global national level data

Moreover in 2021 almost 50% of early-stage and established businesses expected to create new jobs in the following five years, which is the same level as it was in 2019. That is why investigating entrepreneurial activity in the context of external turbulence may improve our understanding of objective antecedents of entrepreneurship. Before acting entrepreneur expresses the intention to create a new venture (Krueger et al, 2000). Thus analyzing intentions helps to predict entrepreneurial behavior more accurately than direct assessment of personality traits, beliefs or demographics (Bird, 1988).

Existing studies focus on entrepreneurial intentions of university students (Guerrero et al., 2006; Twum et al., 2021; Jeger et al., 2014), whereas fewer researches investigate general population (Ahadi, & Kasraie, 2020; Borozan & Pfeifer, 2014). In both cases, entrepreneurial intentions are studied under behavioral paradigm, where both external and internal factors impact the intentions indirectly, through the subjective perceptions and attitudes of individuals. However, crisis also brings objective positive and negative consequences for entrepreneurship development: opening new opportunities, but struggling with resource losses and demand decline (Doern et al., 2018; Peris-Ortiz et al., 2014). The Belarusian context at the turn of 2019 and 2021 years was also characterized by the crisis of the rule of low and negative transformations in democratic institutions. However little is known about the antecedents of entrepreneurial intensions during crises, particularly in developing post-soviet economies. Thus,

the aim of the paper is to develop and test the model of entrepreneurial intentions where both internal factors and changes in external context are investigated.

After the introduction, the overview of the literature on entrepreneurial intentions is presented in Section 2. Section 3 explains the methodology. Section 4 – analysis and results. Section 5 - discussion and conclusions

2. Theoretical framework

2.1 Entrepreneurial intentions

According to behavioral theory, the intention to start business precedes any entrepreneurial action (Krueger et al, 2000). Mainly psychological and behavioral approaches explain the motivation and behavior of nascent entrepreneurs. Researchers also take into account demographic characteristics and external economic context.

There are demographic characteristics that are associated with entrepreneurial intentions and actions: birth order, gender, age, education, race (Bonnett & Furnham, 1991; Turker & Selcuk, 2008). However, as Robinson et al. (1991) notes, the prediction of entrepreneurial behavior is quite complex process and can not be handled by anything as simple as pure demographics. Gender or race just provide specific reaction to circumstances but not determine entrepreneurship by its own (Bird, 1988).

Psychological studies underline the role of personal characteristics in forming entrepreneurial intentions: persistence, risk taking, inner control etc. (Boyd & Vozikis, 1994; Ferreira et al., 2012; McGee, 2009). According to Robinson et al. (1991) entrepreneurs have higher level of self-confidence than non-entrepreneurs. The study suggest that risk-taking is a good determinant of entrepreneurial intention.

Behavioral studies suggest, that not only objective personal characteristics play role in entrepreneurial intentions, but the perception of both own strengths and external conditions matters. According the Theory of Planned Behavior there are three main antecedents of entrepreneurial intentions: personal attitudes, subjective norms and perceived behavioral control, which reflect the underlying cognitive structure of individuals (Ajzen, 1991; Krueger & Carsrud, 1993). Generally the theory of planned behavior suggests, that people's intentions are formed by their believes and perceptions of the object. "Each behavioral belief links a given behavior to a certain outcome, or to some other attribute, such as the cost incurred in performing the behavior" (Armitage & Conner, 2001, p. 474). Subjective norms reflect perception of general

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social pressure and its impact on behavior. In studies of entrepreneurial intentions this element is often associated with social norms and social ties (Ajzen, 1991). Personal attitudes refer to own evaluations of performing a particular behavior. It is determined by associations with subjective value of a given outcome of this behavior. Finally, perceived behavioral control provides information about the potential constraints on action as perceived by the actor, for example previous experience or availability of resources and opportunities. In existing empirical studies, perceived behavioral control either has direct impact on behavior or moderates the relation between intention and behavior (Armitage & Conner, 2001).

Ferreira et al. (2012) complemented both psychological and behavioral characteristics by means of structural equation modeling, suggesting that entrepreneurial intentions are affected by need for achievement, self-confidence, and personal attitude. The study also confirmed the independent role of behavioral dimension, where subjective norms and personal attitude affect perceived behavioral control. Thus, both objective personal characteristics and "perception-driven" behavioral factors can be evaluated independently.

In addition to individual factors, the economic context also has impact on entrepreneurial intentions and actions (Bird, 1988). The first stage of entrepreneurial process in Moore's (1986) model is affected by both personal characteristics and environment: sources of opportunity, support of creativity, personal environment. Namely, these elements refer to institutional and social environment. As Mueller et al. (2002) states, the supply of entrepreneurs is seen as highly elastic, depending of opportunities for profit, which are derived from economic and political conditions. However, this study also highlights that external environment demonstrates the same impact on intentions as its perception. Segueira et al. (2007) following Granovetter's weak ties theory states, that environmental influences are indirect and generalized, whereas micro-level social network of individual can directly influence the individual.

Majority of authors agree that entrepreneurial intentions are formed under the combination of factors (Mueller et al., 2002), however no clear structure of these factors is proposed in the literature. Thus, we suggest theoretical model of entrepreneurial intentions, consisting of three levels of factors: a) perceiving own abilities, which namely comprises self-efficacy; b) perceiving social norms through existing network ties; c) both objective and perceived state of external environment (Figure 3). The model considers perceptions on three levels: individual-society-environment with attempt to evaluate also objective changes in external conditions.
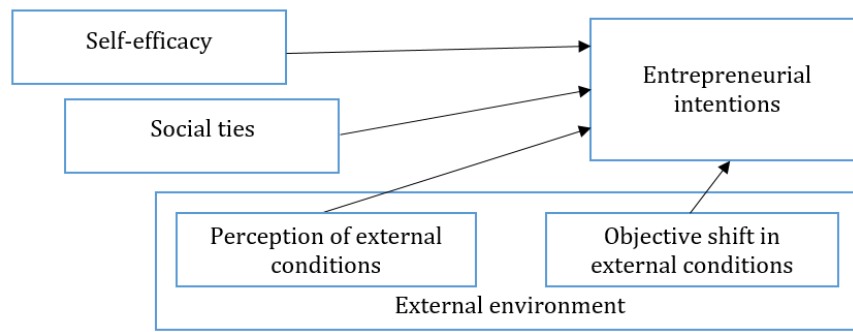
Self-efficacy

Social ties

Entrepreneurial intentions

Perception of external conditions

Objective shift in external conditions

External environment

FIGURE 3: Theoretical model

2.2 Self-efficacy

According to the theory of planned behavior, entrepreneurial intentions are explained through perceptual factors. Following this framework the personal level is widely explored through self-efficacy construct, that means judgments regarding own capability to reach goals (Bandura, 1977). In recent studies, the concept of self-efficacy is seen as quite comprehensive indicator, and it tends to replace list of particular entrepreneurial skills, which is difficult to exhaustively identify. Self-efficacy affects the believes of individual and largely influences choices and efforts. If some of beliefs are beyond the perceived ability of a person, he or she will not act, regardless of social demand for this action (Boyd & Vozikis, 1994). However, if self-efficacy level is high, it makes a person to perform a task regardless of task demands (McGee et al., 2009). McGee et al. also show, that nascent entrepreneurs exhibit higher levels of self-efficacy from their counterparts which confirms the positive relationship not only between self-efficacy and intentions for starting a business, but also other stages of entrepreneurial process.

Thus, we hypotheses, that:

> *Hypothesis 1*: High level of self-efficacy positively influences the entrepreneurial intentions.

2.3 Social ties

Social ties are conceptualized as set of ties that connects individuals (Aldrich & Elam, 1997). The role of network ties in entrepreneurship development and performance of business is widely recognized (Cope et al., 2007). As it is underlined in Leyden et al. (2014), the ability to exploit social networks is a key to entrepreneurial success. Existence and diversity of social ties promote innovation and is important on every step of entrepreneurial process. Social network not only help to discover the opportunities but also constitutes mechanism to create them. The interaction with customers, suppliers, competitors and government agents may help in obtaining

valuable information, reduction in supply costs etc. (Twum et al., 2021). Social ties are important determinant of entrepreneurship development as it provides fundamental resources and expertise, opportunities, motivation and moral support (Sequeira et al, 2007;). The meaning of social ties is even more topical for Belarus due to low demand for loan capital from nascent entrepreneurs and small business, which raises the importance of financial support from family and friends.

There are several categories of social ties: formal/informal, weak/strong ties – which is determined by nature of relationship and frequency of interactions between individuals (Greve & Salaff, 2003). As Sequeira et al (2007) notes, close social environment is a source of practical assistance as well as values and attitudes, which stimulate entrepreneurial intentions. Furthermore strong informal ties are seen as a source of assistance in challenging situations, including moral support as well as financial resources needed for starting own business. Weak ties are seen as less affective, however they provide more diverse information and opportunities (Leyden et al., 2014). Both strong and week ties may serve as a role models, which stimulates a positive attitudes towards entrepreneurship. The role of networks is even more important in emerging markets due to underdeveloped supportive infrastructure (Twum et al., 2021). Given that we expect that:

Hypothesis 2: Social ties positively influence the entrepreneurial intentions.

2.4 The role of context

Perception of external conditions

Along with the perception of own abilities and role models, the perception of current economic situation and opportunities is important in forming entrepreneurial intentions. Bird (1988) suggests two contexts of entrepreneur's intentionality, where social, political and economic context is opposed to the "personal history, personality and abilities". This model aims to explain how various factors affects entrepreneurial intentions through "holistic contextual" thinking. Among contextual factors, stimulating entrepreneurship, Bruno & Tyebjee (1982) highlight availability of venture financing, government regulations, access to customers, suppliers and infrastructure, access to resources (labor force, facilities etc.). Ahadi & Kasraie (2020) additionally suggest available educational opportunities and media. Turker & Selcuk (2008) state that structural support, including economic and political support of entrepreneurship development, affect the intentions to start a business. However "although the structural conditions are similar for everyone living in the same context, the perceptions, attitudes, and

behaviors might vary" (p. 155, Turker & Selcuk, 2008), thus perception of the context is more important in explaining intentions than the context by its own. Thus, the following hypothesis is suggested:

Hypothesis 3: Positive perception of external conditions for starting up a business positively influences the entrepreneurial intentions.

Sharp economic downturn

It is underlined in the Global GEM report, that national context is very important determinant of entrepreneurial activity levels: the variation in entrepreneurial activity between economies is typically much greater than between social groups (GEM, 2022). Ahadi & Kasraie (2020) identify financial challenges as main factor, that is positively associated with entrepreneurial intentions during crisis, producing necessity entrepreneurship. For the rest, too negative turbulent environment may become substantial negative factor, enchasing fear of negative external events and blocking the intentions to start business. Moreover, Mueller's et al. (2002) crossnational study says that economic development and democratic institutions have positive effects on perceptions of new venture feasibility. Vice versa, severe deterioration of the external environment will highly likely result in reduction of entrepreneurial initiatives. The case of Belarus shows significant growth in entrepreneurial intentions from 2019 to 2021 despite generally negative external environment, sharp socio-political crisis, lack of support packages for new businesses from the state. So considering the sharp reduction of household incomes and significant growth in entrepreneurial intentions from 2019 to 2021 in Belarus, the following hypothesis is suggested:

Hypothesis 4: Sharp socio-economic crisis positively influenced the entrepreneurial intentions of the population in Belarus.

3. Methodology

3.1 Sample

We use data from Adult Population Survey (APS) of Global Entrepreneurship Monitor conducted in Belarus in 2019 and 2021 among 4051 individuals. The sample is stratified and nationally representative by age, gender and location. The survey provides data on entrepreneurial activities, attitudes, motivations, and capabilities of population. The responses are used to describe the different stages of entrepreneurial process: nascent entrepreneurs, new business

owners, established business owners. Belarus is related to Level B economy with a GDP per capita between $20,000 and $40,000.

After excluding observations with missing data our sample consists of 3174 observations.

3.2 Variables

First, we estimate a series of logit models to measure how the individual's probability of having an entrepreneurial intention is affected by self-efficacy, social ties and perception of external conditions.

Entrepreneurial intentions variable (*intentions*) is constructed based on the statement whether the respondent expects to start a new business within the next 3 years, which takes the value of 1 if the individual answers 'yes' and 0 otherwise. Despite the fact, that *self-efficacy* is widely conceptualized as a multi-dimensional construct (McGee, 2009), in some studies it is measured through just several questions (Utsch & Rauch, 2000). Following above approach, we measure self-efficacy through two statements regarding evaluating own skills (*skill*) and fear of failure (*fearfail*) on five-point Likert scale from strongly agree to strongly disagree. The fear of failure here is used as opposite to self-efficacy contract in order to double check the relation.

The structure of *social ties* is evaluated in two dimensions: business network and close family and friends circle (Sequeira et al., 2007). Taking into account this structure, we construct 2 variables. First, categorical variable *knowent* indicates how many other entrepreneurs (except parents) does know the respondent. Knowing other entrepreneurs brings useful resources, expertise and motivation (Ao & Liu, 2014). Second, binary variable indicates whether at least one of respondent's parents was an entrepreneur (*parents*), which represents the impact of close family ties. As it is suggested in Boyd & Vozikis (1994), having self-employed parents serves as a positive role model and affects preference of entrepreneurial career.

The context factors of entrepreneurial intention, suggested in Bird's (1988) framework, include political and socio-economic variables, including changes and markets and government regulation. Following this logic, we use the variable *easystart,* that captures the perception of external environment through the statement "In Belarus, it is easy to start a business" (which in fact reflects the attitude to institutional environment). Variable *good_opport* captures the attitude to market context: "In the next six months, there will be good opportunities for starting a business in the area where you live".

We also added number of control variables, which reflect demographic characteristics of the respondents. Most previous studies suggest that *age* is a strong predictor in determining

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entrepreneurial intentions: namely, older people are less likely to intent to start a business than young people (Sequeira et al., 2007). The average age of respondents expressing entrepreneurial intention in our sample is 34,9 years, with an average age in global perspective 35,7 years (Table 1).

Table 1: Average age of respondents, intended to run a business within next 3 years per groups of studied countries by income level in 2018 (in years)

Country income group	Intention to start a business	Mean	N	Std. Deviation
Low	No	35.97	10143	12.899
	Yes	33.87	8151	11.754
	Total	35.04	18295	12.445
Middle	No	40.07	16466	13.237
	Yes	34.79	7800	11.62
	Total	38.37	24267	12.976
High	No	41.87	82718	13.196
	Yes	36.86	17982	12.045
	Total	40.97	100701	13.139
Total	No	41.05	109328	13.29
	Yes	35.67	33934	11.95
	Total	39.78	143262	13.185

Source: Own calculations based on GEM 2018 APS global individual level data

We add dummy variable *female* for female respondents. Despite latest research, reporting growing role of women in entrepreneurship, gender gaps still exist in this field. A significant number of studies show that women less likely start business due to greater fear of failure, specific decision making process and self-confidence level (Shinnar et al., 2014), cultural and social differences over countries (Hann, 2002), discrimination from investors and customers (Miranda et al., 2017), lack of resources (Akulava, 2016) and other barriers. As some studies from transition countries show, women are less active in entrepreneurship activities due to financial constraints and need to balance work and family responsibilities (Borozan & Pfeifer, 2014). As Hann (2002) shows in his work, in former socialist countries women, unlike men, were encouraged to carry out most of domestic and public responsibilities additionally to work, which is still relevant for these countries, including Belarus (Akulava, 2016). Such double burden makes it difficult to engage in opportunity-driven activities as well develop knowledge, skills and networks necessary for running own business.

Place of living determines entrepreneurial activity and intentions in following way. The individuals from central region and big cities tend have more opportunities for running own venture, however residents from smaller regional localities express entrepreneurial intention due to necessity reasons (Ahadi & Kasraie, 2020). Previous literature shows that dichotomy "capital-region" substantially affects various socio-economic indicators and processes in Belarus (Akulava, 2016). Thus, we add variable *region*.

We also include the level of income. Direct questioning about incomes may generate biased answers (Jeger et al., 2014). So, we generated two variables characterizing general level of incomes using the question "Imagine that you have an emergency and need to pay BYN 2,000. What is the probability that you will be able to raise BYN 2,000 within the next month?" with four-point Likert scale from "very likely" to "not likely at all". We constructed two binary variables: *highest_income* for answers "very likely" as indicator of and *lowest_income* "not likely at all" for respondents. Detailed definition of variables is presented in table 1A in Appendix.

4. Analysis and results

Table 2 presents the descriptive statistics for the sample used in a regression model. 20.9% of respondents from the sample indicate entrepreneurial intentions. Respondents demonstrate average level of self-efficacy and perceptions about external environment; however, SD values indicate how diverse the sample is with respect to these characteristics. The variables, referring to income level, describe nearly upper and lower quartile of incomes in dataset. All predictor variables are not highly correlated (r <0.390), supporting the assumption of no multicollinearity (Table 1A in Appendix).

Table 2: Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
intentions	0.2087186	0.4064824	0	1
age	41.31352	12.91672	18	64
female	0.5015412	0.5001077	0	1
region	0.7679436	0.4222377	0	1
lowest_income	0.2175253	0.4126537	0	1
highest_income	0.2818142	0.4499823	0	1
skill	2.812417	1.445346	1	5
fearfail	3.054601	1.497609	1	5
knowent	0.9423162	0.9630722	0	3
parents	0.0682519	0.2522332	0	1
easystart	2.616028	1.36139	1	5
good_opport	2.306473	1.29905	1	5
Sample size				

Number of obs = 2,271

Source: own calculations based on GEM 2019, 2021

We tested the model with hierarchical multiple logistic regression, which is successfully used in behavioral studies, when the criterion variable depends both on the predictors and the order of variables entry (Jeger at al., 2014). Hierarchical regression helps to examine the incremental validity of additional introduced blocks of variables, grounded on theoretical background

(Tabachnick et al., 2009). The first model included only control variables; the self-efficacy dimension was added to Model 2; Model 3 additionally takes into account social capital perspective and, finally, Model 4 presents full number of factors, including the perception of external environment. The estimation results are presented in Table 3.

Table 3: Logistic regression results for entrepreneurial intentions

	Model 1	Model 2	Model 3	Model 4
age	-0.0481***	-0.0488***	-0.0471***	-0.0466***
	(-12.84)	(-12.35)	(-10.06)	(-9.34)
female	-0.149	0.0370	-0.00125	0.0112
	(-1.62)	(0.38)	(-0.01)	(0.10)
region	-0.255*	-0.219*	-0.154	-0.102
	(-2.40)	(-1.98)	(-1.21)	(-0.77)
lowest_income	0.273*	0.218	0.232	0.195
	(2.38)	(1.83)	(1.70)	(1.35)
highest_income	0.143	0.183	0.151	0.160
	(1.31)	(1.61)	(1.17)	(1.18)
skill		0.469***	0.343***	0.353***
		(13.49)	(8.49)	(8.04)
fearfail		0.00694	0.0388	0.0123
		(0.22)	(1.05)	(0.31)
knowent			0.670***	0.693***
			(11.70)	(11.36)
parents			0.180	0.246
			(0.95)	(1.26)
easystart				-0.105*
				(-2.29)
good_opport				-0.0705
				(-1.45)
_cons	0.634***	-0.870***	1.447***	-1.056***
	(3.63)	(-3.79)	(-5.18)	(-3.34)
N	3174	3174	2580	2271
Pseudo R^2	0.0645	0.1272	0.1776	0.1755

t statistics in parentheses, * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Source: own calculations based on GEM 2019, 2021

First three groups of factors determine significant change in entrepreneurial intentions of individuals. Pseudo R^2 represents the improvement of models with Pseudo R^2= 0.0645 for controls only model up to Pseudo R^2= 0.1755 for full model. However adding last block of variables leads to minor decrease in Pseudo R^2 (from 0.1776 to 0.1755), which we will further discuss. The change in Pseudo R^2 is significant for each group of variables (Table 4).

Table 4: Model summary of hierarchical multiple regression

Model	LL	LR	df	Pr > LR	AIC	BIC
1	-1092.025	142.61	5	0.000	2196.05	2230.418
2	-1034.307	115.44	2	0.000	2084.614	2130.438
3	-964.9253	138.76	2	0.000	1949.851	2007.13
4	-959.1113	11.63	2	0.030	1942.223	2010.958

Source: own calculations based on GEM 2019, 2021

For model 1, with control only demographic factors, the results showed a significant negative relationship between age and entrepreneurial intentions. As long as elements of self-efficacy were added to the model 2, some elements of demographic dimension lost their power. Namely, living in regions (not in capital) had no longer negative effect on entrepreneurial intentions, whereas having low incomes was no longer positively associated with intentions. The confidence regarding own capability to reach goals leads to entrepreneurial intentions regardless of the place of living and income level.

The results indicate, that self-efficacy level is positively and significantly related to the probability of having entrepreneurial intentions ($\beta = 0.353$, $p < .001$). Every additional point in self-efficacy assessment on five-point Likert scale increases the probability of having intentions to start a business by 4 percent points (according to marginal effects, calculated for final logit model). This finding supports hypothesis 1. Positively perceived own abilities give more confidence and make to put more effort in achieving particular goals.

The results report a statistically significant positive relation between entrepreneurial intentions and amount of familiar entrepreneurs ($\beta = 0.637$, $p < 0.001$), which provides support for hypothesis 2. Being familiar with a 2-3 additional entrepreneurs increases the probability of having entrepreneurial intentions by 9 percent points.

The impact of perception of market opportunities on entrepreneurial intentions is insignificant in the model, however the perception of institutional factors for starting a business is negatively associated with intentions ($\beta = -0.105$, $p < 0.05$). This result is quite surprising, however it goes in line with results in Guerrero et al. (2006), studding entrepreneurial intentions of students: individuals express significantly high probability of starting business despite negative perception or non-acquaintance with regulatory environment and government support programs.

In order to reveal the impact of negative external changes on entrepreneurial intentions, we tested the year effect with logistic regression (Table 5):

Table 5: Results of logistic regression

futsup	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
age	-0.051	0.005	-9.64	0.000	-0.061	-0.040	***
female	-0.015	0.121	-0.13	0.899	-0.253	0.223	
region	-0.143	0.139	-1.03	0.301	-0.415	0.128	
lowest_income	0.117	0.148	0.79	0.429	-0.173	0.406	
highest_income	-0.180	0.148	-1.21	0.225	-0.470	0.110	
skill	0.409	0.048	8.50	0.000	0.314	0.503	***
fearfail	-0.102	0.043	-2.37	0.018	-0.187	-0.018	**
knowent	0.633	0.064	9.95	0.000	0.509	0.758	***
parents	0.398	0.205	1.95	0.052	-0.003	0.800	*
easystart	-0.105	0.049	-2.16	0.031	-0.200	-0.010	**
good_opport	-0.083	0.052	-1.58	0.115	-0.185	0.020	
year 2021	1.632	0.137	11.95	0.000	1.364	1.900	***
Constant	-1.429	0.332	-4.30	0.000	-2.080	-0.778	***

Mean dependent var	0.209	SD dependent var	0.406
Pseudo r-squared	0.246	Number of obs	2271
Chi-square	571.702	Prob > chi2	0.000
Akaike crit. (AIC)	1780.956	Bayesian crit. (BIC)	1855.420

*** $p<0.01$, ** $p<0.05$, * $p<0.1$
t statistics in parentheses, * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Source: own calculations based on GEM 2019, 2021

We found statistically significant growth of entrepreneurial intentions in 2021, confirming Hypothesis 4. It turns out, that despite the number of socio-economic shocks and political instability, the intentions to start a business are rising among population in Belarus. According to various theoretical and empirical studies, necessity reasons and loss of usual sources of income during crisis increase both entrepreneurial intentions as well as general level of entrepreneurial activity. It is also confirmed by results of global GEM survey, where countries with lower income levels generally have higher level of entrepreneurial activity (GEM, 2021). However, our finding is not accompanied by significantly positive relation between low income level and entrepreneurial intentions in Belarus. This means that other than necessity reasons come into play. Probably the idea of entrepreneurship becomes more attractive for professionals, who still have appropriate job, but foresee future difficulties in the industry or particular firm. At the same time, the role of family business background and fear of failure become significant within negative socio-economic context. The individuals are becoming more sensitive to parents' role models during crisis. The fear of failure is becoming stronger constraint for entrepreneurial intentions. This puts into agenda need for special policy implications, related to role models' promotion.

5. Conclusion

The obtained results show positive and significant relationship between entrepreneurial intentions and self-efficacy, which largely determines one's "choices, aspirations, efforts, and perseverance in the face of setbacks" (Boyd & Vozikis, 1994). Self-efficacy is acquired through the development of skills, which are obtained through experience or "observational learning" (Bandura, 1977). Educational activities contribute to self-efficacy development, thus training and education potentially can improve the rate of entrepreneurial activities (Mueller et al., 2002; McGee, 2009). At the same time, as Wilson et al. (2007) notes, that educational entrepreneurship programs should include realistic skills as well as raise of self-confidence.

In line with existing literature, our study shows positive relations between network ties and entrepreneurial intentions. Making connections help people to achieve more than acting alone (Cope et al., 2007). Knowing other entrepreneurs increases motivation and chances to get useful information or other resources. Networking activities help to identify opportunities, provide support, promote start-up activities. Weak ties are also seen as effective tool in finding financial or informational resources, interacting with venture capitalists, business-angels and suppliers (Sequeira et al., 2007). Thus facilitating networking activities among individuals, entrepreneurs, youth helps to take advantage from positive association between social ties and individuals' entrepreneurial intentions. Creating various contact platforms with investors, conferences, discussions, and workshops will increase interest and motivation to entrepreneurship, helping to obtain higher rates of nascent entrepreneurial activity.

This is also important, that successful collaboration is based upon mutual trust and under the high level of trust in society (Cope et al., 2007). Thus, it is important to promote trust on institutional level, as well as facilitate individuals to learn effective practices of cooperation and finding mutual benefits.

It is also shown, that family role models do not significantly affect intentions to start a business in Belarus, which does not conflict with existing literature (Turker & Selcuk, 2008). The entrepreneurship in the country is relatively young, as the market has replaced the administrative system just atn the end of 20th century. Family businesses have not yet become common phenomenon, and nascent entrepreneurs quite possibly tend to seek sources of moral and financial support outside the family circle. However, this changes during crisis, when the business background of the family may give impetus for entrepreneurial career.

Quite paradoxical finding suggests, that the positive perception of existing external factors is associated with lower entrepreneurial intentions. Such effect could be explained in following way: on the one hand, those individuals who decide to enter own business, tend to be more active

and well informed about both institutional and market conditions. As a result, they may admit that the probability of problems and negative factors of external environment is high, however they act in anticipation of future risks. On the contrary, those individuals, who are not going to choose entrepreneurial career are just not interested in real state of opportunities and regulatory environment in the country, thus they may treat it more subjectively.

The obtained negative relationship between opportunities perception and entrepreneurial intentions also may put on agenda the concept of resilience – "resource that individuals are able to mobilize in a time of stress and adversity" (p. 490, Bullough et al., 2013). As Bullough et al. (2013) notes, generally the environment, perceived as dangerous, is negatively related to entrepreneurial intensions. However, the resilience has significant moderation effect on the perceived danger-intent relation in the study. Individuals who can be resilient perceive more control under external environment, are more confident and persistent in their business intentions and goals. Although the concept of resilience in Bullough's study was considered in relation to war times and highly dangerous environment, it could be also interesting to investigate the effect of individuals' resilience in further studies of entrepreneurial intentions in turbulent socio-economics environment.

Understanding the role of environment contributes to existing literature and helps to design proper policy implications for entrepreneurship developing under the pressure of adverse external conditions. Under this circumstances, the priorities of developing policies should be revised and probably redirected from infrastructure development into educational perspective. As the study of Turker & Selcuk (2008) shows, the impact of educational support on entrepreneurial intentions may be higher than structural support.

This study makes the following contributions to entrepreneurship literature. First, most of the previous studies of entrepreneurial intentions focuses either on external (Martins & Perez, 2020) or internal factors (Guerrero et al., 2008), whereas we explore both directions. Second, our research in based on data from nationally representative adult population survey, whereas vast majority of studies explore entrepreneurial intentions of university students. Furthermore, existing studies based on data from GEM never explored Belarusian case. Generally, the findings show differences in contexts of post-transition economies.

Third, we tested the role of objective consequences of severe socio-economic crisis in forming entrepreneurial intentions. Evaluating the year effects before and during downturn we demonstrated that highly negative external changes lead to growth of entrepreneurial intentions, however the necessity background of such growth is still questionable.

The study contributes to the understanding of what factors make people to choose an entrepreneurial career. The results also have major implications for policy-makers on facilitating entrepreneurship development framework through educational perspective as well creating networking opportunities.

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APPENDIX

Table 1A. Definition of variables

Variable	Variable description
futsup	Dummy variable indicating respondent's willingness, alone or with others, to start a new business, including any type of self-employment, within the next three years: 1- yes, 0 – no.
age	Respondent's age.
female	Dummy variable indicating female gender.
region	Dummy variable indicating respondent live not in Minsk city.
lowest_income	Dummy variable indicating lowest level of income.
highest_income	Dummy variable indicating highest level of income.
suskill	Categorical variable indicating the relation to the statement "You personally have the knowledge, skill and experience required to start a new business": 1 – strongly disagree; 2 – somewhat disagree; 3 – nentreprenuerial intentionsther agree not disagree; 4 – somewhat agree; 5 – strongly agree.
fearfail	Categorical variable indicating the relation to the statement "You would not start a business for fear it might fail": 1 – strongly disagree; 2 – somewhat disagree; 3 – nentreprenuerial intentionsther agree not disagree; 4 – somewhat agree; 5 – strongly agree.
knowent	Categorical variable indicating how many people does know the respondent personally who have started a business or become self-employed in the past 2 years: 0 – none; 1 – one; 2 – 2 to 4; 3 – 5 or more.
parents	Dummy variable indicating that at least one of the respondent's parents was running a business, when the respondent was 16 years old.
easystart	Categorical variable indicating the relation to the statement "In Belarus, it is easy to start a business": 1 – strongly disagree; 2 – somewhat disagree; 3 – nentreprenuerial intentionsther agree not disagree; 4 – somewhat agree; 5 – strongly agree.
opport	Categorical variable indicating the relation to the statement "In the next six months, there will be good opportunities for starting a business in the area where you live": 1 – strongly disagree; 2 – somewhat disagree; 3 – nentreprenuerial intentionsther agree not disagree; 4 – somewhat agree; 5 – strongly agree.

Source: GEM 2019, 2021

Table 2A. Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) futsup	1.000											
(2) age	-0.235***	1.000										
(3) female	-0.040**	0.042***	1.000									
(4) region	-0.061***	0.083***	-0.030*	1.000								
(5) lowest_inc.	0.045**	-0.022	0.018	-0.072***	1.000							
(6) highest_inc.	0.003	0.019	-0.021	0.012	-0.341***	-0.021	1.000					
(7) suskill	0.264***	-0.074***	-0.137***	-0.046***	0.031*	-0.021	1.000					
(8) fearfail	-0.019	0.053***	0.043***	0.011	-0.013	0.025	-0.013	1.000				
(9) knowent	0.300***	-0.137***	0.003	-0.050***	0.030*	-0.003	0.265***	-0.034**	1.000			
(10) parents	0.120***	-0.205***	-0.035**	-0.119***	0.022	-0.015	0.107***	-0.043**	0.118***	1.000		
(11) easystart	-0.012	-0.011	-0.040**	0.034**	-0.010	-0.007	0.189***	-0.038**	0.059***	0.034*	1.000	
(12) good_opport	0.047***	-0.112***	-0.014	0.054***	-0.052***	0.003	0.216***	0.069***	0.098***	0.054***	0.390***	1.000

*** p<0.001, ** p<0.05, * p<0.1

Table 3A. Descriptive statistics by year

Variable	Year 2019			Year 2021		
	N.	Mean	Std. Dev.	N.	Mean	Std. Dev.
intentions	1776	.1019144	.3026209	1530	.3078431	.4617522
age	2001	40.38831	13.25159	2050	40.91756	12.78884
female	2001	.5167416	.4998446	2050	.5141463	.4999218
region	2001	.7746127	.4179416	2050	.7829268	.4123534
lowest_income	1911	.1862899	.3894423	1950	.2774359	.4478483
highest_income	1911	.2647828	.441333	1950	.2897436	.4537597
skill	2001	2.629685	1.53209	2050	2.72878	1.345092
fearfail	2001	2.733133	1.577259	2050	3.24878	1.430533
knowent	1889	.842774	.9556655	1918	1.06048	.988453
parents	1659	.0747438	.2630568	1747	.0566686	.2312744
easystart	1731	2.592143	1.396125	1729	2.547137	1.321214
good_opport	2001	2.15942	1.332694	2050	2.18	1.201224

Table 4A. Descriptive statistics by expressing entrepreneurial intentions

Variable	Yes			No		
	N.	Mean	Std. Dev.	N.	Mean	Std. Dev.
age	745	38.34228	12.06243	2654	42.71251	13.15287
female	745	.4993289	.5003355	2654	.5290128	.4992516
region	745	.7691275	.4216741	2654	.7935192	.4048558
lowest_income	687	.2663755	.442385	2543	.2154935	.4112451
highest_income	687	.2590975	.4384585	2543	.2807707	.4494641
skill	745	2.855034	1.392348	2654	2.451017	1.427363
fearfail	745	3.051007	1.475636	2654	2.995479	1.562125
knowent	686	1.206997	1.004084	2491	.751104	.9059563
parents	601	.0765391	.2660802	2257	.0487373	.2153659
easystart	633	2.503949	1.333739	2237	2.592758	1.359391
good_opport	745	2.126174	1.176689	2654	2.149962	1.290505