

STUDENTS' ENTREPRENEURIAL INTENTIONS IN CONTEXT OF MACROECONOMIC INSTABILITY: AN EMPIRICAL ANALYSIS USING THE CASE OF VORONEZH STATE UNIVERSITY

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ABSTRACT

The paper analyzes the dynamics of entrepreneurial intentions and career preferences among students at Voronezh State University (VSU) in a context of macroeconomic and geopolitical instability. The study highlights the role of the university environment in shaping students' entrepreneurial attitudes. The empirical base is comprised of data from the Russian segment of the international GUESS project for 2018 and 2025. The study design combines longitudinal analysis (comparing VSU indicators at two time points) and cross-sectional comparative analysis (comparing VSU data with national data). The results show that students' career strategies have significantly shifted over the period under review. Over the short-term planning horizon, the proportion of those wanting to start their own business increased, whereas over the five-year horizon, entrepreneurial intentions declined, with a sharp increase in the proportion of undecided students. A regional characteristic of VSU is the higher proportion of students without long-term career plans and lower entrepreneurial environment compared to the Russian average. In a context of external instability, students demonstrate increased uncertainty about their professional futures. It is concluded that universities need to strengthen their support for students' entrepreneurial intentions to ensure the reproduction of entrepreneurial potential.

Key words: entrepreneurial intentions, university, students, macroeconomic instability.

INTRODUCTION

In recent years, Russia has been developing amid economic and geopolitical instability. Restrictions caused by the pandemic and the Ukrainian crisis have led to difficulties in selling export products, a shortage of imported equipment, and the disruption of supply chains and economic ties. Many foreign companies and brands have left the Russian market. The opening of market niches, despite the presence of macroeconomic obstacles, has opened up a unique opportunity for the development of Russian entrepreneurship (Nikitina et al., 2024). The study "Monitoring Entrepreneurial Activity 2024/2025" (Verkhovskaya, 2025) also showed that, according to respondents, starting in 2022, there has been an increase in the number of those who agree that Russia offers favorable conditions for developing their own business: 33,7% in 2022, 38,4% in 2023, and 39,8% in 2024. Moreover, starting in 2022, the number of respondents who believe that starting a business in Russia is easy has averaged 54,6%, while in 2016–2019 this figure was at an average of 23,6%.

However, despite improved survey respondents' assessments of the business climate, data from the Russian Federal Tax Service indicates the beginning of a reversal. In 2025, the number of legal entities established in Russia was the lowest in the past 14 years – 192 883 companies. Moreover, the number of liquidated legal entities exceeded newly created ones by 36,45%, reaching 263 201 companies. The decline in the number of legal entities in small and medium-sized businesses is offset by an increase in the number of sole proprietors (1 076 747 opened, 748 889 closed).

This growth in the number of individual entrepreneurs is largely driven by young people. The desire to start a business peaks at a young age, according to the report "Monitoring Entrepreneurial Activity 2024/2025" (Verkhovskaya, 2025). Thus, in 2024, 45,9% of respondents aged 18 to 24 stated their intention to become an entrepreneur in Russia, 40,2% of those aged 25 to 35, 36,2% of those aged 35 to 44, 16,5% of those aged 46 to 55, and 12,4% of those over 55. Among respondents who are not entrepreneurs, students (51,5%) expressed the highest desire to start their own business in the next three years. This is due to the younger generation being more entrepreneurial, innovative, flexible, and willing to take risks.

Overall, the youth entrepreneurship sector in Russia is steadily growing. By 2025, the number of individual entrepreneurs under 35 reached 1,17 million. Young entrepreneurs are shifting from retail to industries with greater intellectual and innovative potential. The largest relative growth compared to the previous year was recorded in education – 59,8%. Administrative activities grew by 27,6%, scientific and professional activities by 19,9%, and the number of IT companies increased by 14,5%. Public administration, healthcare, culture, sports, and leisure also experienced rapid growth. Among Russian regions, Moscow and the Moscow region remain the absolute leaders in the number of young entrepreneurs (over 200 000). More than 61 000 young founders are registered in the Krasnodar Krai, over 54 000 in St. Petersburg, and over 35 500 in the Republic of Tatarstan. The Republic of Dagestan demonstrated unique growth, with the number of young entrepreneurs in this region increasing by 24% to 4 300.

The growth of youth entrepreneurship is driven by government support. Grant support, provided through various government agencies and development institutions, plays a particularly important role. For example, the Foundation for Assistance to Small Innovative Enterprises (FASIE) offers targeted programs for young technology entrepreneurs, including a grant of up to 1 million rubles under the Student Startup program for students. Projects in IT and the creative industries are eligible for support from the Presidential Creative Industries Fund. Also in 2024, the Russian Ministry of Education and Science, together with the Russian Ministry of Economic Development, launched the "Startup as a Diploma" competition for graduates, allowing young people to present their business project as a final qualifying thesis.

The current level of youth entrepreneurship development is undoubtedly linked to the educational sector's ability to nurture entrepreneurial potential. Universities foster not only professional competencies but also the value-motivational structure of young professionals' career strategies. In the context of macroeconomic instability, there is an objective need to analyze and evaluate the dynamics of students' entrepreneurial intentions, as this indicator serves as a proxy for graduates' actual economic activity.

The theoretical basis for this analysis is the theory of planned behavior (Ajzen, 1991), according to which an individual's intentions are shaped by three factors: individual attitudes toward behavior, subjective norms, and perceived behavioral control. Since starting a business is considered a planned action by an individual preceded by intention, entrepreneurship is often studied from the perspective of entrepreneurial intentions (Bird, 1988). These intentions, in turn, are determined by the individual's personal motives, which are influenced by family, the university environment, and the socio-cultural context (Berman et al., 2008; Shirokova et al., 2015). Universities play a key role in shaping and intensifying entrepreneurial intentions (Ustinova and Koemets, 2024).

Thus, identifying the degree and nature of the influence of the university environment (including educational programs, start-up support infrastructure, informal entrepreneurial communities) on the intensification of students' entrepreneurial intentions, including in conditions of macroeconomic instability, is of great theoretical and practical significance. Without understanding this connection, any measures to stimulate youth entrepreneurship risk remaining mere declarative measures. Therefore, the goal of our study is to assess the dynamics of entrepreneurial intentions among students at a regional classical university (using Voronezh State University as an example) in a context of macroeconomic instability.

MATERIALS AND METHODS

The empirical basis of the study was data from the international research project "Global Student Entrepreneurial Spirit Study" (GUESSS). GUESSS is conducted biennially under the leadership of the Swiss Universities of St. Gallen and Bern. It focuses on studying the career intentions, entrepreneurial activity, and attitudes toward entrepreneurship among students worldwide. Anonymous online surveys conducted in over 50 countries and thousands of universities make it possible to analyze the dynamics of student entrepreneurial spirit over time, compare indicators across universities and countries, and assess the influence of the university environment on the formation of entrepreneurial intentions. The National Research University Higher School of Economics (HSE – St. Petersburg) is a partner in the project and is responsible for collecting data from students across Russia.

The study utilized a mixed-methods approach to data analysis, including secondary analysis of GUESSS project data for 2018 and 2025 (Russian segment), analytical reports (Global study of students' entrepreneurial spirit. National report. Russia 2018), and scientific publications. The study design combines longitudinal analysis (assessing data dynamics for Voronezh State University in 2018 and 2025) and cross-sectional comparative analysis (comparison of Voronezh State University data with national data). The choice of the 2018 and 2025 time points is due to the fact that this interval allows us to capture two qualitatively different macroeconomic regimes: 2018 serves as a starting point characterized by relative stability and the absence of systemic external shocks, while 2025 reflects the state of entrepreneurial intentions after the cumulative effect of the COVID-19 pandemic, sanctions pressure, and the structural restructuring of the Russian economy.

In 2018, 93 students from Voronezh State University were surveyed, accounting for 3,3% of the total sample for Russia. In 2025, the number of respondents increased to 104, accounting for 6,1% of the total sample for Russia. Respondents were distributed by education level as follows: in 2018, 91% held bachelor's degrees, 8% held master's degrees, and 1% held doctoral degrees. In 2025, the share of bachelor's degrees was 44%, master's degrees 17%, specialist degrees 38%, and doctoral degrees 1%.

RESULTS AND DISCUSSION

The study asked participants to answer two questions: where they see themselves immediately after graduating and five years later. The near- and long-term career expectations of students at Voronezh State University (VSU) and across Russia for 2018 and 2025 are presented in Table 1.

An analysis of the career preferences of VSU students and those in Russia as a whole in 2018 revealed that, in the short term, respondents primarily considered employment as employees. The largest share of VSU and Russian students surveyed were focused on large companies (with 250 or more employees) – 27,96% and 24,6%, respectively – and medium-sized organizations (with 50 to 249 employees) – 26,88% and 22,8%. With a five-year planning horizon, a general trend was also observed in 2018, but the majority of students already envisioned themselves as future entrepreneurs (68,82% at VSU and 50,4% across Russia). Moreover, Voronezh students are characterized by lower uncertainty in both the short- and long-term perspectives – 4,3% and 3,23%, compared to 12,4% and 13,3% in Russia, respectively.

A comparison of Voronezh students' career intentions with the Russian national average for 2025 reveals similar trends. Immediately after graduation, the leading career path is working for large companies (28,85% at VSU and 27,62% nationally), followed by being a founder (entrepreneur) of their own company (20,19% at VSU and 22,67% nationally). Third place goes to students who have not yet decided on their career preferences, representing 21,15% at VSU and 19,38% nationally. In the long term, despite similar career choice trends to those observed in the Russian national average, students from Voronezh demonstrate more cautious behavior. For example, the proportion of those who see themselves as the founder (entrepreneur) of their own company in five years at VSU is 6,48%

lower than the national average (38,46% versus 44,94%). Voronezh students are characterized by a higher degree of uncertainty when predicting their career trajectory. At Voronezh State University, a quarter of respondents were unable to decide on their career path five years after graduation, compared to 15,49% across Russia. The 9,51% gap can be explained by Voronezh's proximity to the Special Military Operations Zone, which poses additional risks to economic activity. Under these circumstances, the shortening of Voronezh State University students' planning horizons is a natural response to the aggressive external environment.

Table 1: Career expectations of VSU and Russian students for the near and long term for 2018 and 2025.

Your Career Choice Intentions	VSU				Russia			
	Right after studies, %		5 years later, %		Right after studies, %		5 years later, %	
	2018	2025	2018	2025	2018	2025	2018	2025
1. An employee in a small company (1-49 employees)	13,98	4,81	0,00	0,00	14,00	4,77	1,70	1,53
2. An employee in a medium-sized business (50-249 employees)	26,88	11,54	2,15	5,77	22,80	13,43	3,70	4,65
3. An employee in a large business (250 or more employees)	27,96	28,85	15,05	21,15	24,90	27,62	17,80	20,91
4. An employee in a non-profit organization	1,08	0,96	1,08	0,00	3,10	0,65	1,80	0,65
5. An employee in academia (academic career path)	2,15	2,88	2,15	3,85	6,20	4,42	3,40	4,30
6. An employee in public service	1,08	0,96	0,00	0,00	3,00	2,53	1,80	2,12
7. A founder (entrepreneur) working in my own business	15,05	20,19	68,82	38,46	9,00	22,67	50,40	44,94
8. A successor in my parents'/family's business	7,53	3,85	3,23	2,88	3,00	2,71	2,20	2,36
9. A successor in another business	0,00	4,81	4,30	2,88	1,60	1,83	3,90	3,06
10. Other / do not know yet	4,30	21,15	3,23	25,00	12,40	19,38	13,30	15,49
Total	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00

An analysis of the career preferences of VSU and Russian students for 2018 and 2025 revealed the following general trends:

- there has been a steady increase in student interest in working as employees at large companies. At the same time, the number of those seeking employment at small and medium-sized companies has declined;
- the dynamics of students' entrepreneurial intentions are mixed. In the short term, the number of students wanting to start their own business has increased (from 15,05% to 20,19% at VSU and from 9% to 22,67% across Russia). In the five-year planning horizon, the number of respondents who see themselves as entrepreneurs has decreased (from 68,82% to 38,46% at VSU and from 50,4% to 44,94% across Russia).
- the proportion of students who have not yet decided on their career preferences is growing.

A comparison of the career preferences of VSU and Russian students for 2018 and 2025 also revealed regional differences. The preferences of Voronezh students, while reflecting overall Russian trends, are subject to more rapid fluctuations. VSU students show a more pronounced decline in entrepreneurial intentions over the long term. Furthermore, respondents from Voronezh are characterized by greater uncertainty.

To further assess students' entrepreneurial intentions and the factors shaping them, the study included statements that required students to express their level of agreement on a 7-point scale (1 = strongly

disagree, 7 = strongly agree). The university plays a key role in supporting and developing entrepreneurial potential, so we analyzed students' assessments of its entrepreneurial environment separately and present them in Table 2.

Table 2: Assessment of the entrepreneurial environment of universities for 2018 and 2025.

Assertion	2018				2025			
	Average rating	Response rate in %			Average rating	Response rate in %		
		+	—	+ —		+	—	+ —
Voronezh State University								
The atmosphere at my university inspires me to develop ideas for new businesses.	4,20	36,56	36,56	26,88	4,07	40,38	39,42	20,19
There is a favorable climate for becoming an entrepreneur at my university.	4,12	42,58	37,95	27,41	4,14	39,60	35,29	25,49
My university encourages students to engage in entrepreneurial activities.	4,63	38,04	33,70	28,26	4,17	43,14	37,25	18,63
Russia								
The atmosphere at my university inspires me to develop ideas for new businesses.	4,44	49,24	30,66	20,10	4,81	60,74	22,26	17,00
There is a favorable climate for becoming an entrepreneur at my university.	4,57	52,62	27,80	19,57	5,00	64,50	17,13	18,37
My university encourages students to engage in entrepreneurial activities.	4,70	55,02	26,75	18,23	5,25	69,57	15,90	14,53

Note. “+” is the proportion of respondents who agree with the judgment (scores of 5, 6 and 7 points in total), “—” is the proportion who disagree (scores of 1, 2 and 3 points in total), “+ —” is the proportion who are neutral (score of 4 points).

Positive dynamics were recorded at VSU in two indicators. The share of positive ratings for the statement "The atmosphere at my university inspires me to develop ideas for new businesses" increased from 36,56% in 2018 to 40,38% in 2025, while for the statement "My university encourages students to engage in entrepreneurial activity" it increased from 38,04% to 43,14%. At the same time, positive ratings for the statement "My university has a favorable climate..." decreased from 42,58% to 39,6%. This suggests that VSU has become more proactive in encouraging student entrepreneurship by expanding its educational programs to include new disciplines and engaging in entrepreneurship activities.

VSU students are more pessimistic about the entrepreneurial environment at their university than the Russian average. In 2025, the proportion of VSU students who positively assessed the university's atmosphere was 20,36% lower than the national average (40,38% versus 60,74%). 39,6% of VSU students agreed with the statement that the university's climate was favorable, compared to 64,5% nationally. When assessing student involvement in entrepreneurship, the proportion of positive responses at VSU (43,14%) was 26,43% lower than the national average (69,57%).

At the same time, students became less likely to avoid answering questions. The proportion of those who rated the university entrepreneurship environment as 4 points in 2025 across all dimensions decreased compared to 2018 in both samples. This indicates that the university environment is becoming more visible to students in matters of entrepreneurship. Moreover, there is a qualitative shift toward an increase in the average scores across Russia for all three indicators – from 4,47 in 2018 to 5,02 in 2025.

A regional characteristic is the inverse relationship between assessments related to entrepreneurial intentions and the entrepreneurial environment at the university. Throughout the period under review,

VSU students, on the one hand, were characterized by a higher intention to start their own business immediately after graduation compared to Russian students, while on the other hand, they tended to underestimate the state of the entrepreneurial environment at the university compared to Russian students.

CONCLUSIONS

The study found that the turbulent external environment in Russia in recent years has led to a transformation in established patterns of behavior among students when formulating career plans. These behavioral shifts are most pronounced with long-term planning horizons. The number of students declaring their intention to start their own business is declining. Students are shifting from potential entrepreneurs to employees at large companies. The share of undecided students has increased significantly. In 2018, only three VSU students surveyed were unsure what they would do five years after graduation; by 2025, one in four had not yet decided. The abandonment of long-term planning is a consequence of an adaptive response to external shocks.

Several regional differences in students' entrepreneurial intentions can be noted. The number of undecided students at Voronezh State University over a five-year horizon is 1,6 times higher than the national average. The most likely explanation for these differences is Voronezh's geographic proximity to a zone of heightened military and political risks, which creates additional uncertainty regarding personal safety and the stability of the socioeconomic environment. In the short-term planning period, student preferences changed less. Working for a large company remains the leading option immediately after graduation. Overall, VSU students rate the entrepreneurial environment at the university lower than the national average.

The results of the study on entrepreneurial intentions among VSU students largely reflect national trends. Minor regional differences are consistent with established trends in Russia and serve as indicators of the sensitivity of students' perceptions of the future during a period of macroeconomic instability.

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