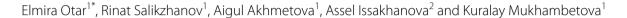
# RESEARCH Open Access

# Former Soviet Union middle class: how entrepreneurs are shaping a new stratum and pattern of socio-economic behavior



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# **Abstract**

The purpose of this study is to create a representative socio-economic profile of entrepreneurs operating in the former Soviet Union (FSU) states as a pillar of the new middle-class stratum. This study explored middle-class entrepreneurship from multiple perspectives, encompassing statistical analysis of microdata about households and firms. The aim was to gauge entrepreneurship within a national framework and examine its associations with social and economic factors. The study adopted the Doing Business tool as a novel paradigm to establish a quantitative correlation between the economic system in the post-Soviet space and the investigated variables. The analysis revealed that prospective entrepreneurs are members of the younger generation between the ages of 25 and 34; a critical factor in the development of entrepreneurship is highly educated human capital; and typical representatives of entrepreneurship intending to operate in the FSU states establish their own business as a means of subsistence, not as a means of advancement in the social stratum. In general, an entrepreneur of the middle class in the new economies of the post-Soviet space does not demonstrate a high level of entrepreneurial activity and, as a pillar of the middle-class stratum, is in the formation stage.

**Keywords:** Business environment, Competitiveness, Economic development, Society, Transitional economy

# Introduction

At the moment, the Covid-19 pandemic has spread to every country on Earth. It adversely impacts public health and the economy, with entrepreneurship being no exception, experiencing detrimental effects. With massive layoffs and business closures, the pandemic has reduced household incomes, particularly in emerging economies (Bosma et al., 2021). The private sector in the aforementioned countries is small and informal, which contributes to the lack of opportunities for high-quality employment and forces a large proportion of the able-bodied population to seek work abroad (OECD, 2021). The national governments of these countries have used sovereign wealth funds to augment expenditures on healthcare and social welfare programs, specifically targeting support for individuals and sectors engaged in small and medium-sized enterprises



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(SMEs). The size and scope of these initiatives vary and are largely determined by the financial resources available. Kazakhstan and Uzbekistan have capped utility prices to assist households. In Kyrgyzstan and Turkmenistan, temporary price controls on food have been implemented to alleviate inflationary pressures. The Russian Federation has mitigated the impact of the national currency's weakness on price regulation (United Nations, 2021). On the other hand, developed markets, particularly the European Union (EU), are defined by a sizable SME sector, which accounts for 99% of all businesses and 85% of jobs (Gaidar Institute for Economic Policy, 2019), with a particular emphasis on microenterprises employing fewer than nine people (Eurostat, 2021). According to Titov (2018), politicians in these nations perceive entrepreneurship as a catalyst for income generation and innovation, thereby exerting a notable influence on the socio-economic landscape, especially in times of economic downturn. Throughout the pandemic, politicians in developed countries focused their efforts on establishing public mechanisms to support business, including those aimed at keeping jobs and enterprises afloat (Aliyeva, 2019; Bosma et al., 2021). Thus, entrepreneurship plays a significant role in each country's national profile, positioning itself as a solution to a broad range of global problems. This study concentrates on investigating the socio-economic profile of entrepreneurs as a key driver of economic growth to evaluate the level of entrepreneurial development within the context of national well-being.

#### Literature review

The surge in interest towards entrepreneurship was made possible by the prevalence of neoliberalism during that period, which emphasized the value of individual uniqueness, efficiency, and personal accomplishments. The early stages of entrepreneurial development are gender-neutral, with men serving as natural centers of normative practice. During the 1980 and 1990 s, the field of entrepreneurship witnessed an expansion driven by the growing interest among women. This surge in interest can be attributed to the rise in the number of publications authored by women in esteemed journals that specifically focused on business management from both gender and feminist perspectives (Marlow & Martinez Dy, 2017). Thus, modern entrepreneurship is a form of social activity in which gender attributions are universally applied to stakeholder engagement, interaction, and support, with both sexes participating in the development of entrepreneurial relationships (Fine, 2017; Marlow & Martinez Dy, 2017). Entrepreneurship is widely acknowledged as the fundamental process of initiating and managing a novel business venture. This process holds significant importance as it generates employment opportunities, income, and societal value, ultimately fortifying the overall economy (Bosma et al., 2021). This assertion aligns with the findings previously reported by Chepurenko (2018). The primary conclusion drawn by the researcher pertained to substantiating the socio-economic benefits of entrepreneurship in the development of national systems. The research findings indicate that entrepreneurship plays a dual role, providing business owners with a reliable source of income while also enhancing the accessibility of affordable goods and services to vulnerable segments of the population. The household was identified as a key platform for entrepreneurial activity, where the exchange of resources takes place through various forms of capital, ranging from financial investments to non-monetary contributions such as time, advice, emotional support, and

labor (Carter et al., 2017). The subsequent examination of the socio-economic significance of entrepreneurship was undertaken by Polbin and Shumilov (2020). The results obtained by the researchers confirmed that entrepreneurs own a lot of the total wealth of households, which is part of the country's wealth. Thus, entrepreneurs have formed a kind of social formation comparable to an economic class, particularly evident in the post-Soviet countries following the collapse of the Soviet Union (Turaeva, 2018). The empirical study by Szerb and Trumbull (2018) addressed the role of entrepreneurship in wealth accumulation in the household of post-Soviet uncertainty. The study applied the rating evaluation of the Global Entrepreneurship Index (GEI) and data from the institutional environment: GDP per capita index; democratic status index; market status index; and World Economic Forum's global competitiveness index. The researchers discovered that human capital is the primary driver of the post-Soviet space's entrepreneurship, as the majority of startups are founded by highly educated individuals with the primary goal of generating income rather than introducing a new product to the market. Thus, entrepreneurs frequently enter well-developed and vibrant markets without creating new market niches, and they rely on unwritten social rules such as family and religious traditions rather than legally binding contracts (Tepavcevic, 2020). Thus, following the dissolution of the Soviet Union, family and religious systems emerged as providers of social and economic security, a role that the national welfare systems were unable to fulfill (Gerasimova et al., 2020; Tepavcevic, 2020; Turaeva, 2018). Andras's work (2020) covered the historical perspective of entrepreneurship formation in the post-Soviet space. The researcher identified five stages entrepreneurial development process:

- Perestroika (1985–1990): In 1985, the Soviet perestroika catalyzed the growth of entrepreneurship. The citizens' economic initiative was to rapidly fill the market with goods, strengthen competition between enterprises with varying forms of ownership, and create extra employment;
- Liberal (1991–1993): The collapse of the Soviet Union served as a starting point for
  the new development of entrepreneurship, leading to significant changes in economic organization. Amidst these transformative circumstances, the official registration of entrepreneurial activity was approved, resulting in the legalization of wage
  employment and the maximum utilization of the benefits of working from home.
  The competition between the public and private sectors for labor resources was a
  feature of that time;
- Conservative (1994–2003): The private sector's operation and development within
  the framework of a socially oriented market economy model that combines market
  self-regulation and state control. So, SMEs were forced to act as trade mediators,
  which meant they had to import scarce goods from outside the country;
- Rule-making (2004–2010): Economic development is supervised by the state, which favored large businesses that were regulated by state bodies at the time;
- Managerial (2011-present): Business develops within the context of a transitional economy and acts as a producer rather than a consumer, meeting the needs of the state and the population. Based on the obtained results, the researcher established that in post-Soviet economies, restructuring became a crucial element of transition, whereby the collapse of the Soviet Union facilitated the emergence of a market econ-

omy marked by a significant reliance on political and administrative activities of the authorities, as well as new standards of living, for the development of entrepreneurship. The middle class, comprising individuals aspiring to upward social mobility, emerged as the key proponent of a high-quality life within the economic system. This assertion is supported by Craciun and Lipan (2020), who highlight the middle class as a crucial safeguard for ensuring a favorable quality of life within society. On a social level, people who want to be in the middle class will be more moral, accept liberal values, and keep democracy stable. At the economic level, the capacity to accumulate and consume durable goods will contribute to the growth of a market economy. As a result, individuals belonging to the middle class exhibit adaptability, responsibility, hard work, and entrepreneurial traits, enabling them to thrive in a market economy. These qualities also position them as proponents of transparent governance and capitalist development, prioritizing these aspects over comprehensive redistribution policies. According to EU methodology, the proportion of the middle class in the economic stratification of society should account for approximately 60% of the total population. The middle-class population, characterized as the most actively engaged segment in the labor market and the markets for goods and services, primarily sustains their livelihood through labor-based income (Eurostat, 2021). The middle class is defined by its income, employment, property, and savings (Levanda, 2021; Otar, 2014a, b). The emergence of the middle class is intricately linked with an improvement in the population's quality of life, ultimately contributing to the stabilization of the economic conditions for market entities. The middle class, on the other hand, has resources that can be accumulated and invested in the economy.

The aforementioned studies attribute multifaceted significance to entrepreneurship and associate it with the concept of historical perspective or household, which serves as a social security function in the economic system of post-Soviet uncertainty. The present study primarily focuses on a set of entrepreneurial characteristics that shape a typical profile of an entrepreneur as a representative of a new economic class that emerged after the dissolution of the Soviet Union in the absence of effective state regulation. The novelty of the study is in presenting a typical profile of entrepreneurship according to the national socio-economic features of the post-Soviet space's new paradigm, as well as the influencing factors of the COVID-19 pandemic.

The article follows a structured approach. The first section is dedicated to the introduction, which encompasses an overview of the existing global issues and trends in the field of entrepreneurship. This is followed by a sect. in the "literature review" section that focuses on discussing the local issues and challenges. The next section is devoted to a brief description of the methodological design of the study. The third section presents the results of the analysis. The fourth section discusses and compares the results with those of other studies. The fifth section contains the concluding remarks, practical suggestions, and areas for future research and research limitations.

This study aims to establish a comprehensive socio-economic profile of entrepreneurs in the FSU states who serve as foundational members of the burgeoning middle-class stratum. The primary objective of this study is to develop a comprehensive understanding of the socio-economic characteristics of entrepreneurs in the former Soviet Union

countries. This pursuit seeks to shed light on their significant involvement in shaping a burgeoning middle-class demographic and driving forward the socio-economic progress of the region. To achieve a collective objective, the focus is directed towards three research tasks: (1) to analyze the socio-economic nature of entrepreneurship as a distinct economic class within the emerging paradigm of the post-Soviet space; (2) to examine business dynamism within the economy's coordinated system; and (3) to develop a representative profile of entrepreneurship of the post-Soviet space as a pillar of the new middle-class stratum.

Based on the above, the following hypotheses are posited:

- The hypothesis concerning the socio-economic nature of entrepreneurship posits
  that entrepreneurship in the former Soviet Union countries diverges from conventional economic classes and functions as a pivotal mechanism in shaping the emergence of a new middle class. This investigation has the potential to unveil distinctive
  features about the structure, motivations, and values of entrepreneurs that contribute to their elevation to a new societal stratum.
- 2. The hypothesis regarding business dynamics suggests that the business landscape in the former Soviet Union countries is intricate, exerting substantial influence on the trajectory of the economic environment. This hypothesis serves to elucidate the factors that either foster or impede entrepreneurial development while uncovering the intricate interplay between the business realm and the state sector.
- The hypothesis concerning the representative entrepreneurial profile may demonstrate that entrepreneurs within the post-Soviet space construct a distinctive sociocultural archetype, which assumes a pivotal role in the formation of the nascent middle class.

# Methods

The study aims to assess middle-class entrepreneurship using traditional socio-economic indicators compiled by statistical offices. This will enable the development of a typical profile of an entrepreneur, on the example of the countries of the Commonwealth of Independent States (CIS), including Kazakhstan, as a representative of Central Asia and the Russian Federation, as a transcontinental country of Asia and Central Europe, respectively. Furthermore, additional countries from the former Soviet Union, such as Azerbaijan (South Caucasus), Latvia (Baltic states), and Belarus (Eastern Europe), have been included. This inclusion has the potential to offer a representative depiction of middle-class dynamics and entrepreneurship across diverse segments of the region. Such an approach facilitates more precise comparative analyses and the identification of overarching trends that impact the socio-economic development and class structure within this crucial geographical context.

Against the backdrop of other former Soviet republics, these countries have historically closed commercial relations in the field of natural resource trade and strive to reach the level of advanced countries in terms of entrepreneurship and SME development. The statistical data analysis spans the years 2015–2020. The study is based on three basic methodological concepts: household entrepreneurship (Carter et al., 2017), firms in the national economy (Tepavcevic, 2020), and economic stratification of society (Levanda,

2021). Methodological tools used include multidimensional statistical analysis, monitoring, correlation indicators, and graphical representation of statistical data. Histograms, graphs, and diagrams, created with Excel, Visio, and MathType, are used to visualize the generalization and interpretation of the evidence.

Three objectives are addressed in the study:

The solution to task No. 1: To identify the socio-economic characteristics of entrepreneurs as an economic class, using demographic statistics (Bosma, 2021; UNFPA, 2021) to assess the level of entrepreneurship development among the general population of the post-Soviet space (hereafter referred to as the CIS). Moreover, the significance of entrepreneurs as an economic class will be quantitatively delineated by using socio-economic statistics from sources such as Federal State Statistics Service (2021), Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan (2021a; b), Azerbaijan State Statistics Committee (2023), the Central Statistical Bureau of Latvia (Latvija.lv., 2023), and the National Statistical Committee of the Republic of Belarus (2023) and Levanda (2021).

The measurement unit of demographic statistics (Fig. 1) is the indicator of distribution by four age groups: 0–14 years, 15–29 years, 30–64 years, and 65 and older. The measurement units of socio-economic statistics (Figs. 2 and 3) are the gross enrollment ratio of higher education; the share of employed in SMEs from total employment in the country; the share of individual entrepreneurs in the structure of SMEs; income groups by quintiles: Ist quintel (poor); IInd quintel (lower middle class); IIIrd quintel (core of the middle class); IVth quintel (upper middle class); Vth quintel (rich).

It should be noted that the correlation coefficient  $(R^2)$  between the socio-economic indicators series (Fig. 2a) is equal to 1, indicating a complete correlation of variables and justifying the significance of variables (such as the share of SMEs in total employment, including individual entrepreneurs, and the gross enrollment ratio in higher education) as meaningful characteristics of entrepreneurship. The result of solving task No. 1 is a quantitative description of entrepreneurship as a pillar of the new paradigm stratum of the post-Soviet space.

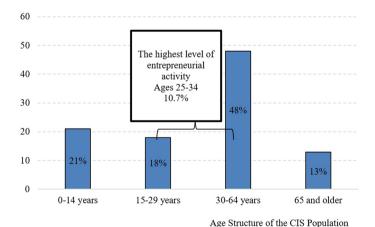


Fig. 1 Age structure of the CIS population and entrepreneurship, 2021.

Source: author-developed based on data from Bosma et al. (2021), and UNFPA (2021)

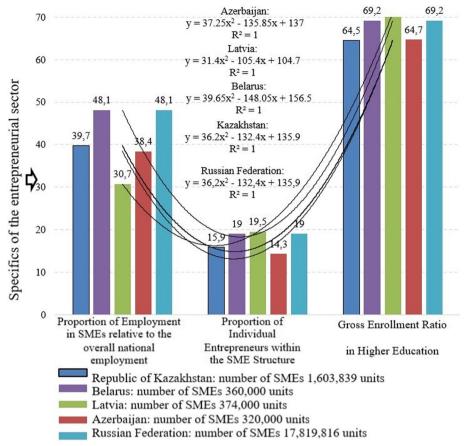


Fig. 2 Profile of the business sector.

Source: author-developed based on data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the examined countries and the Federal State Statistics Service (2021)

The solution to task No. 2. Investigate business dynamism in the coordinate system of the economy in the context of institutional interconnection using the Doing Process tool that identifies potential barriers related to business regulation in the national profile of the country (The World Bank, 2021); income differentiation coefficient that characterizes the degree of social stratification as the ratio between the average levels of monetary income of 20% of the population with the highest incomes and 20% of the population with the lowest incomes (Eurostat, 2021); income tax rate that characterizes the degree of favorable tax conditions for the business environment. Graphs are used to display the input data for the countries of the Republic of Kazakhstan and the Russian Federation, respectively. To plot the graph, the indicators for the three variables considered above for the period 2015-2020 for each analyzed country are taken and compared with the graphs of the trend line parameters: logarithmic for the Republic of Kazakhstan and polynomial for the Russian Federation, used in Excel for approximation purposes. In general, the smoothing formula with a logarithmic approximation can be expressed as  $y = a * \ln(x) + b$ , where ln is the value of the natural logarithm. This is the most appropriate option for the Republic of Kazakhstan, where interval data series initially change and then take on a balanced form. The polynomial smoothing function is

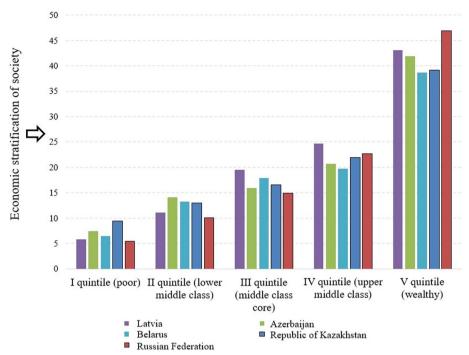


Fig. 3 The model of income stratification of society and entrepreneurship, 2021.

Source: author-developed based on data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the examined countries and Federal State Statistics Service (2021)

$$y = al + al * x + a2 * x^2 + \dots + an * x^n$$
.

Using this method on a wide range of data from the Russian Federation is a good idea because that data is highly variable. The mathematical measure of the empirical dependence of the quantities is the determination coefficient ( $R^2$ ), and the result is the presence of the fact/or absence of correlation dependence.

The solution to Task 3 involved using the results of socio-economic statistics and correlation analysis obtained from Task 1 and Task 2. These results were then demonstrated in a graphical format, forming the foundation for constructing the entrepreneur's profile. The outcome of Task 3 is the socio-economic profile of entrepreneurs in the post-Soviet region. The entrepreneur profile encompasses the main characteristics of entrepreneurial activity as a driver of economic growth, including a high level of education, engagement in entrepreneurship due to limited alternatives in wage labor, and a strong desire for entrepreneurship among the younger population, including those who grew up in the new socio-economic conditions, introducing a fresh potential for entrepreneurship in the middle-class stratum, and a moderate fiscal administration that encourages middle-class entrepreneurs to contribute to the country's economy.

This study aims to explore the process through which a new socio-economic stratum consisting of entrepreneurs is formed. The subject of the study is to deduce the connections and dependencies of a new stratum within society's socio-economic system.

Additionally, a sociological study was conducted by us between February 01, 2018, and February 15, 2020. This study encompassed the search for electronic addresses

and the implementation of online surveys to discern correlations between entrepreneurial activities and various dimensions of socio-economic development.

The sample was randomly generated, and through the utilization of the Finder Expert search service, over 3000 email addresses of individuals residing in the selected countries with their businesses or enterprises were identified. Invitations to participate in the Google Forms survey, along with its rationale and questionnaire, were dispatched to these email addresses. Of the 3100 requests made, 2750 affirmative responses expressing consent to partake in the research were received.

Within the scope of this study, a comprehensive questionnaire was formulated.

# Questionnaire

- 1. Place of residence (city/village):
- 2. Do you have experience in entrepreneurial activities dating back to the times of the Soviet Union? (Yes/No)
- 3. In your view, has the middle class of the former Soviet Union undergone changes over the past decades? (Yes/No)
- 4. Do you believe that entrepreneurs from the former Soviet Union possess distinctive modes of socio-economic behavior? (Yes/No)
- 5. Do you perceive entrepreneurs as agents of change in shaping new values and norms within society? (Yes/No)
- 6. Do you consider that the growth of entrepreneurship might lead to alterations in the social structure and economic dynamics of society? (Yes/No)

The original questionnaire was in the Russian language and was subsequently translated into the languages of the respondents for enhanced comprehensibility. The responses to the proposed questions aided in discerning the respondents' perceptions regarding entrepreneurial activities and their societal implications. Such analysis holds significance in comprehending the role of entrepreneurs in shaping new values, economic dynamics, and socio-cultural changes within the former Soviet Union.

A primary limitation of this study pertains to the potential discrepancy between the factual data and the information provided by the respondents.

Data quality control was ensured through the implementation of the following measures: (1) survey data were cross-referenced with profiling data; (2) participation was restricted within a specific timeframe (7 days after agreeing to participate); (3) several registrations were cross-validated using integrated functions within Google Forms. The sampling error did not exceed 5%.

All acquired data underwent rigorous statistical analysis. The assessment of the obtained research outcomes for their validity was conducted utilizing a multifactorial method of MANOVA (multivariate analysis of variance), employing Microsoft Excel software and the Statistica 10 software package. Discrepancies in the obtained results were ascertained at a significance level of  $P \le 0.05$ , as determined by the Student's t-test criterion.

#### Results

Analysis of the literature data showed that entrepreneurship is a national phenomenon that arises from ongoing human interaction. Consequently, changes in the business sector's quantitative and qualitative characteristics will affect the social system and the national economy. The CIS countries are home to approximately 286 million people as of 2021, with 52 million (18% of the population) aged 15 to 29 years. This is the first generation of individuals who were born and socialized in the newly independent states formed following the collapse of the Soviet Union and are motivated to pursue entrepreneurial endeavors. Figure 1 presents the mentioned information.

The data analysis in Fig. 1 shows that the most active age group aspiring to an entrepreneurial career is between the ages of 25 and 34 (10.7% of the total population). It encompasses a portion of the 15- to 29-year-old age group and a portion of the 30- to 64-year-old age group. Thus, representatives of younger age groups, including youth, are the most entrepreneurial in the FSU states, viewing entrepreneurship as a means of generating income.

To quantify the development of entrepreneurship as a post-Soviet economic class, standard socio-economic indicators characterizing the CIS business sector were selected (using the example of the Republic of Kazakhstan, the Russian Federation, Azerbaijan, Latvia, and Belarus) (Figs. 2 and 3):

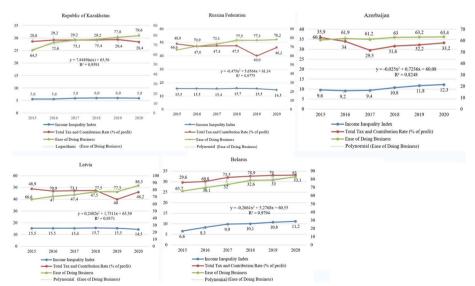
- The number of people with higher education, since entrepreneurship in the FSU states relies on human capital;
- The number of people engaged in SMEs, including self-employed entrepreneurs, since the function of the business sector is to create jobs in the economy;
- The number of SMEs in the structure of the economy, since the size of the private sector has an important role in the labor market and trade;
- The distribution of monetary income by quintile groups of the population, since income is a major determinant of the social stratification of a country.

As of 2021, the number of active SMEs in the Republic of Kazakhstan and the Russian Federation is 1,603,839 and 17,819,816, respectively. Meanwhile, in Azerbaijan, Latvia, and Belarus, the corresponding figures were 320,000, 374,000, and 360,000, respectively. Additionally, all countries analyzed had a population with a sufficiently high level of education. It helps the private sector development and function (the value of the determination coefficient  $R^2$ =1, indicating that the values are completely correlated). It is critical to note that, except for the quantitative indicator of registered SMEs in the Russian Federation, all of the indicators assessing the business sector's profile are lower in comparison to the Republic of Kazakhstan. This indicates that Russian entrepreneurship is lagging in realizing the potential of SMEs within the economy's structure, which is largely responsible for middle-class education and solves the problem of increasing the population's income level through job creation, as evidenced by the data presented in Fig. 3.

The applied model of income stratification of society by quintile groups, which represents the standards of developed countries, demonstrates that the bulk of the population is concentrated around the income distribution of 4–5th quintile groups, which are recognized as the middle class. Thus, the middle class quantitatively prevails in all

examined countries: 51.4% in the Republic of Kazakhstan, 47.7% in the Russian Federation, 50.7% in Azerbaijan, 55.3% in Latvia, and 50.9% in Belarus. However, according to EU methodology, its quantitative indicator is lower than the established standard of best practice (60.0%). Thus, the social structure of the CIS countries is characterized by a predominance of members of the poor and rich classes over the middle class, particularly in the Russian Federation. It is worth noting that, in the context of the Covid-19 pandemic, the poor account for 9.4% of Kazakh society and 5.4% of Russian society, while in Azerbaijan, Latvia, and Belarus, these figures stand at 7.4%, 5.8%, and 6.5%, respectively%. These figures illustrate the number of people who lack the resources necessary to sustain their existence and have no chance of joining the core of the middle class, the stratum that ensures a decent standard of living and the ability to withstand adversity. Within this context, the growth and support of entrepreneurial activity will be influenced by social and economic factors that reflect economic institutional changes. As a measure of socio-economic change, the analysis employs the income differentiation coefficient, which characterizes access to resources necessary to ensure a decent standard of living and the opportunity to realize one's potential; the income tax rate indicator, which characterizes the fundamental national conditions for the development and operation of entrepreneurship; and the Doing Business tool, which characterizes the level of attractiveness of entrepreneurship for prospective entrepreneurs in the economic coordinate system (Fig. 4).

As the dependence model shows (Fig. 4 features of forming relationships in the coordinate system of the economy a–b), the level of reliability of the logarithmic approximation for the Republic of Kazakhstan is  $R^2 = 0.9591$ . In general, the smoothing formula is written as  $y = 7.8489 \ln(x) + 65.56$ . The confidence level of the polynomial approximation for the Russian Federation is  $R^2 = 0.9775$ . The function describing this type of smoothing is written as  $y = 0.475x^2 + 5.6564x + 61.34$ . Correlation dependence results in a strong correlation between the rise in the attractiveness of



**Fig. 4** Entrepreneurship sector: features of institutional relationships in the coordinate system of the economy, 2020 in the Republic of Kazakhstan (**a**), the Russian Federation (**b**) Azerbaijan (**c**), Latvia (**d**), and Belarus (**e**).

Source: author-developed

entrepreneurial activity for the economically active population, which is accompanied by a decline in the overall rate of taxes and contributions in the national context of the economy, and the lack of correlation between the social pillars of the strata of society. Thus, since 2015, the ease of doing business in the Republic of Kazakhstan has increased by +15.1 pp to an estimate of 79.6%, with a parallel reduction in the total tax rate and contributions by -0.2 pp to 28.4%, and in the Russian Federation by +11.6 pp to an estimate of 78.2%, with a parallel reduction in the total tax rate and contributions by -2.7 pp to 46.2%. Such dynamics of indicators of institutional changes in the economy indicate a progressive process of improvement for entrepreneurs as a result of moderate fiscal administration strengthening and a lack of attraction to entrepreneurship among the population, which is regarded as a forced form of employment in conditions of a scarcity of alternatives to wage employment.

Summarizing the results of the three analyzed areas: formation and development of entrepreneurship in the total post-Soviet population as a growth factor for economy and correlation indicators, a typical socio-economic profile of entrepreneurship. The results are visualized below using a graphical image in Fig. 5.

The typical socio-economic profile of entrepreneurship presented here enables identifying characteristics that correspond to the post-Soviet countries' economic models:

- Persons with entrepreneurial intentions are positively motivated to learn more since they are highly educated economic entities;
- Business owners, including self-employed entrepreneurs through their activity, impart dynamism to the market economy, while involvement in entrepreneurship is based on the absence of alternatives to wage employment and, as a consequence, income for subsistence;

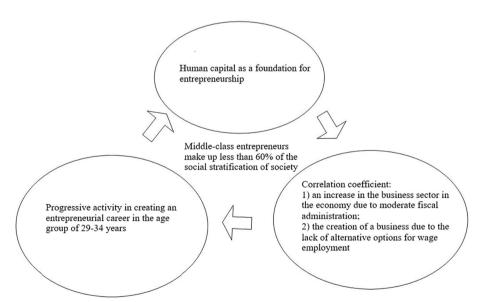


Fig. 5 Typical entrepreneur profile of a new paradigm of the post-Soviet space.

Source: author-developed

**Table 1** Survey findings on the relationships between entrepreneurial activity and various aspects of socio-economic development

Country	Question	Yes (%)	No (%)
Kazakhstan	1	30 (825)	70 (1925)
	2	40 (1100)	60 (1650)
	3	45 (1237)	55 (1513)
	4	50 (1375)	50 (1375)
	5	55 (1513)	45 (1237)
Russia	1	25 (687)	75 (2062)
	2	35 (962)	65 (1788)
	3	40 (1100)	60 (1650)
	4	45 (1237)	55 (1513)
	5	50 (1375)	50 (1375)
Azerbaijan	1	20 (550)	80 (2200)
	2	30 (825)	70 (1925)
	3	35 (962)	65 (1788)
	4	40 (1100)	60 (1650)
	5	45 (1237)	55 (1513)
Latvia	1	15 (412)	85 (2338)
	2	25 (687)	75 (2062)
	3	30 (825)	70 (1925)
	4	35 (962)	65 (1788)
		40 (1100)	60 (1650)
Belarus	1	25 (688)	75 (2062)
	2	20 (550)	80 (2200)
	3	25 (687)	75 (2062)
	4	30 (825)	70 (1925)
	5	35 (962)	65 (1788)

- The dominance of the younger generation under the age of 35 in the business sector, including a group of young people born and socialized in new socio-economic conditions;
- Entrepreneurship as a stratum is currently at the stage of creation as it makes up less
  than 60% according to estimates of the economic stratification of society, which is
  characterized by a restrained level of entrepreneurial inclination on the part of economic entities to the available opportunities.

As for the conducted survey, the results indicated that the question regarding past entrepreneurial experience within the former Soviet Union elicited varying response levels in each country. The highest percentage of affirmative responses to this question was observed in Kazakhstan, while the lowest was recorded in Russia and Azerbaijan.

Regarding perspectives on changes within the middle class over the past decades, respondents from Russia, Azerbaijan, and Belarus are more inclined to consider that this class has changed. Kazakhstan and Latvia also exhibit a certain level of positive responses, albeit to a lesser extent. The question about distinct entrepreneurial styles and their role in socio-economic behavior portrays a similar view across all countries. Respondents from all countries believe that entrepreneurs possess distinct styles and that entrepreneurship can influence societal values and norms.

The process of societal transformation also demonstrates a high level of endorsement from respondents across all countries. Belief in the potential of entrepreneurship as a means of altering social structure and economic dynamics is evident in all responses (Table 1).

Thus, a prevailing positive sentiment towards entrepreneurship and its potential societal impact is observed across all investigated countries. The diverse responses reflect the influence of cultural, historical, and social factors on the perception of entrepreneurship within each respective country.

Therefore, the study validates the hypothesized impact of entrepreneurship on the socio-economic development of nations, emphasizing its critical role in shaping societal values and norms, along with highlighting the importance of business dynamics within the economic landscape.

#### Discussion

The results of the analysis linking entrepreneurship and social stratification of society were carried out in three steps. The first step included an analysis of demographic and socio-economic statistics in order to provide a quantitative description of entrepreneurship formation and its development in the total population by the example of the CIS countries, including the Republic of Kazakhstan and the Russian Federation. The age structure of the CIS population reveals that progressive entrepreneurial aspirations are held by young citizens aged 25-34 years who view entrepreneurship as a source of income. Additionally, a statistically significant relationship was discovered between the structure of SMEs, including self-employed entrepreneurs, and the gross enrollment rate in higher education, indicating the critical role of education in promoting entrepreneurial intentions in the FSU states and correlating with the findings of Martínez-Gregorio et al. (2021). It was discovered that in Levanda's, (2021) model of income stratification of society, the middle class was defined as an investor in the economy using the EU methodology's measurement boundaries (Eurostat, 2021)—income distribution by quintile groups—the majority of the population in the analyzed countries is concentrated in the middle class (2nd to 4th quintiles), which quantitatively dominate both the Republic of Kazakhstan and the Russian Federation, but collectively fall short of the established European standard (60%). Again, in both countries' economic stratification, there is a social polarization of the upper-income quintile against a background of population equality, particularly in the Russian Federation. Our findings are in line with those of Tikhonova et al. (2019). The scholars confirm that the divide between the upper-income group and the rest of society continues to widen over time and that people's chances of moving into one economic stratum are determined by their income. The second step of the study presented the indicators of correlation between the variables of institutional relationships in the context of business dynamism: the Doing Business tool, income differentiation coefficient, and income tax rate for the period 2015-2020. The analysis revealed a strong correlation between the Doing Business tool and fundamental national taxation conditions and the absence of a statistically significant relationship between society's income stratification. These characteristics allow us to assert that favorable conditions for business activity have been established in the post-Soviet region in terms of tax compliance, which enhances the attractiveness of entrepreneurship amidst the absence of a vision of entrepreneurship as upward social mobility and the desire for autonomy. Lafuente et al. (2022) used this approach in their publication. The researchers examined how changes in the entrepreneurial ecosystem, both quantitative and qualitative, affect countries' performance on the Global Entrepreneurship Index (GEI) over seven years (2013-2019). They covered a total of 71 countries. The findings of an empirical study indicate that the quality of the entrepreneurial ecosystem is influenced by the local entrepreneurship system's political priorities. Stephan et al. (2020) argue that the public legitimacy of entrepreneurship in a national context influences people's consideration of alternative career paths and, as a result, fosters a sense of significance and autonomy at work. In comparison to wage employment, researchers define self-employment as an independent and strong-willed career choice that increases the sense of importance in work and the perception of work autonomy. One way to climb the social ladder is to recognize the value of an entrepreneurial household, in which family members, relatives, and other household members all participate (Carter et al., 2017; Duparc & Zhursunov, 2019; Otar et al., 2020). The third step is to develop a typical socio-economic profile of an entrepreneur in the post-Soviet space, based on the quantitative description of entrepreneurship's socioeconomic essence and correlation indicators of the institutional relationship between business activity variables. In this context, the following standard characteristics of economic entrepreneurship were identified: entrepreneurship is based on the highly educated human capital of a young segment of the population aged 25-34 years old; entrepreneurship is viewed as a necessary condition for generating income in the absence of alternative sources of income other than wage employment and is consistent with favorable national framework conditions that facilitate the development and operation of businesses. The lack of entrepreneurial spirit according to Audretsch et al. (2022), is due to the corruption of the environment, which is not conducive to starting and owning a business. Queirós et al. (2019) and Laffranchini et al. (2018) assert that the behavioral patterns of economic actors are intricately influenced by the cognitive framework of the prevailing societal culture. The findings of this study indicate that the collective has a greater influence than the individual in the former Soviet Union states. More broadly, the presented analysis of the aforementioned microdata enables the formulation of the conclusion that the level of attractiveness for the development of entrepreneurship in the FSU states is quite high in terms of basic national entrepreneurship standards but quite limited in terms of generating income to meet the population's immediate needs. The latter requires concrete actions aimed at enhancing social mobility through the social legitimacy of entrepreneurship.

# **Conclusions**

Analysis of data from the CIS countries, including Kazakhstan, Russia, Azerbaijan, Latvia, and Belarus for 2015–2021 was done in this study. It looked at the data in many different ways. The analysis's results showed that the national governments of the FSU states place a premium on entrepreneurship formation and development, as evidenced by the aspirations of young people born and socialized in new

socio-economic conditions to pursue entrepreneurial careers. Thus, entrepreneurship as a stratum is being revitalized due to the transformation of the economic subjects of the age group 25-30 years into business dynamism. Because it is based on highly educated human capital, it has been established that entrepreneurship can be started and scaled up with the help of education. The economies of the CIS countries were found to have a favorable fiscal climate for doing business. Although state policy is geared toward entrepreneurship, there is a lack of public legitimacy among the populace regarding the business sector as a means of generating income and progressing up the social ladder in society's stratification system. The study found that entrepreneurship is viewed as a necessity in the FSU states in the absence of alternatives to wage employment. Thus, the CIS countries must develop the capacity of the mass stratum of society to initiate entrepreneurship as a stratum of the middle class to capitalize on emerging market opportunities and improve their citizens' well-being. It has been proven that modern entrepreneurs, as pillars of the emerging middle class, are in the process of formation and represent 47.7-55.3% of the economic stratification of society. This result suggests that entrepreneurship, as an economic growth factor, requires politicians to popularize it, including at the household level. Overall, the results of multidimensional statistical analysis have shown that the recognition of the importance of the education sector as the primary capital of business and the integration of the younger generation as a factor of business dynamism within the economic coordinate system are typical characteristics of the socio-economic profile of entrepreneurs in the post-Soviet region, who serve as pillars of the emerging middle class.

The results will be useful to politicians, including business owners, who may apply them in real life to increase social mobility through the formation of entrepreneurial aspirations among the population of the FSU states to ensure a decent standard of living, especially in uncertain times.

It is recommended that forthcoming research endeavors incorporate a comparative analysis between the business sectors of Commonwealth of Independent States (CIS) nations and those of advanced economies. This approach will facilitate a comprehensive comprehension of the intricacies characterizing post-Soviet economic entrepreneurship on a global scale at both the meso- and macro-levels.

The study's limitations encompass the subsequent facets: the geographical scope of the investigation is confined to an empirical dataset originating from the Former Soviet Union (FSU), with a specific emphasis on Central Asia, Central Europe, the South Caucasus, the Baltic states, and Eastern Europe. This constrained scope potentially impinges upon the absolute reliability of the outcomes concerning the entrepreneurial profile within the societal economic stratification.

# Abbreviations

SMEs Small and medium-sized businesses GEI Global Entrepreneurship Index

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#### **Author contributions**

All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by EO, RS, AA, Al and KM. The first draft of the manuscript was written by EO. All authors read and approved the final manuscript.

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#### Availability of data and materials

Data will be available on request.

#### **Declarations**

#### **Competing interests**

The authors declare that they have no competing interests.

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