This issue of the journal is dedicated to the various aspects of entrepreneurial development in countries with transitional economies. The specific features of entrepreneurship during the transition to a market economy are analyzed. Such features include the institutional environment that determines the socioeconomic and political contexts of entrepreneurial activities, sets the structure of incentives, and defines specific business strategies. In some cases, the relevant institutions’ activities result in the emergence of predominantly productive entrepreneurship, in others, there are unproductive or even destructive processes [Baumol, 1990]. Thus, various national ecosystems are created, which affect innovation activities, labor markets, and people’s involvement in entrepreneurship in a variety of ways.

Despite the fact that an impressive body of literature on the specific features of entrepreneurship in the former socialist countries has emerged over the past 20–25 years, a certain shortage of comparative empirical analysis still exists. This is due to the limited availability of reliable, representative data and a lack of validated concepts that might explain the increasingly divergent entrepreneurial ecosystem development paths for various former members of the so-called socialist bloc.

The papers in this issue advance a critical analysis of a popular thesis according to which the so-called “path dependence effect” is at the core of the country-specific evolution of entrepreneurial ecosystems in post-socialist nations. Over the course of the quarter of a century that has passed since the collapse of the socialist system in Central and Eastern European (CEE) countries and the former Soviet Union new opportunities have arisen there along with new institutional traps. They reflect the “design” of the systemic transformation, and describe the state of entrepreneurship in each of these countries. Furthermore, the authors confirm the argument that, in addition to the obvious differences in economic development levels, the state and the rate of entrepreneurial evolution in the countries under consideration are affected by numerous socio-cultural factors. As a consequence, countries with comparable per capita GDP figures may be very different in terms of their entrepreneurial development, or vice versa, they may be quite close to each other in this respect despite having significantly different general economic indicators.

Any entrepreneurial activity can be measured at the start-up stage, when potential challenges and opportunities are defined. The first group of papers in the issue analyze the sources of, reasons for, and patterns of entrepreneurial activity in the post-socialist region. The paper by Alexander Chepurenko “Entrepreneurial Activity in European Post-Socialist Countries: Methodology and Research Limits” considers approaches to classifying CEE countries into structurally and contextually defined groups. The paper analyzes the principles underlying such a taxonomy and proposes and justifies its new, original methodology. Two “axes” are put forward to typologize entrepreneurial ecosystems: the level of entrepreneurial activity and the quality of framework conditions for its development. The first indicator is determined by the motivational structure of entrepreneurship, and the second, by the difference between the share of nascent entrepreneurs, and that of people who ceased their
business activities over the relevant period. Based on these two indicators measured by the Global Entrepreneurship Monitor (GEM), the paper identifies several clusters of CEE countries. Despite various limitations, this approach allows one to uncover empirically based differences between national entrepreneurship ecosystems and highlights the need to design government policies adapted to specific national contexts.

The paper by Karina Bogatyreva and Galina Shirokova analyzes the factors affecting the entrepreneurial activities of students, who due to their age and specific professional knowledge, have great potential to establish innovative entrepreneurial firms. On the basis of a sample comprising 32 Russian universities, the authors assess how factors like belonging to a business-owning family, support provided by the university entrepreneurial environment, and the level of development of the regional institutions affect the successful completion of the aspirations to start-up stage. The study is based on the planned behavior theory and the embeddedness perspective. It uses data from the Global University Entrepreneurial Spirit Students’ Survey (GUESSS) conducted in 2013–2014. It was found that coming from a business-owning family tends to negatively affect potential entrepreneurs’ probability of founding a start-up. On the contrary, there is a significant positive correlation between the level of development of the regional institutional environment for entrepreneurship and students’ decision to set up a new venture. The pattern previously detected in advanced market economies was confirmed in the Russian context as well: without a smoothly operating regional entrepreneurial ecosystem, many aspirations to establish innovative start-ups simply cannot be realized. Accordingly, there is a need to review the interactions between key elements of the regional innovation process: start-up firms, intra-university innovation infrastructure, and the system of institutions responsible for promoting an innovation-based economy.

Alina Sorgner’s paper is focused on the challenges faced by entrepreneurship due to the prospects for automation and the replacement of human labor at mass production facilities, which advanced economies will encounter as they move into the new technological paradigm. Various scenarios for employees who are going to lose their jobs due to automation are analyzed, such as becoming unemployed, changing professions, or becoming entrepreneurs. On the basis of data from the German longitudinal project, Socio-Economic Panel Data, the author concludes that representatives of more “secure” professions are more likely to opt for self-employment or establishing new companies than those whose jobs are likely to be cut. In other words, the overall growth of entrepreneurship will be achieved not due to necessity-driven entrepreneurs (i.e., those forced to make this choice by an unfavorable labor market situation), but rather by those motivated by the opportunities offered by new emerging technologies. However, this conclusion primarily applies to advanced market economies. In post-socialist countries where many framework conditions (ranging from the population's attitudes toward entrepreneurship to the actual institutional conditions for entrepreneurial activities) are distinctly different, the situation may therefore be quite different. An upsurge of necessity-driven entrepreneurship is quite probable there, similar to what happened at the beginning of the systemic transformation, however, this time it will be primarily caused not by social but technological trends. Confirming or refuting these hypotheses would require an analysis of the technological entrepreneurship segment in such countries, its specific features and development trends given that the degree of technological entrepreneurs’ participation in the entrepreneurial ecosystem and the institutional maturity may significantly affect the prospects for the next wave of high-tech start-ups.

A special section of the journal, “Technological entrepreneurship: growth factors”, is devoted to analyzing the aforementioned segments in developing economies. Przemysław Zbierowski’s paper opens it. Based upon GEM data for 2013-2015 for Russia, Hungary, Romania, Poland, Lithuania, Latvia, Estonia, Czech Republic, and Kazakhstan, the author analyzes technological entrepreneurs' expectations and intentions regarding growth, entering external markets, and innovation strategies, furthermore he assesses their contribution to economic and social development. Radical differences were discovered between the above countries, both regarding the share of high-tech companies in the overall group of early entrepreneurs and in terms of expectations for growth, expansion to foreign markets, and innovation activities. Notably, Russia had the lowest values for almost all these indicators, while “leadership” is shared by several countries. Despite the limitations imposed by the GEM methodology, the results of the study allowed us to conclude that in the medium term, new high-tech companies' contributions to various transitional economies would probably be different, while the differences between country-specific aspects of entrepreneurship are likely to keep growing. Developing effective political recommendations will not be possible without taking the relevant national contexts into consideration.
On the basis of case studies concerning technological entrepreneurship in Turkey, Elif Kalaycı analyzes the development of networks between the founders of innovative start-up companies and their relevant potential stakeholders. The latter primarily includes family members and the government institutions responsible for supporting and promoting entrepreneurship. The author demonstrates that amid the specific socioeconomic conditions of a country like Turkey, family may significantly impede the development of innovative entrepreneurship. They might do so due to fears of the risks their relatives who decide to go into such businesses might face due to unstable institutional conditions. This observation can also be applied to post-socialist countries whose relevant framework conditions are similar to those of Turkey. The obvious contradictions between the mentality of employees (guided by causal considerations) and the effective logic of an entrepreneur can lead to the collapse of a start-up even at an early stage of its life cycle. Adopting an ethical and passionate approach to business from the very start helps bring an entrepreneur's social network into the circle of stakeholders supporting their project. The author's results partially contradict, but at the same time supplement the data previously published in the literature. The entrepreneur's family and the team they put together do not always serve as sources of help and support. Furthermore, in certain societal contexts, they can either stop the entrepreneur from launching the new venture or cause its failure. In such cases, having a sound basic idea and being able to involve members of one's social network in the business project become particularly important.

The paper by Olga Obraztsova, Tatiana Poliakova, and Ekaterina Popovskaya is devoted to an important issue: the assessment of the effects of various mechanisms for funding start-ups. In the majority of transitional economies, the entrepreneurs’ own resources and so-called “love capital” (money provided by family or friends on non-market terms) serve as the main funding sources for start-up firms, which limits their opportunities for growth. In an attempt to find out what conditions would prompt early-stage entrepreneurs to more actively use borrowed resources, the authors analyzed a sample comprised of more than 2,000 observations made as part of the GEM project on the macroeconomic market parameters in Russia and six CEE countries. This paper demonstrates that, depending on the national context, different combinations of external factors and internal attitudes affect start-up entrepreneurs’ ability to obtain funding from official sources. For example, in Croatia and Bosnia and Herzegovina such opportunities are significantly reduced due to related risks, which, on the other hand, are outweighed by highly innovative business ideas. This is also true for Latvia, where (as in Russia) favorable conditions for starting one’s own business play a no less important, positive role. In Slovenia and Romania, the promotion of a positive image of entrepreneurship by the media is critically important. Post-socialist countries vary significantly not only in terms of their entrepreneurial activity, but also regarding the list and the nature of conditions that affect the available opportunities to borrow financial resources. Therefore, flexible national entrepreneurship promotion policies are needed. In some cases, promoting a more positive image of such activities in the media or increasing the financial and economic know-how of potential entrepreneurs seems to be enough, while in others systemic factors turn out to be more important, such as favorable conditions for establishing a new business or the innovativeness of the idea behind the start-up.

As companies mature, their links with the entrepreneurial ecosystem become more extensive and diverse. Specific features of this process in post-socialist countries are poorly understood. The materials presented in the third section, “Small and medium entrepreneurship”, help one learn more about them. The chapter is opened by a paper by Victoria Golikova and Boris Kuznetsov, who assess external and internal factors limiting the growth of Russian small and medium firms. The data collected through an international survey of companies on the basis of a compatible methodology allowed the authors to conclude that compared with the EU, Russia has a higher share of small and medium production companies striving to step up the scale of their operations, but find they are unable to do so. The main reason is a lack of resources including skilled personnel, advanced equipment and extensive business networks. Insufficient access to external markets also hinders growth. The economic situation in the regions where the companies are located also plays a role: the higher the per capita GRP, the more satisfied companies are with the scale of their operations. Finally, the quality of the business climate matters as well (in particular, the level of corruption): only companies who know how to survive in an unfavorable environment can grow to the size they would consider sufficient. This may explain why Russia has fewer small and medium production companies able to successfully compete on the market compared with EU countries. A kind of vicious circle emerges: high administrative barriers result in higher transaction costs and smaller firms are more vulnerable to administrative pressure. The authors point out the institutional trap into which small production firms fall in regions where unstable or unfavorable framework
conditions for entrepreneurship prevail. Therefore, without a qualitative change of the institutional environment, all measures to provide targeted support, including attempts to attract investments “manually”, engaging private business in public procurement, etc., would not work. Thus, small and medium firms cannot create new high-quality jobs and innovations in the Russian and other similar economies.

The paper by Ian Miles, Veronika Belousova, and Nikolay Chichkanov analyzes the various innovation activities of companies providing knowledge-intensive business services. The study was based on data collected for 477 Russian companies belonging to this sector. Several clusters were identified: non-innovative companies, organizationally oriented innovators, marketing-oriented innovators, technological innovators, non-technological innovators, and companies with a diversified innovative profile. The classification is based upon prevailing innovation types, the correlation between demand for knowledge-intensive services and customers' innovation activity level, and the degree of services' customization. The larger the company, the more diversified its innovation activities tend to be. And vice versa, smaller firms tend to be concentrated in the non-innovative cluster. This means that large-scale innovation activity requires financial stability, the application of advanced innovation management techniques, and other similar assets which small firms usually lack. At the same time, it is small and start-up companies that often create breakthrough innovations and advance social entrepreneurship.

Jana Hojnik, Mitja Ruzzier, and Tatiana Manolova studied the correlation between the application of various “green” innovations and firms' efficiency on the basis of data about more than 200 Slovenian companies. They established that the level of companies' innovation activity directly affects their inclination to use green technologies and make green products. Various eco-innovation types make different contributions to overall business efficiency: organizational innovations work well at all firms, while process innovations generate results only at more innovative companies. The results obtained by the authors suggest that companies should more actively use more advanced eco-innovations. However, keeping in mind the conclusions arrived at by V. Golikova and B. Kuznetsov, this holds true for countries with successfully functioning entrepreneurial ecosystems. In other socioeconomic contexts, the growth of companies' productivity may be affected by other factors.

References