chapter 5.

enhancing of innovative entrepreneurship in conditions of global social and technological challenges

entrepreneurial potential of smes in ukraine in the context of eurointegration reforms

v. lavrenenko
phd in economics,
associate professor of business economics department, shei “kyiv national economic university named after vadym hetman”

n. harashchenko
phd in economics,
associate professor of business strategy department, shei “kyiv national economic university named after vadym hetman”

v. vostriakova,
phd in economics,
associate professor of business economics department,
shei “kyiv national economic university named after vadym hetman”

entrepreneurship in the modern economy is the environment for the generation of innovations which are an important factor in competitiveness and economic growth. awareness of this fact in developed countries in the 1980s. changed the attitude of government and society to small business and ways to support it. small businesses that were previously associated only with high risk, resource constraints and administrative pressures from the state and major competitors, were viewed as a major source of economic growth. the stimulation of entrepreneurship has become one of the main priorities of economic policy. in this context, the problem of sme’s
entrepreneurial potential requires a profound study on the background of eurolntegration processes.

The Association Agreement between the EU and Ukraine and its part — a Deep and Comprehensive Free Trade Area (DCFTA) will fundamentally change the rules of business and the regulatory environment in the country. These changes will affect not only exporters to EU countries, but all business entities, as the national business environment must also be brought into line with EU standards. These changes can become serious challenges for SMEs, requiring the development of skills and large financial resources to adapt to them. To solve the problems that prevent SMEs from realizing their potential to use the new market opportunities of the DCFTA, to ensure their growth and development, an effective SME support policy should be developed that broadly covers the range of issues of the European integration context.

At the same time, it should be noted that analytical documents concerning the impact of the DCFTA Agreement on the development of SMEs in Ukraine, especially those which have been developed after its implementation, are few [1,2,3]. As a rule, they are devoted only to specific issues, and there is none that would be prepared to determine the necessary tasks of the government to support SMEs in connection with the implementation of the DCFTA. There are reports on the study of the impact of DCFTA on Ukraine, Georgia and Moldova (in December 2015 on the challenges and opportunities for SMEs, and in December 2016 — on the impact in general) prepared by the European Business Association [4] and the Vienna Institute for International Economic Affairs Studies (wiiw) and Bertelsmann Stiftung [5]. There is also a document prepared on the basis of a study conducted in early 2016 before the referendum in the Netherlands in April to ratify the Association Agreement on the initiative of the Netherlands Transnational Institute — an analytical review “Expected Impact of the Association Agreement between the EU and Ukraine” [6]. In the last one opportunities and challenges for the SME sector of Ukraine in connection with the the Association Agreement are described and argued.

The following objectives are set within the framework of this paragraph as the part of actual business theory in terms of support and development of SMEs:

first, to analyze the current level of SME development and its characteristics;
secondly, to research the leverage of government support for SMEs to promote business compliance with European standards and new conditions.

International benchmarking studies use the comparative assessments of entrepreneurial intentions of the population and the realized contribution of SMEs to various sectors of the economy to analyze the entrepreneurial potential and imbalances existing in a certain region or country. The significance of these indicators in Ukraine demonstrates the existence of a significant gap between the entrepreneurial potential and the level of its using. Research conducted by the Institute of Sociology of the National Academy of Sciences of Ukraine [7, p. 16], indicates that 30.5% of respondents would like to start their own business. According to the Amway Entrepreneural Spirit Index (AESI), in Ukraine, the proportion of people who would like to start a business in 2015 was 42% [8]. Such values for the country as a whole are quite high and on the whole correlate with the world level. At the same time, on the effectiveness of SME participation in economic processes, there is a significant lag. In particular, the share of SMEs in employment in the market sectors of the economy (excluding banks, farms, public sector) does not exceed 30%, and the share of SMEs in employment in processing industry, which is an indicator of cluster development, amounts to 12%. For comparison, we note that in South Korea, these Fig.s are 85% and 77% respectively. These low results can to a large extent be explained by the unfavorable business climate for SMEs.

The development of SMEs in the context of DCFTA requires government support both to promote business compliance with European standards and new conditions, and for a positive perception of change and awareness of the prospects. The background for government strategic measures requires development of a plan for their implementation, since it is a question of a significant expenses and a serious restructuring of a large number of processes, taking into account both the capacity of the DCFTA and the counteraction to the challenges. The lack of results can affect the deterioration of economic results in the country, which in turn can lead to new political challenges.

In our opinion, a serious problem for today is the lack of a proper research and analytical consideration for the reforms on the way to the implementation of the DCFTA, which should be based on knowledge of national specifics and processes. According to a study by the Center for Public
Expertise, at the request of the Center for International Private Enterprise (CIPE), in the framework of the «Confident Business — Rich Community» project, held at the end of 2014 [9], the expert environment with current challenges and key problems of SME development recognizes corruption in different forms and manifestations; excessive regulation of business activities and lack of effective deregulation; lack of access to financial resources by SMEs. At the same time, representatives of business associations consider the existence of corrupt practices in the interaction of entrepreneurs with public authorities of different levels and the unequal relations between SMEs and public authorities the most acute of the above-mentioned problems of SME development. According to the Global Competition Index (2014), corruption is the most significant problem for business development in Ukraine. This problem closely correlates with the problems of limited and non-transparent access to state and municipal resources and the ineffectiveness of mechanisms for protecting rights and legitimate interests. Business associations consider another problem particularly critical — the presence of excessive tax pressure.

In another document, «Towards a modern public policy in the sphere of small and medium business in Ukraine», published on the basis of the BEBerlinEconomicsGmbH research (with the support of the Friedrich Naumann Foundation for Freedom) [10], the following main obstacles to the development of SMEs focused on growth, such as macroeconomic instability with limited access to financing and an unfavorable regulatory environment, in particular high administrative pressure. In addition, it is necessary to add specific characteristics of SMEs that have developed historically as a result of insufficiently effective economic policy on the part of the state — low competitiveness, a significant portion of SMEs that produce products with low added value, a high level of shadowing of entrepreneurial activity. When analyzing the level of competitiveness of SMEs, it is necessary to take into account that there are sectoral (in terms of scope) features that affect the fact that SMEs become competitive only if they reach a certain size. Only understanding these features, it is possible to formulate public policy, and it should be sectoral in nature. The theory of competition proves that competition take place only in the product-sectoral consumer field, therefore, influence must be aimed at the priorities of the industrial (industrial) policy of the state.
The problem of a large part of SMEs that produce products with low added value is closely linked to competitiveness. Only competition start on the innovation field, where the innovators of the SME sector will challenge the large companies, forcing them to also be involved in this innovative competition, will be able to solve this problem. Accordingly, top priorities of the public policy in the sphere of SME support development should be focused in solving these problems, which are identified by experts as deregulation and overcome the corruption. But business associations except deregulation and overcome the corruption as such priorities pointed tax reform, the problem of concessional lending, the creation of SME development support system from the government.

Corruption issues in the SME sector can be viewed through the prism of not only what is brought to the agenda by business (coercion of SME sector corruption subjects to avoid (decrease) the administrative (or other) pressure that threatens them), but also from the point of view of the dishonesty of the subjects themselves SMEs to gain advantages over competitors as a result of corrupt officials. This generates fictitious self-employment for money laundering for bribes. And this affects the opportunities for growth of bona fide companies and entrepreneurs. State policy should provide for measures to overcome such phenomena.

Thus, there are sufficient presuppositions to consider the entrepreneurial potential in Ukraine unrealized due to institutional and other problems. In our opinion, the main institutional factors hampering the formation and effective development of the business environment are the asymmetry of information, the absence of clear legal norms that structure the activities of enterprises, the orientation of institutions responsible for creating the basic basis of entrepreneurship for pseudo-market rules of behavior, a contradictory combination of institutions and their insufficient development, inconsistency of formal and informal institutions, blurring of property rights, excessive reglamentation of business activities.

In addition, the situation is complicated by the fact that there are a number of problems of public institutions in Ukraine that require solutions, which are the reason for the rather poor quality of conceptual and strategic documents, the lack of clear planning for their implementation, the violation of the process of harmonizing public decisions with key stakeholders and the formal attitude to principles good governance. At the same time,
civil society has not yet developed sufficient levers of influence on the governance processes in the country in order to demand proper implementation.

Important issues include social aspects and tax regulation, tools for developing relations between SMEs and large businesses, ways to «encourage» the business to engage in unprofitable or «uninteresting», but important for the economic, environmental, and social spheres in the country. In addition, the post-industrial economy requires more modern approaches to managing economic activity and using the latest management tools. That is why we should speak about the creation of such mechanisms to promote the development of SMEs, which would be based on simplifying access to information resources and expertise, the use of knowledge management methodologies, social technologies and new project management methods, e-commerce tools and distance learning and counseling technologies.

Overcoming the low level of education in business and the low level of tax culture should, in our view, become priorities for government SME policy, since their growth will directly affect the state of democratization of society. After all, those who avoid paying taxes do not have the «moral right» to demand from the state the rational use of tax revenues and accountability for the money spent.

Small business in Ukraine should be the main tool of the overall strategy of economic growth and structural reconstruction of the national economy. According to Ya.A. Zhalilo, SME should perform the functions of the structure-forming element of Ukraine's modern market economic system, a means of overcoming its structural disproportions. Entrepreneurship in modern economic conditions should become a system of built-in regulators that will be able to respond adequately to market signals, form effective private economic strategies, and for which it becomes possible to apply traditional regulators of economic stabilization.

The problem of known public approaches to stimulating small business development lies in the fact that their main focus is on stimulating the creating of a new small business, while little attention is paid to the issue of strengthening and developing small businesses that are already existing.

It is necessary to actively promote the developing of both the sphere of supply of SME services and the sphere of demand for such services, that is, the creation of the institution of entrepreneurship directly. It should be borne in mind that the process of the entrepreneurship development in
Ukraine was caused by political methods, rather than by the historical conditioning of factors and events that are inherently developing in society. The principles and essence of the new market institution did not immediately penetrate the consciousness of the overwhelming majority of the population, since it did not originate in an evolutionary way, but as a result of changes in the way of life, value orientations, traditions. Proceeding from such preconditions, the reform of socio-economic life depended on the competence of the country’s political leadership, the correlation of political forces. Another peculiarity was that the development of SME took place through the efforts of business entities, that is, on initiative from below, and one of the mechanisms for the emergence of large business is the exchange of power over property. In Ukraine, the SME sector has not developed sufficiently, since privatization processes and the transformation of the property institution themselves did not occur in accordance with the interests of the development of the domestic economic system, but in accordance with the interests of corporate structures.

To realize the potential of SMEs, appropriate government policies should be developed with the involvement of experts with extensive experience in processing and analyzing the problems of the SME sector, and who also have certain applied achievements to stimulate the development of SMEs. This can also include the mechanisms for discussing a policy with representatives of SME interests through public-private dialogue and development of a road map for the implementation of such a strategic process, which will significantly improve the quality of the final documents.

Over the past decades, world markets have been intensively developing against the backdrop of the active processes of globalization. Before Ukraine, as before, it is necessary to solve the problem of creating national market institutions, restructuring the domestic economy, increasing competitiveness and integrating it into the world economy, primarily on the basis of innovations as a universal way of gaining competitive advantages. As studies of world analytical structures show, ahead of the economic development of the leading countries is largely based on the ability of their national innovation systems to use the progress made to create added value. It is national innovation systems that can explain why some countries achieved high results in creating innovations [11].
Despite the significant backlog in terms of both production and export of high-tech products, it should be noted that Ukraine still retains intellectual potential, capable of generating world-class scientific ideas, has strong scientific schools in mathematics, physics, chemistry, medicine, radio electronics, the development of new materials, information technology, communications and telecommunications. Ukraine is one of the eight countries in the world that are capable of providing a full cycle of design and production of aerospace equipment, to the top five countries of the world with a full cycle of tank production and the ten largest shipbuilding countries in the world. The country has developed high-tech industries, in particular the production of heavy engineering, power equipment, instrumentation. Nevertheless, international comparisons (Table 1) show that there is still a significant gap between the leaders. As to the share of R&D expenditures from GDP, Ukraine lags far behind even the marginally acceptable level of 2%. The indicators of business expenses for R&D are insufficient.

**Table 1**

**Benchmarking comparison of innovative development of Ukraine [11-16 ]**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>The value of Ukraine’s indicator</th>
<th>Best value</th>
<th>Lead country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of applications filed under the Patent Cooperation Treaty (PCT) per million population, 2017</td>
<td>3,6</td>
<td>332,4</td>
<td>Japan</td>
</tr>
<tr>
<td>Patent families filed in three offices per million population, 2017</td>
<td></td>
<td>11 000</td>
<td>Japan, Tokyo</td>
</tr>
<tr>
<td>High-tech industries,% of GDP, 2015</td>
<td>15</td>
<td>36</td>
<td>USA</td>
</tr>
<tr>
<td>Export of high-tech products,% of GDP, 2013</td>
<td>0,56</td>
<td>5,19</td>
<td>Germany</td>
</tr>
<tr>
<td>Tertiary graduates in science, engineering, manufacturing, and construction (% of total tertiary graduates), 2014</td>
<td>25,5</td>
<td>48,7</td>
<td>Oman</td>
</tr>
<tr>
<td>Researchers, full-time equivalence (FTE) (per million population)</td>
<td>1006</td>
<td>8255</td>
<td>Israel</td>
</tr>
<tr>
<td>Gross expenditure on R&amp;D (% of GDP), 2015</td>
<td>0,6</td>
<td>4,3</td>
<td>Israel</td>
</tr>
</tbody>
</table>
Entrepreneurial Potential of SMES

<table>
<thead>
<tr>
<th>Indicators</th>
<th>The value of Ukraine’s indicator</th>
<th>Best value</th>
<th>Lead country</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERD: Financed by business enterprise (% of total GERD)</td>
<td>40,3</td>
<td>77,9</td>
<td>Japan</td>
</tr>
<tr>
<td>The country’s share in world spending on R&amp;D, 2014, %</td>
<td>N.d.</td>
<td>31,1</td>
<td>USA</td>
</tr>
<tr>
<td>Domestic market scale as measured by GDP, billion PPP $ (GII 2017 Report), 2016</td>
<td>350</td>
<td>21 269</td>
<td>China</td>
</tr>
<tr>
<td>GDP (nominal) per capita, USD $ (International Monetary Fund), 2016</td>
<td>2 194</td>
<td>103</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>GDP (PPP) per capita, USD $ (International Monetary Fund), 2016</td>
<td>8 305</td>
<td>127</td>
<td>Qatar</td>
</tr>
</tbody>
</table>

Serious problems of the innovation system of Ukraine, as well as most post-Soviet countries [11], is low innovation activity and weak innovation potential of enterprises, which can be explained by two key factors: the structure of the national economy and low incentives and insufficient resources for such activity in its main sectors. In particular, the features of the Ukrainian economy are that it prevails in the sectors that a priori have a lower innovative activity: agriculture, metallurgy. In these industries, product innovation is not a key factor for business success. In current conditions, it is easier for Ukrainian enterprises to buy ready-made technologies and equipment from leading manufacturers. The share of innovation-intensive sectors of the Ukrainian economy, such as information technology, biopharmaceuticals, the production of new materials, aerospace production, is extremely low, as evidenced by the data in Table1. The definition of high-tech branches of the OECD takes into account three components: the share of R&D expenditures in the expenditures of enterprises in the industry, the share of high-tech equipment in the composition of products and the share of R&D personnel in the composition of enterprises. Among such branches are microelectronics, information technology, computational technology, programming, robotics, nanotechnology, nuclear energy, aerospace technology, biotechnology, pharmaceuticals, genetic engineering, artificial intelligence.

Another problem is the absence of an effective system of economic incentives in Ukraine for the creation and commercialization of industrial property rights in Ukraine. Along with this, a significant part of the po-
potentially significant inventions (pharmacology, IT technologies) are filed
directly to the patent offices of foreign countries (Russia, the USA, South
Korea) without an application to the Patent Office of Ukraine [7].

Innovative abilities at the micro level consist of three factors: first,
the technological level; second, the ability of the enterprise to borrow and
adapt technologies and know-how from the outside for use in their inno-
vation processes; and thirdly, the ability to create new knowledge within an
enterprise. If we consider the ability to borrow and adapt knowledge and
technologies of domestic enterprises, as well as their technological level of
production, these skills are extremely low compared to companies from
other countries, as reflected in Table 2.

**Table 2**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>The value of Ukraine’s indicator</th>
<th>Best value</th>
<th>Lead country</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 9001 Quality management systems—Requirements: Number of certificates issued (per billion PPP$ GDP) (GII 2017 Report)</td>
<td>3.09</td>
<td>61.08</td>
<td>Italy</td>
</tr>
<tr>
<td>Firm-level technology absorption (1=not at all; 7=to a great extent) (The Global Competitiveness Report 2017–2018)</td>
<td>4.3</td>
<td>6</td>
<td>Sweden</td>
</tr>
<tr>
<td>Availability of latest technologies (1=not at all; 7=to a great extent) (The Global Competitiveness Report 2017–2018)</td>
<td>4.1</td>
<td>6.6</td>
<td>Finland</td>
</tr>
</tbody>
</table>

Technical standards and certification significantly affect the innovation
activity. Developed mandatory standards can create economic incentives for
enterprises to apply more advanced new technologies and refuse from old
ones [11]. Ukraine is lagging behind the number of ISO 9001 certificates,
which is a sign of separation from global value chains, as well as an indicator
of enormous opportunities for improved management of productive capaci-
ties [7]. Certification of ISO 9001 can be a useful means of taking manageri-
al best practices, regardless of the level of technological development of the
enterprise. With the proliferation of new business models based on contract
manufacturing and fragmented sales chains, quality standards are “entrance
tickets” to global production networks. In addition, the distribution of the
international certification system facilitates technological exchange and im-
provement, reduces the overall level of spending in the economy, accelerates
the diffusion of technological advances and the development of new prod-
ucts. Although Ukraine is given a more positive assessment in comparison
with the Russian Federation and Belarus [7], however, the enterprises of the
country lag behind the level of complexity of technological processes from
the EU countries, exporters operate more in the extraction and primary
processing of resources than in the non-productive stages of the value chain.

One of the generalizing quantitative criteria for assessing the capacity
of the innovation potential of any national economy is the R&D expendi-
tures [13]. In developed countries, they range from 2.5% to 3% of GDP. An
important trend in recent years for almost all countries of the world is the
faster growth of R&D expenditures than GDP growth. One of the main ob-
jectives of the EU over the past decade is to increase the competitiveness
of the EU by increasing investment in the scientific and research field. Lisbon
strategy [14] set a goal: 3% of GDP should be spent on research and develop-
ment. Although by 2010 this goal was not achieved, it remained one of
the five key tasks under the Europe 2020 strategy adopted in 2010.

In 2013, domestic R&D spending in the EU grew by 0.7% compared
to 2012. The share of R&D expenditure in GDP in 2013 reached 2.1%, and
remains considerably lower than in Japan (3.38% in 2011) and the United
States (2.81% in 2012). In 2013, among the EU member states, the highest
science intensive output of GDP was in Finland (3.31%), Sweden (3.3%) and
Denmark (23.06%); It should be noted that in Slovenia and Estonia
the level of science intensive output was higher than the average in the EU
(respectively, 2.59% and 1.91%).

In contrast to the pan-European and world trends, Ukraine has suf-
fered a reduction in R&D spending over the last ten years, which is largely
due to general macroeconomic instability. The size of R&D financing in
2006-2016 is less than 1% of the GDP, which is substantially below the 2%
permissible level. Also, a distinct tendency from the world-wide is the slow
growth rate of R&D financing on the growth rate of GDP.

One of the important factors that influence the management of inno-
vative development of the company is the protection of intellectual prop-
Chapter 5. Social investments as a contribution to SMEs development

Property rights, including R&D results. The efficiency of the innovation activity of enterprises is directly related to the protection of intellectual property rights both in the external and in the domestic markets. If intellectual property rights are poorly protected, enterprises make a choice to attract successful innovations, so the level of protection of intellectual property actually determines the direction of the development of technologies and the product line of manufacturers.

It should be added that the different level of protection of intellectual property rights creates a difference in the amount of foreign investment in the country as a whole [15]. Studies show that the strengthening of intellectual property rights has a positive impact on the level of innovation activity and technological progress, although it is not uniform and can be offset in the long run. Also, according to studies [15], it has been discovered that when a country implements and attracts innovations, and carries out its own development, the lower the level of protection of intellectual property rights, the greater the preference is given to attracting innovation than developing its own. It also confirmed the positive effect of the strong protection of intellectual property rights on the level of foreign direct investment, although this does not guarantee the flow of investment flows into the science-intensive industry.

Successful realization of the entrepreneurial potential of SME’s in Ukraine is possible under the condition of significant improvement of innovation activity. The economic reforms that began in the country after the revolution in 2014, and Association Agreement with the EU create prerequisites for the transition of the economy to sustainable growth.

REFERENCES
4. DCFTAs: Challenges and Opportunities for SMEs/Georgia, Moldova and Ukraine/General Report by Yuliya Vengerovych (EBA Ukraine), Zviad Eliziani (IBDIPC Georgia), Sergiu Mihailov (ProCoRe Moldova). — Electronic resource. — The way of access:: http://archive.eap-csf.eu/assets/General%20report_DCFTAs-Challenges%20and%20Opportunities%20for%20SMEs_GE_MD_UA.pdf December 2015
13. Аналітична довідка «Стан розвитку науки і техніки, результати наукової, науково-технічної, інноваційної діяльності, трансферу технологій за 2013 рік» [Електронний ресурс] / Державне агентство з питань науки, інновацій та інформатизації України. — Київ, 2014. — Режим доступу: http://old.dknii.gov.ua/?q=system/files/sites/default/files/images/_%D0%B7%D0%B0_2013_%D1%81%D0%BE%D0%B4%D1%80_%D0%BE%D0%BA%2B.pdf
15. Офіційний сайт дослідження Global Innovation Index [Електронний ресурс] — Режим доступу: http://www.globalinnovationindex.org/content/page/GII-Home#pdfopener