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SMALL INNOVATIVE ENTERPRISES IN UKRAINE AND EUROPE: TENDENCIES, PROBLEMS, AND INCENTIVE TOOLS FOR THEIR DEVELOPMENT

Problem definition.

Ukraine's positions in the world ranking system remain low:

- The Global competitiveness index 2014 – 76 position of total 144;
- The World Competitiveness by the International Institute for management development 2014 – 60 out of 61 economies measured;
- The Global innovation index 2014 – 63rd among 143 countries;
- Investment climate is estimated as “rather unfavorable” by the 52% and “extremely unfavorable” by the 33% of respondents according to the research of European business association “Investment attractiveness index (1st quarter 2015)” [6,8].

The basic economic indicators now reflect not only the issues related to institutional gaps, and macroeconomic instability, but also the pressure of armed conflict onto economic and social development of the country. The deep crisis in almost all areas of life; lack of political will for implementing real reforms, rising of militarization level of economy pushes Ukraine back to countries with low income, technological underdevelopment, and lost opportunities.

Meanwhile, the world leading countries prove the fact that innovations nowadays become not only an effective tool for a sustainable growth, but also a first order conditions for the countries' survival in the context of global competition.

The results of a new PricewaterhouseCoopers' research named “Growth through innovations 2015” have shown that the most innovative companies in the world expect more than 60% of growth and rise of total revenue at more than \$250 billion within the next five years due to the complex approach to innovations in all the directions of their activity. As a part of a study a direct dependence between innovational leadership and significant growth of revenue was discovered. The innovations became a part of general operational activity of companies. A few years ago the most powerful instrument for the majority of companies was an entry into the Chinese market, but now the biggest potential is provided by the innovations. [1].

At the same time the triple crises in Europe affected business innovation and R&D in a negative way. The market entry of innovative businesses in Europe was obstructed and risk capital dried out. Investment in innovation suffered due to the unstable market conditions and the macroeconomic situation. Surely, in times

of uncertainty fewer companies would boost R&D spending and invest in innovation. This is especially valid for the small and medium enterprises (SMEs).

The crises were a stress test for the small companies and many failed to pass it. In the meantime, innovation demand for SMEs grew higher than ever because it meant survival, productivity, growth and competitiveness [7].

As for Ukraine there is a widely used assumption that the general economic situation in the country is so difficult and unfavorable to business that enterprises think how to survive rather than how to innovate and grow [9]. Although as it was reasonably pointed out above, innovations are really vulnerable to the crisis, they are still one of the key factors of growth irrespectively of geographical location or sectoral affiliation of a company.

Currently, 99,8% of all firms in the EU are SMEs and this is why small innovative companies are crucial for the economic growth and sustainability. Small enterprises are an integral part of the innovation process. They have to innovate to maintain market share and achieve greater efficiency. In the long-run, economic growth depends on the establishment and support of business environment that fosters innovation. Innovation-intensive countries which create and implement new technologies develop faster than countries that do not innovate. This is why innovative businesses have a special place in the long-run development of the EU [7].

The analysis of a current situation in a small innovative entrepreneurship in Ukraine and comparison with other countries in Europe could give us a glance at the tendencies, weaknesses, threats, which companies and national governments face with. It also could help us to find new ways and incentives to improve the current positions and develop a strong strategy for the future.

The objective of the article is to estimate a level of Ukrainian small innovative enterprises development comparable to the European countries' level, and to indicate main problems in this area.

The analysis of the latest scientific research publications.

Innovative activity of small and medium-sized business, quality of management, etc. are studied by S. de Mel, C. Woodruff, T. Edwards, R. Delbridge, M. Munday, S. Lindegaard. The value of small innovative enterprises (SIEs) for the national economic develop-

ment, the necessity of government support are studied by A. Kostrov, V. Shovkaluk, and others. Problems of innovation activity including small enterprises are represented in research papers of J. Shumpeter, P. Druker, M. Porter, S. Rodzher, B. Santo, R. Solow, V. Aleksandrova, G. Voljanik, N. Voljanik, Z. Varnalij, A. Dagaev, M. Denisenko, M. Dolishna, A. Kuznecova, M. Pashuta, A. Peresada, A. Podder'ogin, A. Poruchnik, V. Chaban, and others. At the same time there is a lack of qualified statistical analysis of SIEs' development through time, quantitative and qualitative changes, and the evolution of their problems compared with other European countries.

Conceptual issues of research. The phenomena of “innovative entrepreneurship” as such is quite new and slightly researched in Ukraine. Moreover, small innovative entrepreneurship as an object of scientific research appears only in the early 2000s. In conditions like there is no generally agreed accurate definition neither in science nor in legislation, it is difficult to make a proper analysis, forecast, and especially to develop an innovation policy within the country. Up to 2009 it provided data only on innovative activity of industrial enterprises while there was no detailed in-

formation on SMEs. Moreover, that data couldn't be compared with European innovation indicators. Only in 2009 the Methodology of Community Innovation Surveys (CIS), that is used in EU, was adopted in Ukraine. This Methodology covers all types of economic activities and distinguishes SMEs from large enterprises [9].

Statistical data as regards small innovative entrepreneurship development in Ukraine is based on the European methodology CIS, which was implemented for monitoring the innovation activity in Europe, and for better understanding of innovation processes, influence of innovations on the national economy, competitiveness, employment, structure of trade, etc.

In 2014 in Ukraine the last research of such a kind took place. There was a database of innovation activity in 2008-2010 and partially in 2010-2012. According to the Government office of statistics in Ukraine the total number of enterprises that implemented innovations during the period since 2000 to 2012 had a tendency to decrease, and only since 2009 the increase of this figure occurred (figure 1).

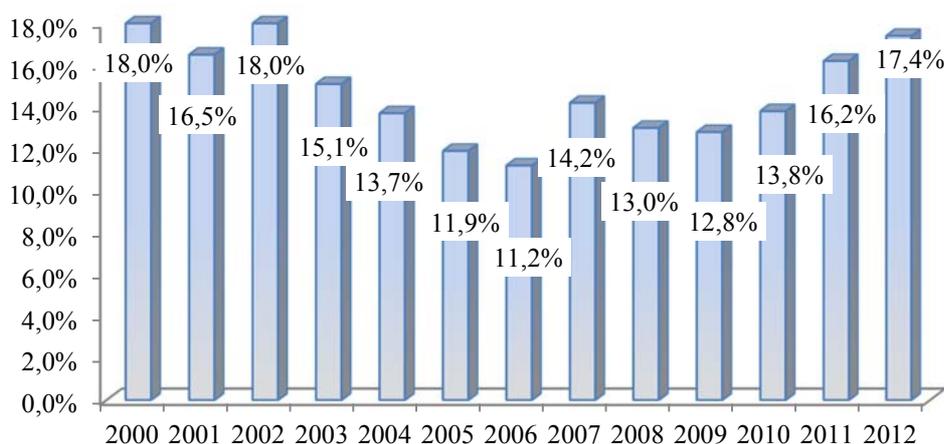


Fig. 1. Percentage of enterprises that had innovation activity, %

Note: Compiled by the author with the data of [2].

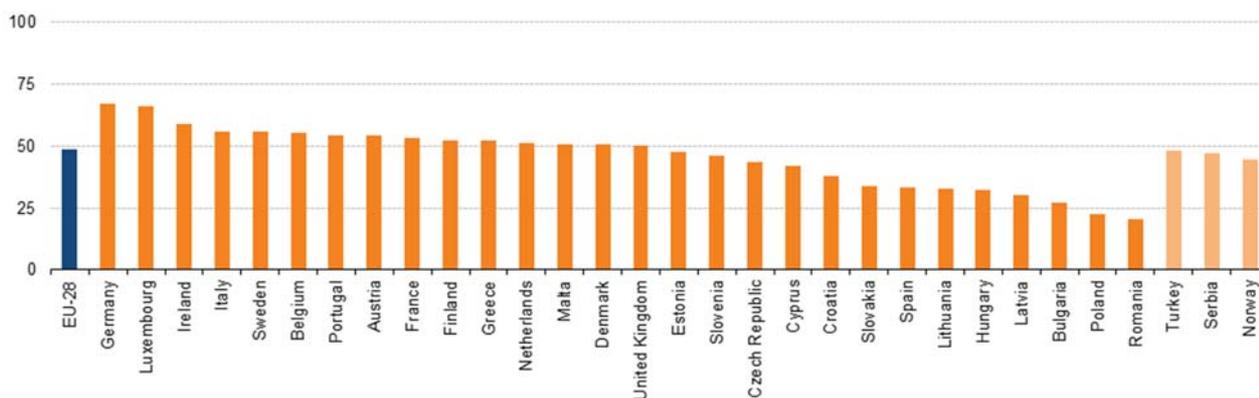
It is worth mentioning that the percentage of innovation active enterprises in total number of enterprises in European Union is not less than 25%, and in average it is 50% (figure 2).

In the diagram below there is a negative trend of innovation activity among industrial enterprises started in 2007, and increase since 2009 to 2012. In 2012 the share of innovative enterprises raised to 13,6%, and in 2013 has decreased to 12,9% (fig. 3).

During the period under a study the number of implemented technological processes in the industrial enterprises after a significant decrease in 2005 has started to increase, that can be explained with the ne-

cessity of modernization of old production in traditional sectors (figure 4). Development of new kinds of production after a sharp decline in 2002 remains on the same positions now.

The number of enterprises which held innovative activity is represented on the figure 5. Despite of slight increase (less than 3%) of innovative enterprise since 2006 to 2012 the vast majority belong to “non innovative” category of enterprises (79,6%). Only 20,4 % of enterprises implement innovations mostly in marketing and organization. Processes improving is observed only in 0,9% of all enterprises – they are ongoing of interrupted.



(*) The survey reference period covers the three years from 2010 to 2012.
 Source: Eurostat (online data code: inn_cis8_type)

Fig. 2. Percentage of innovative enterprises in EU (28) in 2010-2012(% of total number of enterprises) [3]

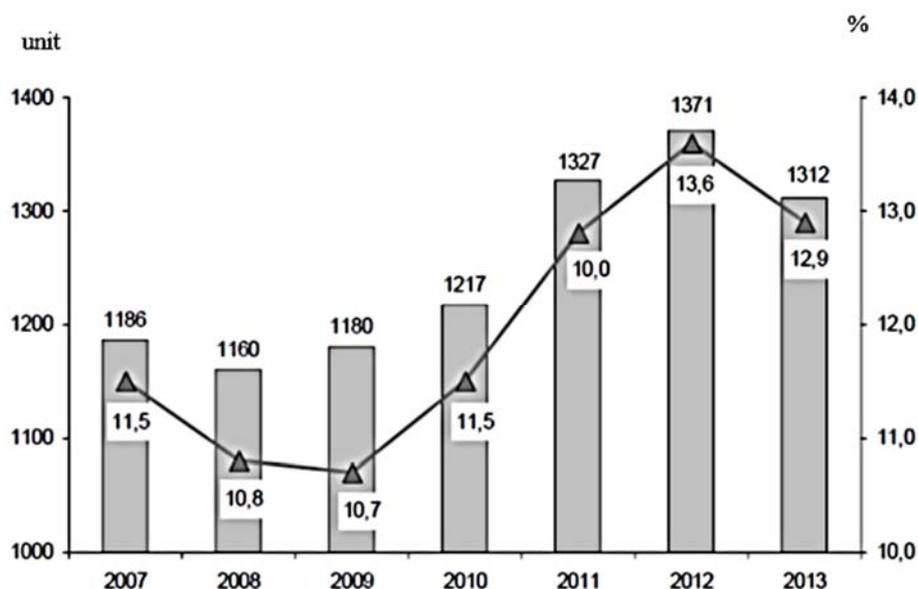


Fig. 3. Number of enterprises which implemented innovations, and the percentage in the total number of enterprises [2, p. 181]

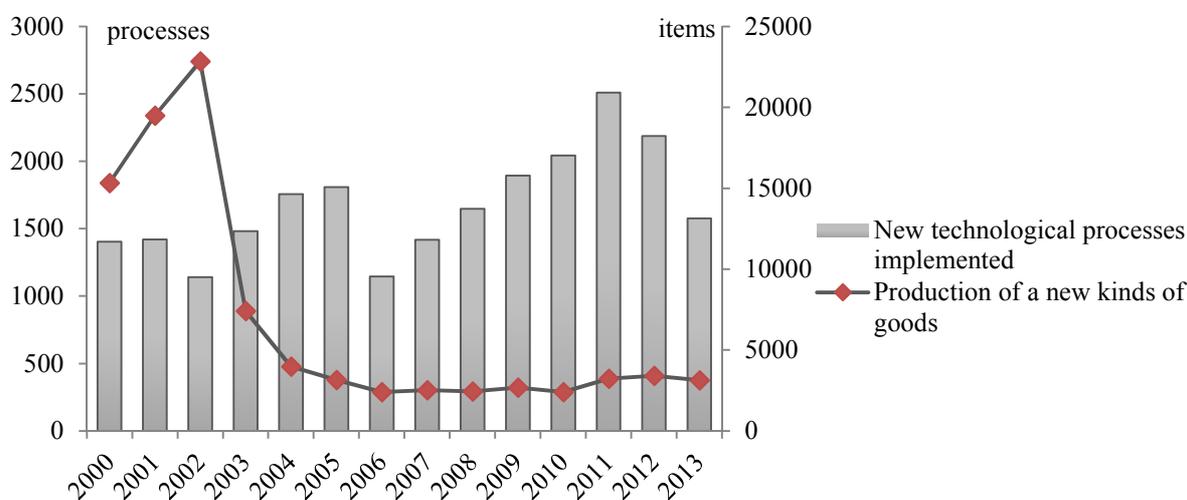


Fig. 4. Innovations' implementation in the industrial enterprises [2, p. 189]

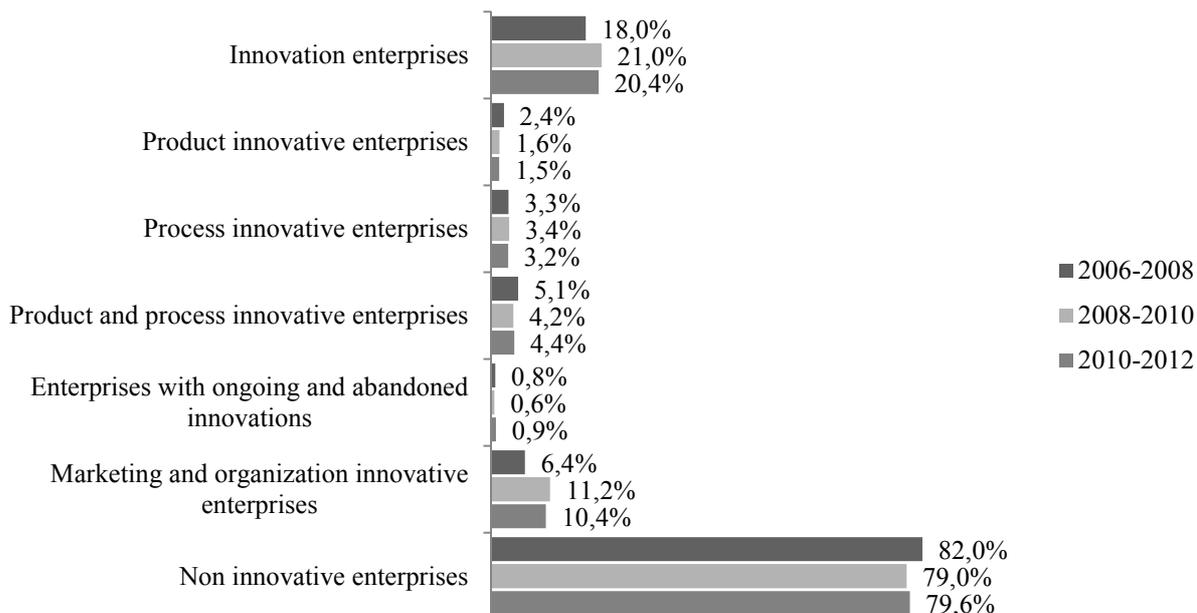


Fig. 5. Classification of Ukrainian enterprises according to the type of innovation activity, % of total number, 2006-2012 [2, p. 219]

In average in EU countries a share of enterprises with product/process innovations is 22,5% (table 1). The lowest rate is 4,0% (Romania), the highest is

35,8% (Germany). The leader in marketing/ organization innovations is Luxemburg with average of 39,6%, and the outsider in this context is Poland with 10,5%.

Table 1

Percentage of innovative enterprises of EU (28) according to the type of innovations (% from the total number of innovative enterprises) [4]

	Innovative enterprises (including enterprises with abandoned / suspended or on-going innovation activities)	Product innovative enterprises	Process innovative enterprises	Organisation innovative enterprises	Marketing innovative enterprises
EU-28	48.9	23.7	21.4	27.5	24.3
Belgium	55.6	31.5	31.1	29.3	21.9
Bulgaria	27.4	10.8	9.3	12.4	14.2
Czech Republic	43.9	25.3	24.0	20.5	22.4
Denmark	51.1	24.8	22.9	32.2	29.4
Germany	66.9	35.8	25.5	32.2	34.4
Estonia	47.6	20.7	23.8	21.7	21.9
Ireland	58.7	27.8	25.9	21.8	35.7
Greece	52.3	19.5	25.6	30.2	36.8
Spain	33.6	10.5	15.1	19.4	13.2
France	53.4	24.2	24.1	34.2	25.4
Croatia	37.9	16.4	19.0	22.9	23.5
Italy	56.1	29.1	30.4	33.5	31.0
Cyprus	42.1	20.9	28.2	26.2	29.5
Latvia	30.4	10.4	12.7	16.9	16.5
Lithuania	32.9	11.6	13.1	17.5	19.3
Luxembourg	66.1	30.3	32.8	46.8	32.4
Hungary	32.5	10.6	8.3	16.5	19.7
Malta	51.1	23.9	26.4	34.7	32.6
Netherlands	51.4	31.9	25.9	27.3	23.2
Austria	54.4	26.6	28.7	36.4	29.5
Poland	23.0	9.4	11.0	10.4	10.6
Portugal	54.6	26.0	33.5	32.8	32.8
Romania	20.7	3.4	4.6	14.1	13.8
Slovenia	46.5	23.6	22.5	26.3	28.5
Slovakia	34.0	14.4	13.5	18.6	19.3
Finland	52.6	31.0	29.3	29.7	26.5
Sweden	55.9	31.5	23.9	25.3	30.4
United Kingdom	50.3	24.0	14.1	34.2	16.8
Norway	44.7	19.1	11.9	21.7	23.2
Serbia	47.5	24.5	22.0	32.6	32.2
Turkey	48.5	17.7	20.4	31.7	34.7

(*) The survey reference period covers the three years from 2010 to 2012.
Source: Eurostat (online data code: inn_cis8_type)

The share of innovative enterprises did not change significantly since 2006. [2, p. 218]. The share of medium-sized enterprises with innovation activity changed significantly in comparison to small and large innovative enterprises (from 21,7% to 25,0%).

For small enterprises this change was from 14,9% in 2006-2008 to 16,9% in 2010-2012, and for large enterprises – the share increased from 40,8% to 43,4%. In 2010-2012.

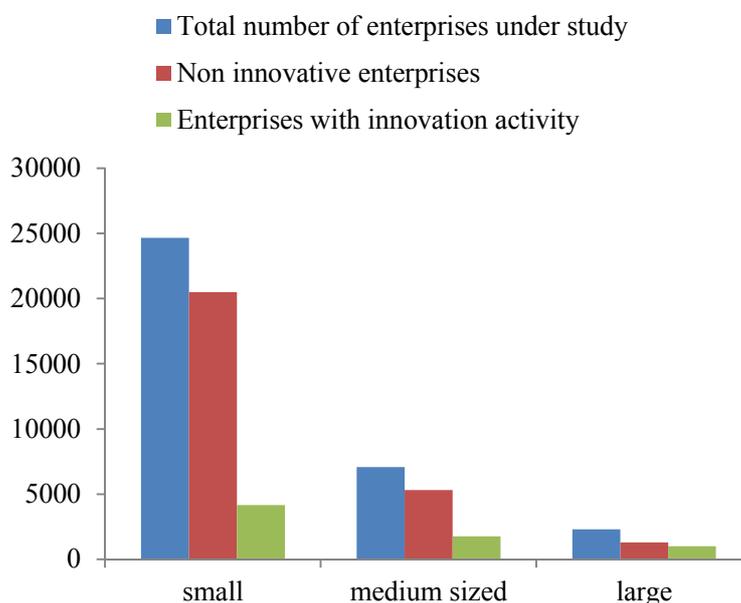


Fig. 6. Innovation activity of enterprises depending on their size, unit [2, p. 218]

It should be noticed that the specific character of researches of innovation processes in Ukraine is that more attention is paid to the enterprises with technological innovations (related to the development and implementation of technologically new and technology enhanced goods). Therefore, most figures of database in these researches are related to the enterprises of such a type and the main findings are not able to present the complete image.

Conclusions and perspectives for the future research in this area.

The current situation and main trends of small innovative enterprises development can be described as follows:

- Notably, small entrepreneurship has a high potential of development, that still remains not used in comparison with other European countries;
- The rate of innovative enterprises in Ukraine was only 17,4%, at the same time in developed countries this figure reaches 70-80%;
- The low sectoral development ratio is observed, number of employees, sales, and others are among those basic figures;
- Cutback in production of goods and services, that were new for an enterprise or for a market;
- The expenditure structure of innovation companies still relates to buying of soft programs and modernization of an old equipment;
- There are no tight partner links with other innovative organizations within a country, and abroad;

- Low quality and inefficiency of governmental support of innovative enterprises.

The bullet points described above give the exact diagnosis of the fundamental problems of Ukraine, especially in a part of the implementation of its national potential, which is still strong though. As all can agree without making efforts to development of effective tools and mechanisms for its implementation it is impossible to get a real value added. This can lead to reducing the chances for economic and technological breakthrough and well-deserved position in the global competition.

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Тулку Я. І. Малі інноваційні підприємства в Україні та країнах Європи: тенденції, проблеми та стимулюючі інструменти розвитку

Стаття призвана дослідити поточну ситуацію розвитку малого інноваційного підприємництва в Україні та зробити порівняльний аналіз змін у часі та з іншими країнами. Аналіз показує тенденції, слабкі сторони, виклики, з якими зустрічаються компанії та уряди. Також проведене дослідження може допомогти знайти шляхи та стимули для поліпшення позицій і розробити сильну стратегію, орієнтовану на майбутнє.

Ключові слова: малі інноваційні підприємства, глобальний індекс інновацій, продуктові/ процесні/ маркетингові та організаційні інновації.

Тулку Я. И. Малые инновационные предприятия в Украине и странах Европы: тенденции, проблемы и стимулирующие инструменты развития

Статья призвана исследовать текущую ситуацию развития малого инновационного предпринимательства в Украине и сделать сравнительный анализ изменений во времени и с другими странами. Анализ показывает тенденции, слабые стороны, угрозы, с которыми встречаются компании и правительства. Также проведенное исследование может помочь найти пути и стимулы для улучшения текущих позиций и разработать сильную стратегию, ориентированную на будущее.

Ключевые слова: малые инновационные предприятия, глобальный индекс инноваций, продуктовые/процесные/маркетинговые и организационные инновации

Tulku Y. I. Small Innovative Enterprises in Ukraine and Europe: Tendencies, Problems, and Incentive Tools for Their Development

The article aims to investigate the current situation of small innovative enterprises in Ukraine and compare changes in time and among countries. The analysis shows the tendencies, weaknesses, threats, which companies and national governments face with. It also could help to find new ways and incentives to improve the current positions and develop a strong strategy for the future.

Keywords: small innovative enterprises, global innovation index, product/process/marketing and organization innovations.

Received by the editors: 28.11.2014
and final form 23.12.2014