EVALUATION OF SMALL BUSINESS INFLUENCE
ON THE ECONOMIC DEVELOPMENT OF THE REGION

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Abstract. *The purpose of the paper* is to study the role and assess the small business development influence on the economic development of the region. *Methods*. Theoretical and methodological foundations of the research draw up the scientists' works on the problems of economic development of the regions. During the scientific research, a complex of such methods was used: generalization and scientific abstraction – in order to specify the conceptual-categorical instrument and identify characteristics of the small business; monographic – in case of highlighting the scientists' views on the investigated problems; comparative analysis – when identifying features of small business influence on the economic development of the region; mathematical modelling in economics – to develop the methodology for the evaluation of small business development influence on the economic development of the region. *Results*. Special aspects of small business functioning as a factor of the economic development of the region that accommodates economic growth, the improvement of the product quality and social indicators of development, formation of the middle class, decrease of the unemployment rate, increase of the population living standards are researched. The ambiguity of approaches to the small business definition is established, the characteristic feature of which, in most cases, is the number of employees. However, the small business is distinguished for industrial enterprises and service-oriented companies, based on the structure of management, and also taking into account the self-regulation of small enterprises or their relations to the large enterprises or industrial group of companies. It is established that criteria for the evaluation of the efficiency of small business enterprises can be: increase in the entrepreneurship development rates, minimization of material and social losses of the society, increasing the share of small business in GDP formation, raising the level of social protection of the employee. Method of the evaluation of small business development influence on the economic development of the region is proposed, which provides: the allocation of the priority areas of activity of small business entities that have a positive effect on the correspond territory; formation of the aggregate indices representing each of these areas; establishment of connection between the researched areas of the small business influence with the economic development of the region; building-up the compound integrated index based on the results of the correlation analysis parameters that have an effect on the economic development of regions; evaluation of the contribution extent of the small business to the economic development level of each region. *Practical meaning*. It is established that the functioning of small businesses significantly influences the sectoral structure of the territory and the level of the population employment, while the influence on the infrastructure and the ecological state of the region is not so considerable. Factors, that determine the efficiency level of the small business functioning and also have a significant influence on the economic development level of the region are singled out, namely: the number of small enterprises; products sold turnover; the number of employed and the proportion of employees in the small businesses. Taking into account the specifics of small business, its strong influence on the economic condition of the local territories is substantiated, which in its turn determines the necessity for conducting the complementary measurements involving a local survey of the statistical information, particularly in large cities, mountainous areas, zones of ecological disaster. The methodology for the evaluation of the small businesses functioning at the local level allows us to specify actual reasons that stem the tide of small business in existing locations and to formulate the measures for their elimination. *Value/originality*. On the ground of the conducted research, the conceptual principles of the small business influence assessment on the economic development of the region are proposed, which took the basis of the scientific research on formation effective model sustainable development region.

Key words: small business, economic development, region.

JEL Classification: D22, R10, O10

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1. Introduction

Small business (SB) is one of the economic development factors and the social welfare improvement. It contributes to the gross domestic product growth, the improvement of product quality, the formation of the middle class, the reduction of unemployment, etc. However, if in the European countries the SB provides up to 60% of the budget revenues, then in Ukraine this figure is only 0.18% (Britchenko, 2010).

As an integral sector of the market economy, the entrepreneurship has the pronounced regional orientation, because the small business enterprises plan their activities primarily based on the needs of the local markets, capacity and structure of the local demand, and the local authority within their power form the business climate. It is obvious that small business should be the factor of the regional level development, influence the economic development of the region.

Problems of the small business development in the economy of the regions of Ukraine are considered in the aspect of the small business development by the specifics of the cities (Babkina, 2010), the strategic key factors of the regional economic development (Verkhohliadova, Cherednichenko, Stenicheva 2010); adaptation of small and medium-sized businesses to the economic management under the conditions of a crisis (Humanetska, 2010), development of small business in different forms of state financial support (Piskunova, 2010). Economic growth of the region is also investigated on the basis of the business activities (Kovalov, 2014). However, in these works, the support tools by the regional authorities of the small business development are most often studied. While the small businesses influence on the development of the region remains, commonly, out of attention.

Therefore, the ***purpose of the study*** is to research the role and assessment of the small business development influence on the economic development of the region.

2. Characteristics of the small business

The small businesses operation is usually considered at the regional level, since SB often use resources of the local market and sell their products, mainly, on the territory of their placement. The small business orientation to the local labour market closely connects it with the socio-economic conditions available in the region.

There is no official or generally accepted definition of SB. More or less recognized is the definition of the European Commission, depending on the number of employees, annual balance and turnover (Table 1). However, enterprises are not considered SB, if other companies, not belonging to the specified category, own more than 25% of the capital.

Table 1

Small business characteristics as defined by the European Commission

Type of enterprise	Number of employees		Annual turnover, million euros		Annual balance sheet, million euros
Very small business	< 10	and	≤ 2	or	≤ 2
Small business	< 50	and	≤ 10	or	≤ 10

Definitions are used variously in different countries, but in most cases, the allocation of a particular type of enterprise occurs depending on the number of employees. As a rule, it is considered that a small enterprise should employ less than 50 people, although in some countries this figure is less. In some countries, the conditions are different for industrial enterprises and service-oriented companies; in this case, service enterprises tend to be smaller than industrial enterprises. In some countries, there is a distinction between autonomous Small Enterprises and those associated with a large enterprise or industrial group, or also Small Businesses are distinguished on the basis of the management structure (for example, the owner is personally engaged in the work of the firm or the enterprise is a family business). Finally, the statistical definition of a SB often differs from the definitions, developed for economic policy conducting; for example, although a company with a staff of 60 people may not be related to the SB for statistical purposes, it may have the right to participate in social SB support programs. The main characteristic of the Small Business is "small" in the sense that the enterprise does not belong to 10 or 20 percent of the largest firms in the market or in the industrial sector.

In Ukrainian legislation, this issue is regulated by the Commercial Code of Ukraine. The subjects of the small business are (Commercial Code of Ukraine):
– individuals registered in the manner prescribed by law as sole proprietors with the average number of employees for the reporting period (calendar year) does not exceed 50 persons and the annual income from any activity does not overgrow the equivalent of 10 million euros, determined by the average annual rate of the National Bank of Ukraine;
– legal entities – economic agents of any organizational form and form of ownership, in which the average number of employees for the reporting period (calendar year) does not exceed 50 persons and the annual income from any activity does not overgrow the equivalent of 10 million euros, determined by the average annual rate of the National Bank of Ukraine (Table 2).

Small business is a form of business organization that meets certain criteria. This form is legally fixed (Commercial Code of Ukraine), and the characteristic feature of the entrepreneurship is the innovative principles.

Table 2

Small business characteristics according to the Commercial Code of Ukraine

	Small business	
	Micro	Small
Number of employees	≤ 10 persons	≤ 50 persons
Annual income	≤ 2 million euros	≤ 10 million euros

3. The methodology of evaluation of small business development influence on the economic development of the region

The main criteria of the effectiveness evaluation of the small business enterprises at present time are (Kovalov, 2014):
– increasing the entrepreneurship development growth rate as one of the factors of the economic development of the region;
– minimization of material and social losses of society;
– increasing the share of small business in GDP formation;
– raising the level of social protection of employees, etc.

To provide them, we suggest using the methodology of the SB development influence evaluation on the economic development of the region (Fig. 1).

At the first stage of the given methodology, at the regional level, we highlight the priority areas of the small business entities activity, which have a positive effect on the relevant territory. Such approaches can be determined by each self-government individually depending on the characteristics of the territory development and the security level of the different approaches to services.

At the second stage, in order to quantify the SB influence on the regional development, it is necessary to select the whole complex of indexes that would represent each of these approaches. The State Statistics Service of Ukraine provides a number of statistical indicators that in one way or another characterize this phenomenon and can be used as resultant, or factorial features. By the logical analysis of the state statistics materials, the following relative parameters characterizing the development of small business in the region for each of the priority guidelines were selected:

1. Sectoral structure of the territory – the concentration factor; the number of small businesses per unit employed in the SB in the region; the share of turnover of SB in the total turnover of enterprises of the region.

2. Local budget – local budget revenues per person; the share of carrying-out of works/services for the public funds by the SB to the total quantity of such orders in the territories.

3. Innovative potential of the territory – the share of SB that use innovations in the total number of SB.

4. The infrastructure of the territory – the share of SB providing services to the subjects of the territory in the total number of SB; the share of entrepreneurs involved in the construction and repair of roads and landscaping territory in the total number of entrepreneurs.

5. Attractiveness of the territory – the share of goods and services exported (imported) by the SB, in the total amount of foreign trade turnover of the region; the share of investments in the SB in the total volume of investments in the region.

6. Policy of the region – the share of SB in the total number of enterprises taking part in the political life of the region; the share of public associations of SB entities
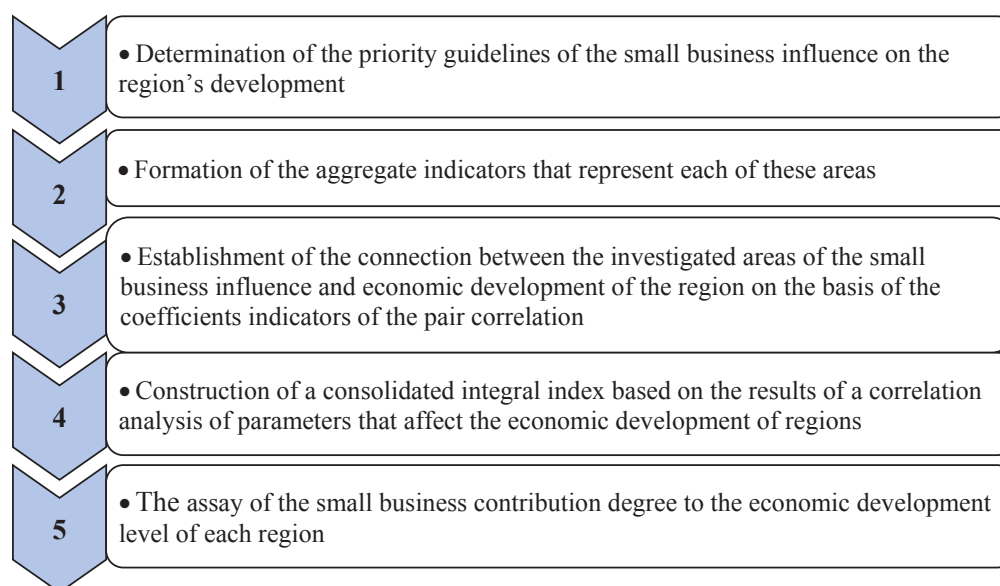
Fig. 1. Stages of implementation of the methodology for small business development influence evaluation on the economic development of the region

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in the infrastructure of regional small business support.

7. Ecology of the region – the share of SB involved in environmental protection activities in the total number of enterprises. The amount of SB financing in measures of environmental protection.

8. Living standards of the population of the region – the share of employed in SB in the total number of the employed population of the region; the average monthly salary of the SB employee in comparison with the average monthly wage in the region; the share of hired SB employees to the total number of employees in the region.

In order to identify the link between the investigated areas of influence of SB with the economic development of the region, it is necessary to calculate the coefficient of the pair correlation of indicators, which characterize the functioning of small business and the level of economic development of the region – this is the third stage of the methodology.

To evaluate the extent of the SB contribution to the level of economic development of the region, it is necessary to construct a consolidated integral index based on the results of the parameters correlation analysis, influencing economic development of regions (fourth stage).

The calculation of the integral indicator of the SB influence on the economic development of the region involves the implementation of the several successive stages:

1. Parameters normalization influencing the economic development of the regions to their specific average value:

$$P_{ir} = \frac{x_{ir}}{x_{io}},$$

where P_{ir} – normalization coefficient; x_{ir} – the value of the i-th parameter for r-th region; x_{io} – the value of the i-th parameter for the country as a whole.

2. Calculation of the integral index of the SB influence on the economic development of the region as the average geometric normalized parameters:

$$D_r = \left(\prod_{i=1}^{n} P_{ir}\right)^{1/n},$$

where D_r – an integral indicator of the influence of the level of SB development on the economic development r-th region; n – the number of normalized coefficients.

The presented integral index is a dimensionless value whose level is not limited by a certain interval. The reason for this is the calculation of the index on the basis of relative indicators, the value of which can many times exceed or be many times smaller than the value of a certain average level. The larger the value of the integral indicator, the greater the extent of the SB development influence level on the economic development of the region.

Thus, the SB functioning evaluation, conducted with the help of selective relative indicators, will characterize the extent of the SB contribution to the level of economic development for each region separately – the fifth stage.

The Empirical research base is presented by statistical materials of the State Statistics Service of Ukraine characterizing the development of small business and economic development of regions of Ukraine for 2010–2016.

As a result of correlation analysis as the key indicators influencing the economic development of the region, for the calculation of the integral indicator were selected:

– the number of small enterprises per unit employed in SB in the region;

– the share of the products sales volume by the small business in the total amount of the products sold in the region;

– the share of the works/services execution for the public funds by the small business to the total number of such orders in the region;

– the share of the non-governmental associations of SB entities in the infrastructure of regional support for small business;

– the share of employed in SB in the total number of the employed population of the region;

– the share of the SB employee to the total number of employees of the corresponding region.

4. Applied aspects

The results of calculations of the consolidated integral index in the context of the regions of Ukraine for the period from 2010 to 2016 showed that the largest values of the small business development are achieved in Kherson, Chernivtsi regions – the value is higher on the average over 1,5 (Table 3). Moderate indicators of small business development – from 1,0 to 1,5 – are received for such regions as Kirovohrad, Ivano-Frankivsk, Odesa, Ternopil, Chernihiv, Zhytomyr, Rivne, Khmelnytskyi, Mykolaiv, Sumy, Cherkasy, Volyn, Zakarpattia, Sevastopol city, AR of Crimea (for the period of 2010–2013). All other regions have a low potential for small business development. This is due to the inadequate use of the small business development factors.

The obtained calculations allow us to conclude that the greatest influence of small business on the economic development of the region is observed in Rivne region and Sevastopol city. The weak influence of small business on the economic development of the region is inherent to Zakarpattia, Khmelnytskyi, Ternopil, Donetsk, Zhytomyr, and Cherkasy regions. The insignificant contribution of the SB to the economic development of the country in the whole. To determine the specific reasons for the existing differentiation of the indicators of regions of Ukraine, it is necessary to conduct a more in-depth study aimed at identifying the additional factors influencing the development of small business.

It should be noted separately that the impact of small business on the level of economic development of Ukrainian regions remains practically unchangeable. For the period from 2010 to 2016, the investigated

Table 3

Consolidated Integrated Index of the Small Business Development Influence Assessment on the Economic Development of the Region

Region	2010	2011	2012	2013	2014	2015	2016
Autonomous Republic of Crimea	1,28	1,27	1,25	1,26	-	-	-
Vinnytsia	0,89	0,92	0,94	0,95	1,00	0,97	1,09
Volyn*	0,96	0,99	0,96	0,98	1,08	1,07	1,05
Dnipropetrovsk*	0,96	0,96	0,95	0,92	0,65	0,69	0,72
Donetsk	0,64	0,62	0,64	0,64	0,62	0,62	0,68
Zhytomyr	1,03	1,03	1,03	1,02	1,27	1,11	1,05
Zakarpattia	1,04	1,02	1,03	1,00	1,01	1,01	1,06
Zaporizhzhia	0,76	0,78	0,77	0,77	0,64	0,65	0,64
Ivano-Frankivsk*	1,37	1,37	1,35	1,29	1,50	1,52	1,51
Kyiv	1,00	1,02	1,01	0,99	0,84	0,86	0,86
Kirovohrad	1,24	1,28	1,27	1,24	1,41	1,50	1,56
Luhansk	0,91	0,90	0,92	0,93	0,90	1,02	1,02
Lviv*	1,02	1,00	1,00	1,00	0,89	0,73	0,80
Mykolaiv	1,02	1,00	1,03	1,01	1,10	1,12	1,07
Odesa*	1,34	1,36	1,39	1,39	1,14	1,17	1,21
Poltava*	0,80	0,81	0,81	0,80	0,93	0,93	0,92
Rivne	1,11	1,11	1,14	1,12	1,20	1,26	1,25
Sumy	1,09	1,09	1,10	1,09	1,05	1,07	1,06
Ternopil	1,28	1,20	1,14	1,14	1,14	1,18	1,36
Kharkiv*	0,87	0,89	0,88	0,87	0,61	0,62	0,65
Kherson*	1,28	1,32	1,39	1,39	1,72	1,78	1,67
Khmelnytskyi	1,23	1,24	1,23	1,22	1,23	1,23	1,23
Cherkasy	1,06	1,06	1,08	1,08	1,05	1,05	1,06
Chernivtsi	1,47	1,42	1,43	1,41	1,58	1,63	1,64
Chernihiv*	1,29	1,30	1,33	1,33	1,16	1,19	1,15
Kyiv city*	0,72	0,73	0,71	0,72	0,41	0,41	0,38
Sevastopol city**	1,35	1,44	1,51	1,59	-	-	-

* – without the indicator: "the share of the products sales volume by the small business in the total amount of the products sold in the region"
** – without the indicators: "the share of the products sales volume by the small business in the total amount of the products sold in the region" and "the share of the works/services execution for the public funds by the small business to the total number of such orders in the region"

influence on the average in Ukraine remained on the same level.

5. Conclusions

Thus, during the research, it is revealed that the functioning of SB has a different influence on the economic development of the region. The small business has the greatest influence on the sectoral structure of the territory and on the employment level of the population, and the smallest – on the infrastructure and the ecological state of the region.

As factors determining the efficiency level of the SB operation, as well as those that have the greatest influence on the economic development level of the region, the number of small enterprises is allocated; the sold products turnover; the number of employed and the proportion of employees in SB.

It should be noted that taking into account the specifics of small business, the strongest influence it has on the economic climate of the local territories. In this regard, for a more in-depth study of the ties between the degree of the small business development and the economic development level of the territories, it is necessary to carry out the additional measurements using the local survey of statistical information (for example, separate large cities – regional centres, mountain territories, zones of ecological disaster, etc.). For this, it is necessary to determine the specifics of the small businesses functioning at the local level and to develop appropriate methodological tools for its evaluation. The development of this methodology allows us to define specific reasons that stem the tide of small business in existing locations and to work out the actions for the resolution of the existing problems in this sphere.

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