

# Analyzing and Strategizing the Development of Entrepreneurial Activity Based on the Principles of Increasing Productivity (Illustrated by the Example of Developed Countries and Ukraine)

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## Abstract

The article presents the results of a comparative analysis of productivity in developed countries, including EU countries and Ukraine. Hypotheses about the identity of the deindustrialization factor as the main cause for productivity decrease for both the Ukrainian economy and the economic systems of developed countries are verified.

**Purpose of the article:** To develop a comprehensive methodological approach to strategizing and state regulation of the business environment based on guidelines developed according to the results of a comparative analysis of the productivity of entrepreneurial activities and focused on maximizing the creation of added value, which is a criterion for increasing the productivity of entrepreneurial activities.

**Methods used:** A review of the scientific literature, a comparative analysis of the productivity of entrepreneurial activity in developed countries and Ukraine, including time series analysis, calculating growth rates of per capita value-added, and factor analysis of key obstacles that hinder the growth of the productivity of innovative entrepreneurial activity.

The contribution made to the theory and methodology of productivity includes the proposed definition of the economic category “productivity of entrepreneurial activity”; general methodological principles of forming a strategy for improving the productivity of entrepreneurial activities are established; taking into account the best international experience, the main principles of state regulation of the entrepreneurial environment are laid down; it is established that the purpose of the strategy for improving the productivity of entrepreneurial activity is to provide the state with favorable business conditions, i.e., to create a favorable entrepreneurial environment and make it possible to identify and use hidden assets of entrepreneurial structures to develop value-added chains, the growth of which is a criterion for increasing productivity.

**Keywords:** productivity of entrepreneurial activity, deindustrialization, strategy, value-added maximization

**JEL:** O38, O47, O57

## Introduction

The problem of strategizing the development of any economic system involves a number of tasks. These include determining the direction of development and the means and mechanisms that stimulate the shift of the system and its elements in a certain direction. Thus, after the global economic crisis, countries worldwide faced the prob-

lem of increasing productivity as the main factor of economic development (Jorgenson, Gollop, and Fraumeni 1987; Aeeni, Motavaseli, Sakhdari, and Dehkordi 2019; Bai, Kao, and Wu 2021; Farinha, Lopes, Bagchi-Sen, Sebastião, and Oliveira 2020). However, economic productivity is mainly perceived only as labor productivity, ignoring other factors of production.

Therefore, together with the transition of developed countries to the stage of post-industrial society, it became clear that limiting the concept of capital to physical capital does not provide answers to a number of questions on public administration and the socio-economic development of society. When the level of education, innovation, and informatization have become the determining factors of society's socio-economic development, and when the leading role in the economy is played by high-tech companies, in which physical capital ceased to be decisive, human capital and intangible assets have come to the fore, opening the way to innovative development.

Thus, the purpose of this study is to develop methodological and methodical foundations for strategizing entrepreneurial activity based on the principles of productivity increasing, taking into account national specifics, as well as the level of economic development and the tendencies of each country. All the above-mentioned issues require new methods to identify substantial patterns of productivity of entrepreneurial activity changes and their causes that suggest a range of appropriate methodological principles and mechanisms to improve entrepreneurial development strategizing. These methods include a review of the scientific literature, a semantic analysis of the category of productivity, statistical data analysis, factor analysis, comparisons of growth rates of per capita value-added for different countries, and the systematization of theoretical approaches and good practices to improve entrepreneurial activity. That allowed us to formulate methodological principles of productivity increase illustrated on the example of the Ukrainian economy.

## Comparative analysis of the productivity of developed countries and Ukraine

A study of the dynamics of productivity around the world, calculated as the volume of gross product per employee (OECD, *Productivity...* n.d.), showed a decline in almost all countries, especially in recent years (2018–2019) (Table 1).

**Table 1.** Dynamics of productivity of countries worldwide, %

Countries	2012	2013	2014	2015	2016	2017	2018	2019
Austria	1.1	1.3	0.8	0.4	3.6	3.6	2.3	-1.0
Belgium	-1.4	2.4	5.9	5.0	-1.1	1.0	-2.7	-0.1
Canada	-0.2	2.6	5.7	0.1	0.8	2.2	1.3	-3.4
Czech Republic	-4.2	-3.0	1.5	2.2	0.8	6.2	0.7	3.2
Denmark	3.0	0.4	-1.0	-1.7	3.8	0.9	1.9	2.6

**Table 1.** (continued)

Countries	2012	2013	2014	2015	2016	2017	2018	2019
Estonia	5.0	4.8	7.2	-3.5	4.9	1.9	7.7	-0.4
Finland	-8.4	3.4	2.5	1.4	4.3	8.5	-3.7	3.5
France	1.2	1.7	0.9	2.2	0.8	1.5	0.5	-0.7
Germany	-1.5	-0.8	3.9	1.4	4.2	3.0	-1.0	-4.1
Greece	2.0	5.1	-1.6	-3.8	4.5	0.8	1.4	-5.1
Hungary	-4.7	1.1	4.2	8.8	-2.1	-1.1	-4.3	4.6
Ireland	0.3	-7.6	9.5	71.8	-1.3	4.8	11.2	1.3
Italy	-2.0	0.8	1.1	2.1	2.3	2.8	0.7	-0.8
Japan	1.6	2.7	2.8	3.3	-0.3	4.4	0.4	..
Latvia	-2.6	-2.8	2.3	5.1	4.2	4.9	-0.3	0.8
Lithuania	-0.1	3.3	5.4	0.3	-0.2	3.8	-1.3	4.4
Luxemburg	3.9	16.3	-5.7	10.1	10.8	-1.0	0.4	0.3
Netherlands	0.4	3.0	-0.5	-1.7	0.4	3.1	0.1	-1.9
Norway	-1.6	-3.1	0.4	5.7	5.3	5.3	-2.8	-5.3
Poland	2.9	-1.5	2.0	2.2	-0.4	-0.2	4.4	4.6
Portugal	0.8	0.9	0.4	-0.5	-0.6	0.3	-0.6	-1.6
Slovakia	1.3	-1.1	14.4	6.1	-4.5	-2.5	6.8	2.2
Slovenia	-1.1	1.5	3.7	0.1	2.1	4.5	-0.6	0.2
Spain	1.7	1.0	2.4	0.9	0.6	0.2	-1.9	-1.0
Sweden	-2.2	-1.9	0.4	6.8	1.5	0.4	-1.9	1.2
Switzerland	-0.6	1.9	-1.3	-0.0	3.3	5.9	3.9	2.4
UK	-3.6	-0.4	1.4	-0.3	1.6	0.2	-1.7	-0.4
USA	-1.6	0.8	0.9	0.8	-0.5	3.4	2.7	..
EU- 18	-0.4	0.7	2.7	3.2	2.0	2.3	0.1	-1.8
EU -28	-1.1	0.2	1.9	2.8	1.4	1.7	0.1	-0.9

Source: own calculations based on data derived from OECD, *Productivity...* (n.d.).

Thus, the most progressive decline of real productivity is observed in Belgium, Canada, Germany, Italy, the Netherlands, Spain, and the United Kingdom, although in general, both the EU-28 and the EU-18 have demonstrated a decline since 2018.

The average annual growth rate of productivity (per man-hour of working time) in Germany decreased almost threefold, from 4.2% in 2016 to -4.1% in 2019, and in the UK, from 1.6% to -0.4%. In Japan, Ireland, and the United States, there is a change in productivity dynamics, meaning that it was caused by a decrease in the share of manufacturing in GDP.

Therefore, in the EU in 2014, a task force was created to develop and implement a strategy for the development of advanced production technologies, whose tasks include promoting the introduction of innovative technologies (i.e., all solutions that contribute to improving productivity-production speed, accuracy, and reducing energy and raw materials consumption) into production processes, i.e., stimulating the development of activities that are characterized by the manufacture of products with high added value.

In other words, a new development paradigm is being actively formed in the world economy. It is based on innovative sources of growth, an important role that belongs to entrepreneurship, because entrepreneurship is an economic subsystem that creates conditions for complete realization of society's potential as a prerequisite and the ultimate goal of social development (Nordhaus 2015; Wieczorek and Hekkert 2012).

For comparison, we will study the dynamics of productivity in Ukraine (Table 2). In Table the indicator of "Number of persons employed of active business entities" is used because employees of economically active entities are the ones who create value added in the national economy. The number of persons employed of active business entities (that reaches 8.661 mln. persons in 2018) appears twice less than total number of employed (that reaches 16.3 mln. persons in 2018).

**Table 2.** Dynamics of productivity in Ukraine

Years	GDP per PPP, million USD	Number of persons employed of active business entities, millions	Productivity	Basic growth rate, %
2014	130.57	9.008	14.5	-
2015	90.49	8.332	10.9	-25
2016	93.31	8.244	11.3	-22
2017	112.13	8.271	13.6	-6
2018	130.86	8.661	15.1	4

Source: own calculations based on data derived from *Number of persons employed...* (n.d.); *GDP of Ukraine* (n.d.).

Table 2 demonstrates a decrease in productivity between 2015 and 2017 (compared to 2014), from 25% in 2015 to 6% in 2017, and only in 2018 did the gradual recovery of productivity growth (by 4%) begin.

It is reasonable to put hypothesize about the cause of the productivity decrease in developed countries and Ukraine. To verify it, we will assess the dynamics of gross value added created by Ukrainian enterprises, as a whole and by type of activity, in actual prices and in constant prices in 2012 (Table 3).

**Table 3.** Gross value added of Ukrainian enterprises by type of activity, 2012–2017, in actual prices, billion UAH

	2012	2013	2014	2015	2016	2017	2018	2019	2019/2012
Total	1173	1126	1410	1508	1998	2483	2726	3238	2.76
Agriculture	86	80	143	209	219	231	238	242	2.81
Industry	488	435	532	554	765	961	1024	1166	2.39
Construction	28	48	59	42	57	69	84	142	5.71
Trade	217	229	346	340	392	538	619	693	3.19
Transport	122	119	124	164	219	250	260	307	2.52

Source: own calculations based on data derived from *Statistical yearbook for 2017–2019; Gross domestic product...* (n.d.).

In general, in the country as a whole, it increased almost 2.8 times; in agriculture, industry, trade, and transport, the growth was from 2.4 to 3.2, and in construction – more than 5 times higher. This increase is mainly due to inflation.

A completely different picture emerges if we estimate the gross value added of Ukrainian enterprises in constant prices in 2012. Its volume in 2012–2019, as a whole, decreased by 7.9%, and in transport by 6.2%. The situation was particularly negative in industry, where the decline was 33.8%, indicating a further process of the deindustrialization of the country's economy. In this context, the growth of gross value added in agriculture and trade by 8.7% and 3.1%, respectively, and especially in construction by 108.8%, looks worrying (Table 4).

**Table 4.** Gross value added of Ukrainian enterprises by type of activity, 2012–2017, in constant prices in 2012, billion UAH

	2012	2013	2014	2015	2016	2017	2018	2019	2019/2012
Total	1173	1079	1167	898	1016	1034	984	1080	0.92
Agriculture	86	77	113	106	101	96	90	93	1.09
Industry	488	418	414	304	331	330	302	323	0.66
Construction	28	45	44	24	31	35	37	58	2.09
Trade	217	217	257	182	188	206	215	224	1.03
Transport	122	113	110	106	125	122	108	114	0.94

Source: own calculations based on data derived from *Gross domestic product...* (n.d.).

Negative trends in the country's economy have also affected the structure of gross value added of enterprises by type of economic activity (Jorgenson, Gollop, Fraumeni 1987). The share of industry decreased by more than a quarter, from 41.6% to 29.9%. At the same time, the share of agriculture increased from 7.3% to 8.6%, construction – from 2.4% to 5.4%, trade – from 18.5% to 20.7%, and transport – from 10.4% to 10.6%.

These calculations confirm our hypothesis about the role and identity of deindustrialization as the main factor for reducing productivity, not only for developed countries but also for Ukraine.

In turn, a significant factor accelerating the deindustrialization of developed countries is the capital outflow to create jobs in countries with low labor costs. However, in value-added chains, profits are further withdrawn from these countries back to developed countries. In our opinion, for Ukraine, this factor is also the reason for deindustrialization, but capital is withdrawn from the country for other reasons and is no longer returned.

We will further study the dynamics of capital outflow from Ukraine by comparing the values of the GDP and GNI indicators at purchasing power parity per capita, taking into account that GNI is GDP plus income from abroad and minus income withdrawn abroad (Table 5).

Table 5 illustrates the constant trend of capital outflows from Ukraine, the minimum level of which was 1.44% in 2016 and the maximum – 3.21% – in 2017, which confirms our assumption.

**Table 5.** Dynamics of GDP and GNI by PPP per capita in Ukraine

Indicator	2012	2013	2014	2015	2016	2017	2018	2019
GDP by PPP per capita, USD	8523	8695	8756	8014	8330	8741	9287	9775
GNP by PPP per capita, USD	8340	8500	8610	7880	8210	8460	9020	9601
Difference between GDP and GNP, %	2.15	2.24	1.67	1.67	1.44	3.21	2.88	1.78

Source: own calculations based on data derived from <http://api.worldbank.org/v2/uk/country/UKR?downloadformat=excel> (accessed: 20.11.2020).

On the other hand, the reason for the considered processes is the presence of the following negative indicators: the unprofitability of entrepreneurial structures; unsatisfactory industry structure in terms of the material production development; the deterioration of fixed production assets and the use of backward technologies; the uneven development of entrepreneurship in the regional context and the presence of a significant informal sector. These negative trends are a consequence of the unfavorable entrepreneurial environment, which prevents entrepreneurs from effectively combining existing factors of production.

## Methodology

In general, the international scientific community has been researching the category of “productivity” for centuries but has yet to reach an agreement on this issue. As part of our research, we tried to group the main performance concepts in Table 6 by the number of performance factors (Marx’s one-factor model and the multivariate models of other scientists).

**Table 6.** Basic performance concepts

Characteristics	Concept
One-factor model: Marx (1952)	The productive factor of manufacture is labor (criterion is labor productivity)
Multi-factor models <i>The History of Quality</i> (2020), Kendrick (1976), Solow (1987), Sink (1989), Stigler (2004), Tinbergen (2007), Emerson (2014), Drucker (2015), Cieřlik, Gauger, and Michałek (2017)	Productivity is a comprehensive indicator of the efficiency of functioning of all factors of production (later – this is both entrepreneurship and the relative level of technological development of the country).

Source: developed by the authors.

A fairly thorough study of the current state of economic productivity, on the example and at the level of enterprises in Ukraine, is given by Cieřlik, Gauger, and Michałek (2017), where the performance of micro-level subjects represented as a general population at the macro level is estimated using the Levinsohn-Petrin function. Among the indicators used by researchers in this model is one variable that characterizes the volume of intangible assets attracted to the economy. However, they did not define stra-

tegic directions for increasing the level of entrepreneurial productivity based on the better use of intangible assets. In this aspect, all intangible assets and entrepreneurship itself should be considered a key factor in implementing effective economic development and increasing the value added created.

However, within these concepts, it is impossible to explain the current trends and processes of change in economic productivity. In our opinion, the problem is the underestimation of the role of entrepreneurs, their experience and knowledge, and their ability to creatively combine factors of production.

In other words, we believe that entrepreneurship is not only a factor of production, but its organizer, most effectively redistributing and combining resources, which determines the growth of productivity of both their activities and the economy as a whole.

Thus, we come to the conclusion that *the productivity of entrepreneurial activity is a process of effectively transforming people's competencies (knowledge, skills, experience), as well as the material, financial, energy, intellectual, organizational, and managerial resources. It creates opportunities that produce high-quality results that meet the needs and expectations of stakeholders, and it ensures the sustainable and balanced development of entrepreneurial structures and the economy as a whole.*

It is known that sustainable economic growth is possible only when it is based on the inclusion of intensive factors, in particular, the activation of entrepreneurial activity and the growth of its productivity (as the total productivity of factors of production that entrepreneurs combine). Therefore, the criterion for increasing the productivity of entrepreneurial activity should be the growth of value added through the detection and use of hidden assets of entrepreneurial structures.

At the end of the 20<sup>th</sup> century, a new direction in the theory of state regulation of market processes emerged, the theory of regulating the external business environment. Proponents of this area of economic thought demonstrated the need to improve the entrepreneurial environment as a condition for socio-economic development.

Thus, American economists George A. Steiner and John F. Steiner (1994) consider the system of state regulation of the economy as an entrepreneurial environment that ensures, first of all, the rights of consumers of various products, including information products. In addition, they consider it an important area of state regulation to support entrepreneurial activities through such levers as subsidies, antimonopoly regulation, and creating a competitive environment, among others.

On the example of countries from Central and Eastern Europe, Glinkowska-Krauze, Chebotarov, and Chebotarov (2020) emphasized the importance of internal business cultures and state regulation to improve the business environment.

These proposals demonstrate that state regulation of the economy is a complex system of various forms and methods of influencing the entrepreneurial environment. At the same time, the entrepreneurial environment determines both the rules of how entrepreneurial activity is conducted, and it sets certain parameters within which the interests of entrepreneurial structures, the state, and society as a whole are coordinated.



Thus, the system of state regulation of the economy (including the system of strategic documents) is considered to be a set of measures aimed at developing entrepreneurship, and developing the entrepreneurial sector will contribute to the socio-economic development of the country as a whole.

So, taking all of this into account, *the purpose of the strategy of regulating entrepreneurial activity is to increase the productivity of entrepreneurs, who must be given state aid, with favorable conditions for its conduct, i.e., a favorable entrepreneurial environment, as well as ensuring the possibility to identify and use hidden assets of entrepreneurial structures to develop value-added chains, whose growth is a criterion for increasing productivity.*

When building a strategy for improving entrepreneurial productivity, it is necessary to take into account the trends identified above:

- in the global economy, a new development paradigm is being actively formed; it is based on innovative sources of growth (Nordhaus 2015; Wieczorek and Hekkert 2012), i.e., promoting the introduction of innovative technologies (all solutions that contribute to the increase in productivity – production speed, accuracy, as well as reducing energy and raw material consumption) into production processes. In other words, the development of activities characterized by the manufacture of products with high added value is stimulated;
- deindustrialization is the main factor that reduces productivity, not only in developed countries but also in Ukraine;
- one of the most important reasons for deindustrialization for Ukraine is unproductive capital outflows.

In addition, our previous research (Butenko, Shlafman, Umanets, Bondarenko, and Shatalova 2018) indicates the presence of three main groups of factors that hinder the growth of innovative entrepreneurial productivity:

1. Organizational: There is a lack of a purposeful, balanced economic development policy in Ukraine. It should be based on a scientific definition of development directions, taking into account available resources, and introduce effective regulatory mechanisms. It results in insufficient incentives to introduce new organizational forms of research and innovation. The reform of this sector was ill-conceived, without a clear vision of the desired image of science in the country. There is an imperfect financial and personnel policy in the field of science, which led to a critical loss of the researchers' potential. There are also insufficient working mechanisms of public-private partnership in the field of innovative development, an imperfect state industrial and innovation policy, and an imperfect business environment, which requires the institutional base of entrepreneurial activities to be improved.
2. Financial: There is an imperfect structure of financing scientific and technological development, in particular, the extremely low participation of state, foreign, and domestic entrepreneurial structures in its financing. Mechanisms for concentrating resources within existing mechanisms for selecting and implementing priority areas for the development of science, technologies, and techniques are inefficient.

Economic: Ukraine's domestic market is underdeveloped; there is a low level of competitiveness of domestic production; there are deep structural imbalances – mainly industries that extract raw materials or manufacture products with a low degree of processing for export remain. Their capacity utilization depends on demand in the foreign market, and a significant share of production is material-, energy- and labor-intensive. Accordingly, there is a low share of innovatively active industrial enterprises. Many enterprises of other industries do not withstand competition even in the domestic market; the consumer market of Ukraine is being filled with foreign-made goods; high-tech industries are struggling to survive; a significant part of the scientific and technical potential is lost. For a long time, negative structural changes have been accompanied by job losses and the economic decline of many settlements, where city-forming enterprises ceased their activities, leading to mass labor migration of the economically active population to other countries.

Thus, the subject of our consideration should be the socio-economic, scientific, technological, and institutional components of the entrepreneurial environment.

Taking into account the above-mentioned factors, we will define general methodological principles of strategizing the development of entrepreneurial activity based on the principles of increasing its productivity:

1. The principle of purposefulness, the main meaning of which is to expand the goals to solve the problem, which will provide for the selection of real tasks to work on to achieve the overall goal. In other words, solving individual tasks should be aimed at increasing the productivity of entrepreneurial activities, and inefficient mechanisms should be transformed in accordance with the overall goal.
2. The principle of conformity, which stipulates that the measures and mechanisms applied must correspond to the available resources and real needs of entrepreneurs. In Ukraine, this applies to the institutional framework (regulatory framework), because in the informal plane, where the drivers of institutional transformation are clear economic interests, transformations occur very quickly, and this leads to the restoration of the balance between the requirements of economic reality and the provisions of regulatory documents, leading to the emergence of a significant “shadow” share in the country's economy.
3. The principle of integrity, which takes into account all groups of factors that affect the increase in entrepreneurial productivity.
4. The principle of optimality, which involves choosing the best option from possible or alternative options.
5. The principle of adaptability and flexibility. The state regulation of the economy should be supplemented with new aspects and contain certain accents in accordance with modern requirements.
6. The principle of consistency of interests, which is meant to identify the optimal satisfaction of the interests of all economic agents (or minimize the costs of integrating their private interests into a single social system).

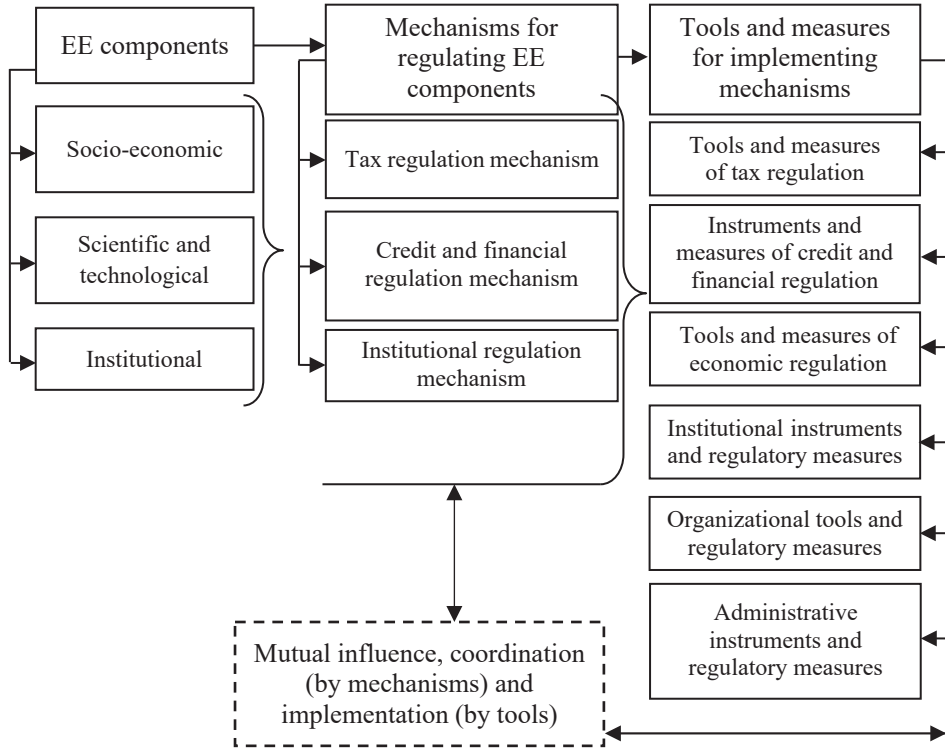
7. The principle of concentration, which is meant to combine regulatory actions of government bodies aimed at coordinating the interests of all agents of economic relations: the state, entrepreneurial structures, and consumers.
8. The principle of the systematic presence of the state in the economy, which is implemented in the system of planning and stimulating the development of entrepreneurial activity.
9. The principle of specialization, which is meant to create a limited set of functions of each of the authorities and create a system of public control over their implementation.
10. The principle of openness and transparency, i.e., a broad discussion of draft decisions, taking into account the opinions of various subjects of economic relations.
11. The principle of network development, which provides for the transition from disparate firms to a single network of various entrepreneurial structures connected by an electronic network based on the Internet. There is close interaction in technology, product quality control, innovation planning, among others.
12. The principle of cyclicity, which is meant to take into account the cyclical nature of reproducing value chains.
13. The principle of budget efficiency: it is necessary to avoid inefficient budget expenditures (i.e., the current underfunding of state target and budget programs, which makes their budgeting and implementation unpredictable; violating the priority principle of financing budget programs due to individual ministries and departments lobbying for their own interests; blurring the formulation of goals in budget programs, which makes it impossible to determine the criterion of their effectiveness; imitating performance indicators, i.e., selecting indicators that can be easily achieved but that do not carry any economic content).

Accordingly, we can establish the basic principles of state regulation of the entrepreneurial environment based on the best foreign experience (system improvement) (*Better Regulation Framework 2020*):

1. consistency: the application of new legal documents must comply with the current legal norms of state regulation and not contradict international norms;
2. purposefulness: a regulatory act should be aimed at solving a specific problem, so it should not contain vague terms; it is necessary to periodically assess their necessity and effectiveness, and outdated and ineffective ones should be canceled or modified;
3. balance: the penalty for violating a legal document should be proportional to the loss caused, and it is necessary to consider the possibility of applying alternative measures to state regulation, which may be more effective and less costly for the state (self-regulation);
4. clarity: the subject of regulation should be clearly identified, and the purpose of the regulation, as well as the entire text of the normative act (without the possibility of discrepancies in its provisions), should be clearly formulated; penalties should also be clearly defined;

5. liability: a clear measure of responsibility of both the regulatory entities and the regulatory bodies (represented by their employees) for violating the requirements of regulatory acts should be established.

Our research has shown that the strategic guidelines for ensuring an increase in the productivity of entrepreneurial activity are improved socio-economic, scientific, technological, and institutional components of the external entrepreneurial environment (EE). Thus, we will define a comprehensive methodological approach to implementing their effective state regulation, shown in Figure 1.



**Figure 1.** Methodological approach to state regulation of components of the external entrepreneurial environment.

Source: developed by the authors.

At the same time, it is important to identify effective approaches that would ensure the real implementation of the tasks set out in the strategic guidelines, using updated and adapted mechanisms and measures. The mechanisms shown in Figure 1 are of strategic importance, but we consider market orientation to be the most important priority, since the conceptual and methodological foundations should be established, and the basis on which all other components of the general methodical approach will be focused should be defined. The second most important focus is on maximizing the creation of value added, which contributes to the realization of economic, social,

budgetary, environmental, and other interests of society as a whole, the state, and entrepreneurial structures. For this purpose, it is recommended to use regulatory levers in the context of certain priority types of entrepreneurial activity that are promising in the context of maximizing value added.

At the same time, all the components of regulatory mechanisms and tools are focused on maximizing the creation of value added, which is the criterion for increasing the productivity of entrepreneurial activities.

The foregoing considerations lead to the conclusion that to increase the productivity of entrepreneurial activity, it is necessary to develop a strategy based on certain strategic guidelines and the proposed methodological approach to their regulation.

## Conclusions

Identifying principles and mechanisms for strategizing entrepreneurship development and increasing its productivity must be based on reliable data about the peculiarities of the functioning and transformation of the national economic system. Thus, for the purpose of the article, the problems that have developed in countries worldwide and Ukraine regarding the dynamics of productivity were studied, and a comparative analysis of the dynamics of productivity of the economies of developed countries (including EU countries) and the economy of Ukraine (by type of activity) was conducted.

Based on our theoretical research and comparative data analysis for different countries, including Ukraine, we arrived at the following conclusions:

- the relevant indicator of entrepreneurial productivity is per capita value-added calculated in constant prices. This indicator characterizes the results of involving all types of capital in the production process and thus meets the requirements of today's socio-economic development of society when the level of education, innovation, informatization, and entrepreneurial skills are the factors that determine society's socio-economic development;
- the decisive influence of inflation on the reliability of the results of calculating business productivity was determined. Thus, in Ukraine, the dynamics of total gross value added at current prices is characterized by a 2.8 times increase; however, when estimated in constant prices, the gross value added of Ukrainian enterprises is characterized by a 7.9% decrease;
- the hypotheses were verified about deindustrialization being the main factor that reduces productivity for both the Ukrainian economy and the economic systems of developed countries, and the weight of the factor of unproductive capital outflow in Ukraine's deindustrialization process;
- as a result of logical analysis, the nature of the deindustrialization of the Ukrainian economy and the economic systems of developed countries was found to be different. In developed countries, it is due to the relocation of manufacturing to regions and countries with cheaper labor, while in Ukraine, this phenome-

- non is a result of inadequate regulatory policies and inappropriate business environment;
- the negative trends in the Ukrainian economy have also affected the structure of gross value added by type of economic activity. During the research period (2012–2019), the share of industry decreased from nearly 42% to 29.9%. At the same time, the share of agriculture and other non-manufacturing types of activities increased;
  - one of the quite significant factors accelerating the deindustrialization of the Ukrainian economy is the capital outflow dynamics. By comparing the values of GDP and GNI indicators at purchasing power parity per capita, it was estimated to be 1.78% of GDP.

The essence of the category “productivity of entrepreneurial activity” was formulated, which allowed us to determine the goal of the strategy for improving the productivity of entrepreneurial activity. It involves providing the state with a favorable entrepreneurial environment, as well as ensuring that it is possible to identify and use hidden assets of business structures to develop value chains, whose growth we define as a criterion for increasing productivity.

At the final stage of the study, we developed methodological principles for forming a strategy to increase the productivity of entrepreneurial activity based on certain strategic guidelines. To implement the principles, we proposed a comprehensive methodological approach to state regulation of the entrepreneurial environment.

Subsequent research should be aimed at developing a draft strategy for improving the productivity of business activities in Ukraine based on the principles of qualitatively improving the entrepreneurial environment, as well as on identifying and using hidden assets of business structures to develop value-added chains.

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## **Analiza i określanie strategii rozwoju przedsiębiorczości w oparciu o zasady zwiększania produktywności (na przykładzie krajów rozwiniętych i Ukrainy)**

W artykule przedstawiono wyniki analizy porównawczej produktywności w krajach rozwiniętych, w tym w krajach UE i na Ukrainie. Weryfikowane są hipotezy dotyczące identyfikacji dezindustrializacji jako głównej przyczyny spadku produktywności zarówno ukraińskiej gospodarki, jak i systemów gospodarczych krajów rozwiniętych. Cel artykułu: Opracowanie kompleksowego podejścia metodologicznego do tworzenia strategii i państwowej regulacji otoczenia biznesowego w oparciu o wytyczne opracowane na podstawie wyników analizy porównawczej produktywności działań przedsiębiorstw i ukierunkowanego na maksymalizację wartości dodanej, która jest kryterium zwiększania produktywności działań przedsiębiorstw.

Zastosowane metody: przegląd literatury naukowej, analiza porównawcza produktywności działalności gospodarczej w krajach rozwiniętych i na Ukrainie, w tym analiza szeregów czasowych, obliczenie tempa wzrostu wartości dodanej na mieszkańca oraz analiza czynnikowa kluczowych przeszkód utrudniających wzrost produktywności innowacyjnej działalności przedsiębiorstw.



Wkład wniesiony do teorii i metodologii produktywności obejmuje proponowaną definicję kategorii ekonomicznej „produktywność działalności przedsiębiorstw”; ustalenie ogólnych metodologicznych zasad tworzenia strategii poprawy produktywności działań przedsiębiorstw; określenie głównych zasad państwowej regulacji otoczenia przedsiębiorstw z uwzględnieniem najlepszych doświadczeń międzynarodowych; ustalenie, że celem strategii poprawy produktywności działalności przedsiębiorstw jest zapewnienie państwu korzystnych warunków prowadzenia działalności gospodarczej, tj. stworzenie sprzyjającego otoczenia przedsiębiorstw oraz umożliwienie identyfikacji i wykorzystania ukrytych aktywów struktur przedsiębiorczych do budowania łańcuchów wartości dodanej, których wzrost jest kryterium wzrostu produktywności.

**Słowa kluczowe:** produktywność działalności przedsiębiorstw, dezindustrializacja, strategia, maksymalizacja wartości dodanej



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