

The Influence of Globalization Processes on Forecasting the Activities of Market Entities

Olga Vyshnevska ^a, Inna Irtyshcheva ^b, Iryna Kramarenko ^b, Nazariy Popadynets ^{c,*}, Maryna Ponomarova ^d

^a Mykolayiv National Agrarian University, Mykolaiv,Ukraine

^bAdmiral Makarov National University of Shipbuilding, Mykolaiv, Ukraine

^cScientific-Educational Institute of Entrepreneurship and Perspective Technologies of Lviv Polytechnic National University, Lviv, Ukraine

^dKharkiv National Agrarian University named after Dokuchaiev, Kharkiv, Ukraine

Received 25 September 2021; Revised 20 November 2021; Accepted 05 December 2021

Abstract

The paper outlines the essence, components, and features of globalization from the viewpoint of manifestations in society, development priorities, and possible threats. The processes taking place in the globalized environment are proven to require market participants to adapt to changes in the external environment, including through the expansion of the spheres of transnational business influence. A significant increase in the influence of geopolitical, geosocial, geo-economic, and environmental factors on a global level is emphasized. The paper proves that the development of the world economy, individual states, and regions of the world should be focused on a set of global factors that determine potential opportunities and the priority threats of market entities. A significant advantage of modern activity management is the timely identification of priority approaches to adapting solutions in order to prevent threats, conduct analytical assessments, and predict (plan) the activities of entities in the context of the growing influence of transnational business using appropriate methodological approaches to economic analysis. The authors argue that the development of business ideas, the formation of business plans, and forecasting the results of market entities' activities should take into account the relevant capabilities and input conditions that will allow a timely response to ensure the adequacy of actions and forecasts. The efficiency of forecasting (planning) activities and adjusting managerial decisions is emphasized. The paper proves that expansion of the activity domain of the transnational business fosters the maintenance of efficient management mechanisms that allow quick change of approaches to holding the domestic and external policy of business processes.

Keywords: Analytical Problem; Security; Globalization; Competitive Positions; Forecasting; Transnational Companies.

1. Introduction

The significance of global changes encourages the transformation of decision-making systems at all levels. Rapid response to changes in the external environment, adaptation, coordination of decisions, monitoring the compliance with current and strategic objectives allow market entities to have market advantages and form "the rules of the game" among potential competitors. The influence of global factors on the activities, interaction, and development of individual market participants is indisputable. Among producers, the globalization, which encourages the adjustment of management decisions, has resulted in the strengthening of the role of transnational business in various areas and sectors of the world economy. The practice of managing the entities activities' shows that adaptation of decisions due to the impact of globalization requires coordination of actions and joint efforts.

Recent trends show the growing negative financial and economic processes that increase the need to combine efforts to localize all types of financial threats (from stock to fiscal) at various governance levels. The influence of geopolitical, geosocial, geo-economic, and environmental factors of the global level is increasing significantly. That is why the development of the world economy, individual states, and

regions of the world should be focused on a set of global factors that determine potential opportunities and detect priority threats to market entities. The directions of development and adaptation to changes are determined by global priorities of the world community; practical experience shows their significance and essence, especially considering the expansion of the influence of transnational business.

The main global priorities are determined by international agreements that have been ratified by the parties, relevant conventions, agreements, manifestos, international law, etc. The modern vector of world economic development is focused on global positions of world development, taking into account the proclaimed Davos Manifesto - 2020, which combines the positions of social responsibility of

*Corresponding author Email address: popadynets.n@gmail.com

business, compliance with environmental obligations, digital transformation, and technological changes.

The Anniversary World Economic Forum was held in Davos, Switzerland on January 21-24, 2020. The forum brought together about 3,000 participants from 117 countries, including the leaders of more than 50 states. The Davos 2020 program included six main areas: ecology, economics, society, industry, technology, and geopolitics. Within the framework of the forum, 160 substantive initiatives were announced at once (World Economic Forum, 2020a). The World Economic Forum has summarized possible global risks, the manifestations of which will be significant to the world. Consideration of possible risks significantly changes or adapts the priority of tasks that will be formed and implemented at various levels of management (from local to global, from territorial to sectoral).

That is why the priorities for the development of global peace should be focused on the main vectors, which are stipulated by international agreements. Considering the significance of global threats, no country in the world will be able to solve problems locally in any social domain. It confirms the need for the growing role of international partnership, the joint responsibility of each participant for the results of the implementation of agreed measures, acceptable management decisions, and their practical implementation.

The risks of the world's transition to the "new rules of the game", considering the existing global threats, must take into account the possibilities of technology adaptation (technological changes already are of a transformational nature in many sectors of the world economy) and provide for the possibility of social changes and ensuring the public safety of the state, territories, and personalities. Infrastructural support for technological change should include the development and selection of alternatives, mobility of solutions, common goal of preserving the global world, and neutralization of various types of threats.

What priority approaches should be chosen and introduced in order to prevent threats and adapt management decisions to cooperate in an atmosphere of the increased influence of global factors and the growing role of transnational business? What competitive advantages can producers have considering the growing competitive advantages of "big business", multinational companies? What opportunities can market participants have, what solutions need significant adjustments, changes, and transformations?

The aim of the study is to substantiate the essence, directions, and priorities of management decisions adaptation in order to prevent threats, assess the situation, and make efficient and timely decisions, taking into account global factors of influence, challenges, and threats of a transnational nature and determine the approaches and features of analytical assessment and forecasting (planning) of entities' activity using appropriate methodological approaches.

The main task of the study is to identify priority approaches to the adaptation of management decisions through the influence of global factors to prevent threats and analytically assess and forecast (plan) the entities' activity in the context of the growing impact of transnational business using appropriate economic analysis.

Globalization encourages the adjustment of the business management system, forecasting activities, adaptation of management decisions, and quick coordination of actions. The issue becomes especially relevant in the context of the growing influence of transnational business. Assessment of globalization manifestations is associated with the determination of potential opportunities and threats of market entities in various sectors and spheres of the global economy, their manifestations in time and space. Studies of the globalization process have been carried out by many authors, including O. Bilorus (2003), V. Vlasov (2012), A. Halchynskyy (2006), P. Herst and G. Tompson (2002), M. Stehnei et al. (2019), R. Robertson and K. E. White (2003), D. Nort (2010), T. Vasyltsiv et al (2017, 2020), C. Wheelan (2010), D. Acemoglu and J. A. Robinson (2015). Most authors study globalization processes in the context of manifestations in society, mainly in economics (Bilorus, 2003; Vlasov, 2012; Melnyk, 2018). The authors distinguish the positions of individual countries in the world from the position of opportunities and limitations, mainly historical and mental in nature (Nort, 2010; Holovko and Sahova, 2002; Redchenko, 2003; Taylor, 2004; Shyryahina, 2009; Krysovatyy, 2018, Yakubiv, 2020).

Herst P. and Tompson H. argue that globalization is among the key concepts of our time. It is used by advocates of both right and left political trends as the cornerstone of international economy and public policy research. In the process of political and academic discussions, they make a general assumption that the economic globalization process goes full speed and constitutes a qualitatively new stage of international capitalism development (Herst, Tompson, 2002). Robertson R., White K. E. (Ed.) introduced glocalization into the social-scientific discourse, and his image of glocalization has been elaborated in a series of articles, chapters, and encyclopedia entries (Robertson, White, 2003).

Nort emphasizes that economic changes depend on the ability of the society to create productive, sustainable, honest, acknowledged, and at the same time flexible institutes capable to operate in response to the change of political and economic circumstances. Not abandoning his more recent definition of institutes as formal and informal rules that restrict economic behavior, the author also considers more extended conditions of the rules development and change of economy (Nort, 2010).

Halchynskyy A.S. discloses the conceptual alternatives and methodological aspects of global transformations (Halchynskyy, 2006).

Vlasov V.I. addresses the history, theory, practice, and personalities in globalism. The author outlines for the first time in the history of global science the genesis and evolution of global phenomena and the development of various globalism theories and trends that impact the development of the global community (Vlasov, 2012).

Many researchers emphasize that strategic analysis and efficient development strategies are important for economic entities in the process of globalization changes (Holovko, Sahova, 2002; Redchenko, 2003). It is essential to use forecasting to secure the strategic development of economic entities. James W. Taylor provides a new adaptive method to forecast the volatility of financial returns. It enables the smoothing parameter to vary as a logistic function of user-specified variables. The approach is similar to those used to model time-varying parameters in smooth transition GARCH models (James W. Taylor 2004). Ponomarenko O.I., Perestyuk M.O., Burym V.M. use economic analysis to develop business strategies for economic entities development (Ponomarenko, Perestvuk, Burym, 2004). Shyryahina O.Ye. uses the automation of profit forecasting models (Shyryahina, 2009).

That is why the prevention of external threats should be systemic and intuitive. According to the World Economic Forum (2020b), a short-term risk forecast has a significant impact of 75.0 to 89.0% for the following factors: destruction of ecosystems, environmental pollution and impact on human health, insufficient fresh water sources, uncontrolled natural fires, loss of confidence in media sources, loss of confidentiality at different levels of government (from business to governments), internal political polarization, and economic confrontation. Shortterm factors, for the most part, are significant threats to global society. The long-term forecast of risks is substantially influenced by the following factors: loss of biodiversity, environmental policy, natural disasters, water crises, natural disasters, extreme weather, insufficient results of global climate policy, cyberattacks, infectious diseases, instability, economic fraud, and migration. Long-term factors, by their majority and significance, are of social significance.

The World Bank Group (International Monetary Fund) presented an economic forecast at the Forum, which determines the potential of the world economy (World Economic Forum, 2020a; World Economic Forum, 2020b; The official site of International Monetary Fund, 2020). The IMF forecast for 2020-2022 ranged from 2.9 to 3.4 percent, which is quite optimistic considering the spread of negative financial and economic phenomena in most countries of the world. At the same time, the limited opportunities for the growth of the global economy may be due to the uncertainty of the consequences of the pandemic, which has significantly affected most states of the world.

According to IMF forecasts (World Economic Forum, 2020a; World Economic Forum, 2020b; The official site of International Monetary Fund, 2020), the consequences of the pandemic will be tangible for almost 170 countries of the world, accounting for 85.0 percent. The World Bank Group recommended that Governments paid more attention to fiscal and monetary policies, stimulated aggregate demand, and ensured inclusive economic growth. These require significant adaptation to change and development of appropriate strategies based on productivity and employment but take time to be

developed and implemented. We can add the negative consequences of the pandemic, which are global in nature, to the already existing threats to the world, as well as the need to reorient the economies of the world to more efficient use of resources.

Considering what has been mentioned above, any forecasts must be made taking into account a certain global vector of the world economy development. It is possible to develop assumptions at the local level taking into account the results of the analytical evaluation of activities and forecasting using retrospective and factor analysis, comparison, extrapolation method, since any opportunities for making and adjusting management decisions are related to understanding the processes and speed of reaction to occurring changes and a set of four components - knowledge, experience, logical thinking, and intuition.

The analytical task in the author's research has been formed taking into account the reflection of the market entities' capabilities in increasing financial results considering alternative input conditions. The implementation of approaches to increase production capacity encourages an increase in the absolute amount of costs, which is a limiting factor, as the growth of income (revenue) from sales may occur at a slower rate than the growth of total costs due to uncontrolled external factors. Such factors may be limited market opportunities for the market entity due to the increasing influence of transnational business.

2. Materials and Methods

Methodologically, the study is based on assessing the impact of globalization factors on the activities of market participants, identifying priorities in the adaptation of management decisions to changes in environmental factors, analytical assessment using appropriate methods and approaches of economic analysis, as well as forecasting (planning) and the need for threats prevention. Considering the fact that economic analysis is based on the basic principles of dialectics, the changes in movement, interconnection and interdependence, cause and effect relationships, manifestations of necessary and random, and objection have been taken into account. The essence of the analytical assessment and forecasting (planning) of the market entities' activities lies in the conclusions and management decisions to stay ahead of the situation. Such an approach to management provides advantages in doing business and quickly adapts the internal system of market entities to changes. The importance of adjusting the management system in the context of the growing influence of transnational business is undeniable and lies in the need to change approaches to conducting an analytical assessment and forecasting the activities of market entities.

To prepare the publication, the abstract-logical method and the method of systematic generalization have been used to form the essence, features, manifestations of globalization processes, and bibliographic method – to process and generalize statements. The choice of the method or technical approach of economic analysis is determined by the purpose of the analytical assessment of processes and phenomena, information requirements, the scope of the analytical task, the nature of the relationship between the indicators, as well as the characteristics of the activities of an individual market entity. Regardless of the chosen research methods, the algorithm for solving the analytical problem includes the possibility of comparing, grouping, linking incoming indicators and graphical display of processes and phenomena. The complexity of the construction and the steps for solving the analytical problem should correspond to the efficiency of the implementation of the chosen managerial decision in practical activities.

In order to carry out forecasting (planning) of activities and adjust managerial decisions, the method of extrapolation of trends using a direct equation has been used. The method allows us to establish the dynamics of changes in main performance indicators that can determine the capacity of the enterprise in the future to fulfill obligations to partners. The extrapolation method is used in the short-term forecast of financial performance. The main result of forecasting is the identification of the entity's capabilities at the same pace of its development. The forecast determines the expected alternative development options based on the hypothesis that the main factors and trends of past periods will be preserved for a period that is being predicted. The feasibility of using the extrapolation method is proved by practical use in analytical work. Other forecasting methods have a number of advantages and disadvantages, but if the extrapolation method is used, the entire observation provides the same significance. Other forecasting methods include the normative method, factor modeling of profit method, target profit formation method, the CVP method. The choice of forecasting method depends on the analytical task, the complexity and scale of current and strategic tasks, as well as the characteristics of the activities of market entities.

The extrapolation of trends method in forecasting the activities of a market entity is used to build an equation taking into account existing patterns. The determined nonrandom component of the process and the stochastic random component of the process are the components of the equation. The general mathematical form can be represented as follows:

$$y = f(t) + \xi(t) \tag{1}$$

where f(t) is a determined non-random component of the process, ξ is a stochastic random component of the process. It should be noted that the trend describes the actual trend of the process over time as an average value. Extrapolation is carried out by substituting in the trend equation the value of the independent variable that corresponds to the value of the forecast horizon:

$$v_{t+n} = f(t_{n+n}) + \xi(t)$$
 (2)

where t is a variable, p is the value of the forecasting horizon, that is, the forecasting period (planning) of the activity. The trend equation can be described by the corresponding dependencies, namely: linear, quadratic, stepwise. The parameters of the equation are determined using the least squares method:

$$(\mathbf{y}_t + \mathbf{y}_{t1})^2 = \min \tag{3}$$

where y_t characterizes the actual value of the function, y_{t1} - characterizes the calculated value of the function determined on the basis of the trend equation. Various algebraic functions are used for alignment: linear, the graph of which is a straight line; quadratic (parabola); indicative (hyperbola).

The linear function is described by the equation: $y_{t1} = a + b \times t$,

(4)

(6)

where y_{t1} - the levels of the aligned series, and t - the years.

Parameters a and b can be calculated by using the subtraction from conditional zero method. Conditional zero is the value of t, which is in the middle of the series. With an odd number of members of the series, for example n = 5, t becomes -2, -1, 0, 1, 2 ($\Sigma t = 0$), with an even (n = 6) -5, -3, 1, 1, 3, 5.

Therefore, the sum of conditional indicators is zero, and the system of equations is simplified. The system of equations can be used when forecasting (planning) the activities of a market entity:

$$\begin{cases} na + b\Sigma t = \Sigma y \\ a\Sigma t + b\Sigma t 2 = \Sigma y t \\ na = \Sigma y \end{cases}$$
(5)

 $b\Sigma t 2 = \Sigma v t$

The calculation of the parameters a and b is as follows:

$$a = \sum y/n \tag{7}$$

$$b = \sum yt / \sum t^2 \tag{8}$$

$$= \Sigma y t / \Sigma t^2 \tag{8}$$

Substituting the values of the parameters a and b in the equation, we get the level of the effective indicator or indicators aligned, depending on the analytical task. The system of equations and calculations is formed in the main part of the publication.

The use of research methods allowed us to conduct research and summarize the results in accordance with the goal; substantiate the essence, directions and priorities of adaptation of managerial decisions in order to prevent threats, assess the situation and make decisions taking into account global factors of influencing, challenges and threats of a transnational nature; determine approaches and features of analytical assessment and forecasting (planning) the activities of market entities.

3. Results and Discussion

Management decisions at the level of an individual market entity depend on a number of factors, including input opportunities (resources that are available; resources that can be further involved), as well as the characteristics of the industry or field of activity. In order to ensure performance, there is a need to form a forecast level of achieving business goals, which can be summarized and formed into an action plan. To carry out the calculations, an assumption has been made and the method of extrapolating trends by the equation of the line has been used. The assumption contains input information that for the last 5 years, the market entity has been receiving an increase in net profit in the amount of minimum input conditions - 4.0% of the base level, maximum input

conditions - 24.0 percent of the base level. The level of net profit of 50.0 million currency units for the basic unit of the indicator has been determined. The system of equations for calculating the predicted level of the financial result of activity has the following form, where y is a net profit.

$$\begin{cases} a_t = a + bt \\ a = \frac{\Sigma y}{n} \\ b = \frac{\Sigma yt}{\Sigma t^2} \end{cases}$$
(9)

The information coverage period is 5 years. The calculation (Tables 1, 2, 3) has been made taking into account various options for the growth of the effective indicator from the base level (from 4.0 to 24.0 percent). The tables summarize the information on alternative net profit growth options.

The development of alternative management decisions on possible areas of increasing the performance of market entities is based on the assessment of situations that arise, taking into account the relevant patterns and features of the activity, as well as potential opportunities, both their own and formed in cooperation with other interested entities (business partners, investors, creditors, organizers, and participants of grant projects, etc.).

As the financial forecast cannot be made with significant accuracy, current management decisions should be adjusted to reflect changes in the internal and external environment. The extrapolation method allows you to conduct short-term forecasting of financial results, and determine the main priorities of business management.

Table 1

Initial and calculated information on forecasting net profit of the PP "Barvinok" with actual growth at the level of minimum input conditions - 4.0%

Years	У	t	yt	t^2
2015	50.0	-2	-100	4
2016	52.0	-1	-52.0	1
2017	54.08	0	0	0
2018	56.25	1	56.25	1
2019	58.50	2	117.0	4
In all	270.83	0	21.25	10

Source: calculated by the authors.

Calculation: a = 270.83 / 5 = 54.17; c = 21.25 / 10 = 2.13. The projected level of net profit in the next period may be: y = 54.17 + 6 * 2.13 = 66.95 million currency units with an increase in the effective indicator at the level of average input conditions, an increase of 4.0% from the base level.

Table 2

Initial and calculated information on forecasting net profit of the PP "Barvinok" with actual growth at the level average indicator value - 14.0%

Years	У	t	yt	t ²
2015	50.0	-2	-100	4
2016	57.0	-1	-57.0	1
2017	64.98	0	0	0
2018	74.08	1	74.08	1

2019	84.46	2	168.92	4
In all	330.52	0	86.0	10

Source: calculated by the authors.

Calculation: a = 330.52 / 5 = 66.11; c = 86.0 / 10 = 8.60. The projected level of net profit in the next period may be: y = 66.11 + 6 * 8.60 = 117.71 million currency units with an increase in the effective indicator at the level of minimum input conditions, an increase of 14.0% from the base level.

Table 3

Initial and calculated information on forecasting net profit of the PP "Barvinok" with actual growth at the level of maximum input conditions - 24.0%

Years	У	t	yt	t^2
2015	50.0	-2	-100.0	4
2016	62.0	-1	-62.0	1
2017	76.88	0	0	0
2018	95.34	1	95.34	1
2019	118.23	2	236.46	4
In all	402.45	0	169.80	10

Source: calculated by the authors.

Calculation: a = 402.45 / 5 = 80.49; c = 169.80 / 10 = 16.98. The projected level of net profit in the next period may be: y = 80.49 + 6 * 16.98 = 182.37 million currency units with an increase in the effective indicator at the level of maximum input conditions, an increase of 24.0% from the base level. According to alternative growth options, the effective indicator ranges from 66.95 million currency units to 182.37 million currency units. The difference between the predicted minimum and maximum values of the indicator is 2.7 times.

The calculations make it possible to note that the growth of the financial result of the market entity is due to certain restrictions that depend on a combination of internal and external factors (on the adequacy of resource support to the selling price of products, goods, works or services provided by the market).

The implementation of approaches to increase the revenue component of activities leads to increased costs. That is why the choice of an alternative option for a managerial decision should be made in terms of scale and cost, and ensuring income growth should occur at a faster pace than the costs of activities. Changes in the forecast values of the financial results of the enterprise have been put into this graph (Figure 1).

Input conditions depend on a large number of factors. The expansion of potential capabilities of a market entity encourages an increase in the level of expenses; it can occur at a faster pace than an increase in income (revenue) from the sale of products, goods, works or services. That is why when forecasting (planning) the activities of a market entity, it is imperative to take into account the possibilities of controlling and managing expenses. The dynamics of the change in the effective indicator under various input conditions have been taken into account in the variants of the calculations. But the choice of an alternative managerial decision depends on the entity's ability to maintain a market position and provide appropriate control over the total costs.

The most optimal is the deviation of the indicator to 10.0 percent. Under such conditions, the market entity can, due to its own capabilities, make adjustments to the situation, and any changes will not be critical or catastrophic. In the calculations, this increase in financial results is from 4.0 to 8.0 percent, the projected level of net profit is from 66.95 to 85.72 million currency units. With the growth of the effective indicator from 10.0 to 20.0 percent, the risks of increasing the expenditure component increase, which can lead to the leveling of efforts and loss of ability to manage processes. In the calculations, this increase in the financial result is from 14.0 to 16.0 percent, the projected profit level is from 117.71 to 129.5 million currency units.

Considering the potential for net profit growth of 20.0 percent and above, the growing risks of default at all levels (from material supply to marketing activities) should be taken into account, which can lead to a significant increase in financial risks. In the calculations, the projected level of net profit is from 154.7 to 182.37 million currency units. That is why, when choosing a solution, it is necessary to form a clear sequence of actions, primarily for cost control, in order to neutralize potential threats and prevent the growth of financial dependence, which can lead to the loss of any business opportunities

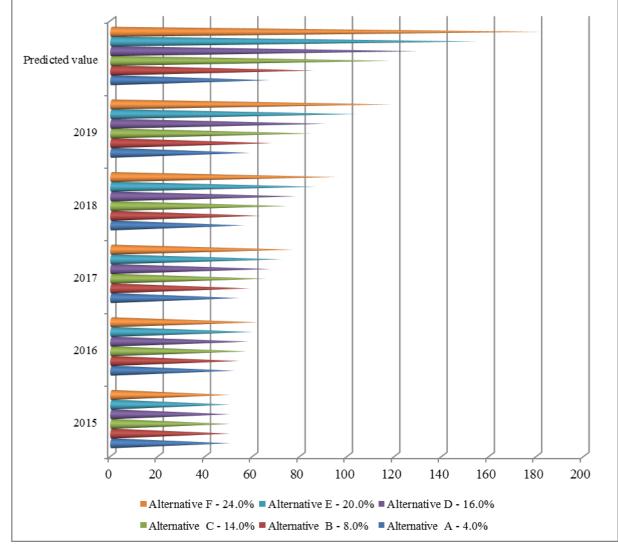


Fig. 1. The projected level of net profit of the market entity under various options for the input conditions for the growth of the effective indicator, million of currency units

Construction and timely solution of the analytical problem is an important management task. Using methods and techniques of economic analysis allows you to have access to mass data to use in business management. An analytical assessment of the activities of a market entity and forecasting (planning) of its activities should take into account potential input conditions. Focusing management decisions on potential opportunities avoids unnecessary losses and reduces the level of dependence on other market players. Choosing an effective alternative solution among the entire set of solutions allows you to orient your business to indirect risks, which can be quickly leveled, mainly due to your own capabilities. It is necessary to react to changes in the external situation quickly and effectively. It is possible only with the constant adjustment of management decisions. Companies are moving to use artificial intelligence, programs that detect trends, changes, threats and form an information field for decision-making. Artificial intelligence can process a significant amount of information, quickly carry out complex mathematical calculations, and provide analytical information in a form convenient for the manager. However, artificial intelligence cannot have human quality, such as - logical thinking. When making a decision, the manager adds his own experience, logic, and intuition to a whole array of analytical information.

Adoption, adjustment, adaptation of management decisions under the influence of the whole set of the global world external factors should take into account the potential input conditions, which are based on the characteristics of activities, resource levels of all processes, organizational structure of the market entity, its market position, competitive opportunities, etc. The effectiveness of managing a market entity should be focused on increasing the effectiveness of business plans and individual business processes, the effective implementation of business ideas, investment proposals, as well as the practical implementation of production and financial plans, marketing strategies, development projects, etc.

High parameters in forecasting (planning) the activity of a market entity is not always a guarantee of success. Forecasting activities should correspond to the realities of the environment in which the activities of the market entity are carried out; input conditions and additional opportunities that can be activated under certain conditions, including through cooperation, partnership, and grant activities in various fields and industries.

The assessment of risks, including the risks of late or ineffective management decisions, should be an obligatory condition for efficient forecasting. Risk is assessed mainly through the use of expert assessment methods, taking into account possible assumptions, the experience of previous periods of the entity's activity. Assessment of external risks is complicated by a lack of external information, the reliability of which has certain doubts and omissions in collection and processing. The best way to prevent possible risks is to create a reserve fund that will cover financial losses and neutralize the occurrence of relevant negative processes and phenomena. In order to neutralize possible threats of the increase in the cost of activities, the research determines that forecasting and implementing managerial decisions to increase the financial result of the entity at 10.0 percent will ensure the effectiveness of managerial decisions and the ability to quickly adjust them if necessary. The increase in the predicted value may lead to additional costs and unnecessary losses due to the negative effects of external factors, including those defined by international financial groups and the World Economic Forum.

4. Conclusion

According to international financial groups, including the World Bank Group, the global economy will face a significant decline in the next period due to the impact of the pandemic, which may range from 5.2 to 8.0 percent. Such a recession of the world economy is greater than that after the Second World War and could significantly affect most countries in the world, especially those that have a high level of financial dependence on credit resources. Such a situation should encourage joint efforts, intensification of cooperation and partnership in order to prevent threats and create conditions for stabilization of the situation. The issue is especially relevant in the context of guaranteeing the public security of the world, ensuring the development of areas and sectors of the world economy, neutralizing threats, as well as creating opportunities for the development of individual market entities.

The research determines that setting and timely solving the analytical problem is an important management task. The use of economic analysis methods and techniques provides access to mass data to use in business management. Analytical assessment of a market entity activity and forecasting (planning) its activity should take place considering the prospective entry conditions. Managerial decisions orientation on opportunities helps to avoid extra losses and impacts the decline in the level of dependence on other market actors. The selection of an efficient alternative solution among the entire set of solutions contributes to orienting business on indirect risks that can be quickly eliminated, mostly due to its own capabilities.

The calculations in Tables 1-3 and Fig. 1 show that the indicator's deviation up to 10.0 % is the most optimal. In such conditions, a market entity can adjust the situation based on its capabilities, and any changes won't be of critical or catastrophic nature. When the performance indicator grows from 10.0 % to 20.0 %, the risks of growing expenses component increases, which can cause the leveling of efforts and loss of processes management capacity.

The research determines that these methodological approaches to forecasting the activities of market entities in the global environment are based on the possibility of providing conditions for the prevention of threats, timely assessment of the situation, effective and timely decisionmaking. The business plans, forecasts, development strategies should take into account real or potential input conditions that cover the possibilities for preventing and neutralizing threats. The development of business ideas and forecasting the results of activities of market entities should take into account the appropriate opportunities for timely response to the changes, adequacy of actions and forecasts based on the defines methodological approaches.

References

- Acemoglu, D., & Robinson, J.A. (2015). Why are some countries rich and others poor. The origin of power, prosperity and poverty. Moscow: AST.
- Bilorus, O.G. (2003). *The economic system of globalism*. Kiev: KNEU, 2003. 380 c.
- Halchynskyy, A. S. (2006). Global transformations: conceptual alternatives: methodological aspects.

Kiev: Lybid.

- Herst, P., & Tompson, H. (2002). *Doubts about globalization*. Kiev: K.I.S.
- Holovko, T.V., & Sahova, S.V. (2002). *Strategic analysis*. Kiev: KNEU.
- Krysovatyy, A., Zvarych, I., Zvarych, R., Zhyvko, M. (2018). Preconditions for tax environment of alterglobal development. *Comparative Economic Research*. 21(4), 139–154.
- Melnyk, M., Korcelli-Olejniczak, E., Chorna, N., & Popadynets, N. (2018). Development of Regional IT clusters in Ukraine: institutional and investment dimensions. *Economic Annals-XXI*, 173(9-10), 19-25. https://doi.org/10.21003/ea.V173-03
- Nort, D. (2010). Understanding the process of economic change. Kiev: High School of Economics.
- Redchenko, K.I. (2003). *Strategic analysis in business*. Lviv: "New World – 2000".
- Robertson, R., & White, K. E. (Ed.) (2003). Globalization or glocalization? *Globalisation. Critical conceptin sociology*, 3, 31-51.
- Shyryahina, O.Ye. (2009). Automation of profit forecasting models. Actual problems of economy, 11(101), 251-263.
- Stehnei, M., Irtyshcheva, I., Boiko, Y., & Khaustova, K. (2019). Strategic Priorities and Effectiveness of the Implementation of the State Policy for Sustainable Agricultural Development in Ukraine. *Public Policy and Administration*. Vol.18, no 2, 194-208. https://doi.org/10.13165/VPA-19-18-2-02
- Taylor, J. W. (2004). Volatility forecasting with smooth transition exponential smoothing. *International Journal of Forecasting*, 20, 273-286.
- The official site of International Monetary Fund (2020). Retrieved April, 20, 2020 from: https://sites.google.com/site/economorganizations/

ekonomicni-organizaciie-globalnogomasstabu/mvf-miznarodnij-valutnij-fond

- Vasyltsiv, T., Lupak, R., & Osadchuk, Yu. (2017). Assessment of the level of penetration of import dependence in the context of the import substitution policy in Ukraine. *Economic Annals-XXI*, 167 (9-10), 13–17. https://doi.org/10.21003/ea.V167-03
- Vasyltsiv, T., Irtyshcheva, I., Lupak, R., Popadynets, N., Shyshkova, Y., Boiko, Y., & Ishchenko, O. (2020).
 Economy's Innovative Technological Competitiveness: Decomposition, Methodics of Analysis and Priorities of Public Policy. *Management Science Letters*, 10(13), 3173–3182. doi: 10.5267/j.msl.2020.5.004
- Vlasov, V. I. (2012). *Globalism: history, theory.* Vinnytsia: LLC "Nilan-LTD".
- World Economic Forum. (2020a) Results of the 50th anniversary meeting. Retrieved April, 20, 2020 from: https://www.rbc.ua/static/longread/davos_ukr/inde x.html
- World Economic Forum (2020b). *The Global Risks. Report 2020.* Retrieved April, 22, 2020 from: http://www3.weforum.org/docs/WEF_Global_Risk _Report_2020.pdf
- Yakubiv V. et al. (2020) Application of Economic and Legal Instruments at the Stage of Transition to Bioeconomy. In: Ahram T. (eds) Advances in Artificial Intelligence, Software and Systems Engineering. AHFE 2019. Advances in Intelligent Systems and Computing,965. Springer, Cham. https://doi.org/10.1007/978-3-030-20454-9_64.

This article can be cited:

Popadynets, N., Vyshnevska, O., Irtyshcheva, I., Kramarenko, I., Ponomarova, M. (2022). The Influence of Globalization Processes on Forecasting the Activities of Market Entities. *Journal of Optimization in Industrial Engineering*, 15(1), 261-268.

http://www.qjie.ir/article_687279.html DOI: 10.22094/joie.2021.1945341.1909

