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STATE POLICY ON THE FUNCTIONING OF INSTITUTE OF BANKRUPTCY IN UKRAINE

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Abstract. It is precisely in the course of adjusting the activities of these subjects the main task of state regulation of the bankruptcy institute is the formation of such conditions for the functioning of the national economy, which will reduce the risk of doing business for all its entities and promote the internal reorganization of its structure in accordance with the requirements of global transformations. The system of indicators describing the situation in a certain area of the functioning of national economic entities allows us to determine, directly or indirectly, the effectiveness of the bankruptcy institute at the macro-level. To analyze the impact of each of the factors on GDP, a sensitivity analysis was conducted according to which input data X were recorded at the values of 2018 and alternately changed by 10%. For each such change, GDP was calculated as compared to the model value for 2018. As a result of the calculations, the most sensitive factors were identified and features of the functioning of the bankruptcy institute in the Ukrainian economy were identified. The main provisions of a state policy aimed at increasing the functional effectiveness of the bankruptcy institute are formulated. First of all, it is necessary to promote the country's position in the Doing business rankings, as well as the Indexes of Economic Freedom and Corruption Perceptions. On the other hand, an annual growth of the inflation index of around 10% and the level of the fiscal tax burden will also have a positive effect on GDP dynamics.

Keywords: bankruptcy institute, trend model, state policy, Ukrainian economy, crisis

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1. Introduction

At present, in economic science, it is almost universally recognized that economic, political and social institutions operating in one or another country have a significant impact on a significant range of parameters of its economic development. The influence of institutes on the development of the national economy is recognized by many international organizations as well as by a number of national governments that carry out reforms aimed at improving the quality of national institutions. Numerous empirical studies of the influence of institutions (clearly defined and securely protected property rights, the quality of contract protection, rule of law, independence of the judiciary, clarity of separation of powers, accountability to the public bodies of public administration, etc.) have clearly shown their correlation with indicators that reflect prosperity, economic growth, the volume of investments in the economy and many other parameters of the national economy (see for example (Duginets, 2004).

The bankruptcy institute is an integral part of a competitive market environment, that is, the very probability of bankruptcy forces enterprises to take measures to ensure financial stability, to increase efficiency and productivity of labor (Yankovyi et al., 2019). At the same time, the state should also introduce certain measures to regulate the institute in order to reform the economy and ensure effective mechanisms for its functioning. At the same time, state intervention in the economy may be twofold: reducing transaction costs, by improving the quality of institutions (introducing "fundamental reforms"), or worsening the quality of the institutional environment, due to the erosion of property rights (the introduction of unnecessary administrative barriers).

The national economy is a combination of economic interactions between economic entities operating at the national and international levels, not always remaining solvent. It is precisely in the course of adjusting the activities of these entities not only the elimination of loss-making enterprises, but also the improvement of those productions, where loss-making resulted from ineffective management. Thus, the main task of state regulation of the bankruptcy institute from an economic point of view is the formation of such conditions for the functioning of the national economy, which will reduce the risk of doing business for all its entities and will facilitate the internal reorganization of its structure in accordance with the requirements of the global transformations of the XXI century.

2. Literature review

A lot of attention is focused on the problem of research of the bankruptcy institute and the substantiation of directions for improvement of its activities. So among the domestic and foreign scholars, who covered this issue in recent years, one can distinguish certain areas of research. For example, E. Altman (2002), W. Moulton and H. Thomas (1993) as well as L. Panchuk (2012) explore corporate strategies in a crisis, including bankruptcy as a focused strategy. Different types and manifestations of the Institute of Bankruptcy are analyzed by J. Ohlson (1980)], I. Livshits, J. MacGee, & M. Tertilt (2007), T. Jackson (1982); R. Lieb (2006), R. Porta et al (1998), O. Hart (2000), I. Yepifanova (2017). The features of the bankruptcy institute

in different countries are defined by R. Dakovic et al (2010), N. Nosan (2016) and A. Subbot (2014). The work of A. Matviychuk (2013), I. Trots (2014), K. Golovach (2016) is devoted to research of different models of diagnostics of bankruptcy of enterprises and other issues of the functioning of the bankruptcy institute.

It should be noted that in world science there are also studies that are at the intersection of economics and law. For example, in the work of F. Fedin, a study was carried out on the consequences of two main policies for debt relief in the United States. The resulting model explains the observed interstate differences in consumer default rates (Mitman, 2016). P. Rolin's paper explored differences in bankruptcy laws in the US states; the results show that the laws on personal bankruptcy are an important political tool that governments can use to stimulate business growth without causing a business turnover (Rolin & Ross, 2016).

A specific group of articles is devoted to the study of the institution of bankruptcy in various sectors of the economy of different countries. So, for example, the study of A. Barreda, Y. Kageyama, D. Singh and S. Zubieta examines bankruptcy prediction of hospitality firms within U.S. equity markets. The results of the study showed that a significant number of hotel business enterprises were hit hard by the recent economic downturn; further research is needed to improve the accuracy of bankruptcy forecasting models (Barreda et al., 2017).

Another example is a study of the construction industry in Slovakia, which, together with the automotive industry, constituted the core of the Slovak economy before the financial crisis. The results obtained by R. Daniela, D. Mária and J. Lucia confirmed the hypothesis that, despite first signs of recovery in this sector, the overall recovery will take several years (Daniela et al., 2016).

Research in this area was continued by T. Kliestik, M. Misankova, K. Valaskova and L. Svabova. They concluded that the number of bankruptcies in Slovakia has been growing for several years for no apparent macroeconomic reason. As a result of the analysis using traditional bankruptcy forecasting tools, they proved that existing models can be adapted to local conditions, especially local legislation. However, it is becoming increasingly difficult to predict the risk of bankruptcy, since in modern conditions, enterprises are becoming ever more global and complex (Kliestik et al., 2018).

Considering issues in the functioning of TNC production chains, based on cross-country differences that are constantly changing under the influence of scientific and technological progress, it can be stated that world production will continue to become more complicated (Koval et al., 2019).

This has added relevance to a number of studies of the institution of bankruptcy from the perspective of the global economy. For example, the paper of J. Zhu, F. Jia, H. Wu analyzes the relationship between entry and exit of foreign direct investment (FDI) from the perspective of uncertainty in economic policy and the cost of resolving bankruptcy. The authors proved that increasing bankruptcy costs in a country exacerbate the dampening effect of economic policy

uncertainty on both FDI entry and exit. Moreover, the bankruptcy resolution channel does not exist for foreign portfolio investment, which is consistent with real option theory (Koval et al., 2017; Zhu et al., 2019).

A specific group of articles is devoted to studying the relationship between bankruptcy and corporate functioning. So, in the paper of J. Graham, H. Kim, S. Li and J. Qiu, the conclusion is substantiated that wage premiums for the expected costs of bankruptcy are of sufficient value to be an important factor in deciding on the structure of corporate capital (Graham et al., 2019).

In turn, the paper discusses how the experience of directors affects corporate policy. So, firms begin to take more risks when one of their directors goes bankrupt in another firm, where they simultaneously act as a director. The results also indicate that directors, in particular independent directors, influence company policy not only in their monitoring role, but also as a consultant (Gopalan et al., 2018).

So, the resulting processing forms the theoretical and methodological basis for this study. However, in their studies, the authors indicated do not always take into account the role of the state in the functioning of the bankruptcy institute, which in the last decade has become particularly relevant in regulating the stability of national enterprises, taking into account the dynamic nature of economic crises and cycles. Their research in most cases is devoted to substantiating various methods of diagnosing the risk of bankruptcy at the micro level. Therefore, in spite of the existing number of existing developments in domestic and foreign literature, the socio-economic significance of defining the state policy regarding the functioning of the bankruptcy institution necessitates a more thorough analysis.

The authors do not deny the significant contribution of existing developments to the improvement of the theoretical and methodological foundations of the problem under study. Meanwhile, the significance of the transformational changes in the "rules of the game" in the business environment and the mechanisms for their practical implementation require substantiation of the directions of state policy in this area at the expense of a systematic study of interdependencies and interrelations between the indicators characterizing the functioning of the bankruptcy institute in the national economy.

Thus, the purpose of the study is to analyze the functioning of the bankruptcy institute in Ukraine in order to substantiate the directions of its state regulation.

3. Methods

In order to realize the goal of the study, a complex of complementary methods of scientific knowledge of economic processes and phenomena was used, namely, a correlation analysis with elements of artificial intelligence technology, which allowed to identify the main directions of state regulation of the bankruptcy institute in Ukraine with a view to its improvement. Also in the work are used general scientific approaches and methods of modern

research, based on fundamental theoretical and methodological and practical developments of domestic and foreign scientists in the scientific plane functioning of the Institute of Bankruptcy.

4. Results and Discussion

It should be noted that the quality and effectiveness of the bankruptcy institute, unlike ordinary economic processes, have no direct indicators. Meanwhile, in practice, there is a significant number of successful attempts to quantify the phenomena that do not have direct measurement indicators (see, for example, (Yepifanova, 2017). Also, at the moment there is a considerable number of works devoted to the problem of forecasting the probability of bankruptcy, which we conditionally divided into several groups.

The first group of works - the largest in size - includes research, the basis of which is the construction of models for forecasting bankruptcy on the basis of analysis of indicators characterizing the financial state of enterprises (Altman, 2002; Grice & Ingram, 2001; Philosophov et al., 2008; Shen et al., 2010). This approach involves the construction of a model of dependence (linear or nonlinear), as a rule, a complex variable of the probability of bankruptcy from a set of financial indicators selected by one or another principle. Domestic legislation also uses this approach: companies are encouraged to pay attention to deteriorating financial indicators or compare them with normative values.

The second group takes into account factors external to the enterprise, such as GDP, the level of real wages, real and nominal interest rates, inflation, the level of crediting (Bernhardsen, 2001; Vlieghe, 2001; Liu, 2004). In this research group, the empirical method confirms the importance of macroeconomic variables in predicting bankruptcy. For example, the study (Liu, 2004) confirmed the hypothesis that inflation has a direct correlation with the number of future bankruptcies, and according to another study, the real interest rate affects the number of long-term vlieghey long-term ventures.

The third group includes the study of the role of corporate governance factors in predicting bankruptcy, this trend has been developing since the early 1990s (Daily & Dalton, 1994; Fich & Slezak, 2008; Parker et al., 2002). These studies have revealed the importance of corporate governance factors and their impact on the probability of bankruptcy.

In spite of the fact that the research topic - forecasting bankruptcy of enterprises - is quite popular, there are still a number of discussion issues:

1. With regard to the study of the bankruptcy institute in Ukraine, many domestic works include attempts to adapt foreign methods to contemporary national realities, considering the political, economic and social peculiarities of our country (Nosan, 2016; Saturday, 2014). Also recently, the works, which study the industry specificity of enterprises in the issue of forecasting the probability of bankruptcy, have gained considerable popularity (Golovach; Trots], external factors (Panchuk, 201)], etc. At the same time, the influence of corporate governance factors on the bankruptcy institute in Ukraine was not studied in practice.

2. All factors affecting the institution of bankruptcy should be divided into external and internal (among the internal factors that characterize the quality of corporate governance of the organization, indicators of the financial state, as well as other internal in relation to the enterprise factors that do not belong to the group of financial indicators). These factors have been used in numerous studies, but at the same time it was not identified the priority of the impact of each individual unit in aggregate on the possible bankruptcy of the enterprise. In order to determine the impact of an entire unit (for example, corporate governance factors), it is necessary to combine them into one variable and identify the impact of the complex variable on bankruptcy of enterprises. Note that the parameters of "corporate governance" and "financial status" can not be measured directly, because they are not clearly defined (these factors are often called latent variables). In this case, commonly used indicators that are associated with latent variable linear dependencies.

3. Traditionally, in work related to forecasting the probability of bankruptcy of enterprises, the sample is divided into two classes: bankrupt and financially sound organizations. However, there is still no generally accepted definition of bankruptcy, which greatly complicates the process of primary classification of these companies and, as a consequence, increases the probability of a forecast error. When building models for forecasting the probability of bankruptcy, some domestic researchers eg, (Matviychuk, 2013) consider the official publication of bankruptcy in the press sufficient condition for the recognition of this organization as a bankrupt.

4. In the Ukrainian scientific community, there is almost no study of the role of the state in the functioning of the institution of bankruptcy, namely the identification of the macroeconomic and microeconomic goals of this process. For macroeconomic purposes, we understand the recovery of the national economy as a whole, and microeconomic is aimed primarily at restoring the financial sustainability of an insolvent enterprise. Research in this area is becoming increasingly urgent, since as of 2011, 10 thousand 382 proceedings were initiated in these cases, and in 2017 - 1,692, with only 97% of enterprises - business entities are going to liquidate (Official web-portal "Judiciary of Ukraine"). That is, such statistics testify to the unsatisfactory performance of all the participants in the economic activity regarding the financial rehabilitation of enterprises.

Thus, in order to find out the state, structure, and tendencies of the bankruptcy institute at the macro-level, we propose to use certain indicators (quantitative or qualitative) that characterize the situation in a certain area of the functioning of national economic entities that directly or indirectly determine the effectiveness of the institute bankruptcy, patterns of its development, as well as the interaction of social, political, economic and other processes at the macro level. The following indicators were assigned to the selected indicators:

- Doing business index, place in the rating (X1);
- Economic Freedom of the World Index (EFW), place in the rating (X2);
- Index of Economic Freedom (Economic Freedom of the World Index, EFW), value (X3);
- Inflation index, % (X4);
- Corruption Perceptions Index, Ranking (X5);
- Number of business entities, units (X6);
- Unemployment rate, % (X7);

- National taxes, quantity (X8);
- Number of bankruptcy cases (X9);
- The level of the total tax burden, % (X10);
- The level of fiscal tax burden, % (X11);
- Tax revenues to the Consolidated Budget, UAH million (X12).

It should be noted that the Doing business index and the Index of Economic Freedom are the main indicators, since a significant number of components of these ratings can be attributed to the functioning of the institution of bankruptcy (for more details see (Ilkova, 2018). With regard to the Corruption Perceptions Index, the question of the shadow economy can not be overlooked, as in recent years, the widespread occurrence of the Ukrainian economy has become a deliberate bankruptcy, which does not always mean bankruptcy of the business and, accordingly, is not directly related to financial insolvency. Others from the list of indicators characterize the features of the functioning of the bankruptcy institute at the level of the national economy.

For analysis, data sets for 2008-2018 were used according to the proposed indicators. In this case, the number of input parameters exceeds the number of equations. This means that the system has many different solutions. Therefore, for further analysis, it is necessary to reduce the number of input parameters. To do this, an autocorrelation analysis was conducted, according to which the pairwise correlation coefficients of all input and output fields are calculated, and it is determined that the largest mutual correlation coefficients are present between the fields: X1 (Doing business index, ranking in place), X8 (national taxes, quantity), X10 (Total tax burden, %), X12 (Tax revenues to the Consolidated budget, UAH million). And also between X2 (Economic Freedom of the Index Index (EFW), place in the rating) and X6 (Number of business entities, units). This means that for analysis only the fields X1 (Doing business index, place in the ranking) and X2 (Economic Freedom of the World Index EFW, place in the rating) can be left, as all others can be expressed through them for using linear dependence. Consequently, GDP can be expressed in terms of the functional dependence of the species:

$$Y = F\,(X1, X2, X3, X4, X5, X7, X9, X11) \quad (1)$$

Since the number of data is 10 years old and the unknown is 8, then the only way to find a functional dependence is the multiple regression analysis, the result of which is a functional dependence in the form of a linear equation:

$$Y=-20X1+142X2+15X3+264X4-0{,}002X5-237X7-0{,}023X9-118X11-1940$$
$$R=0.99 \quad (2)$$

To analyze the impact of each of the factors on GDP, a sensitivity analysis was conducted according to which input data X were recorded at the values of 2018 and alternately changed by 10%. For each such change, GDP was calculated as compared to the model value for 2018. The results of this analysis are given in *Table 1*.

Table 1. Analysis of the sensitivity of GDP to change of factors by 10%

Sensitivity	X1	X2	X3	X4	X5	X7	X9	X11
Deviation	-5.29%	22.85%	5.70%	26.48%	-13.06%	-7.85%	-1.34%	-11.00%

Source: calculated by authors based on State Statistics Service of Ukraine

As can be seen from Table 1, the most sensitive factor is X2 (Economic Freedom of the World Index EFW, place in the ranking) and X4 (Inflation Index, %). When the latter changes by 10%, the GDP will increase by 23% and 26% respectively. In the first case, this can be explained by the fact that the growth of economic freedom leads to an increase in the country's economy. For all 180 countries included in the 2017 report, a correlation of 0.61 between the index and GDP per capita is observed. And in some regions of the world (for example, in European countries) the correlation reached 0.7 (The World Bank, 2017). With regard to rising inflation, its increase by 10% will positively affect the Ukrainian economy: production is developing, unemployment is decreasing, consumers buy more money for goods and services. It should be noted that modern scientists believe that the level of inflation should not fall below 1%, but should not exceed the level of 4% (Epstein, 2007; Wright, 2009). But this applies to developed countries, such as the USA, France or the UK and Germany. As for Ukraine and other developing countries, it can be said that the maximum permissible inflation rate for Ukraine is no more than 20%, or as an intermediate option, 16% (see for example (Petryk & Polovnev, 2003). Therefore, an increase in the inflation rate by 10% annually will have a positive impact on the country's economy.

The following are sensitivity factors: X5 (Corruption Perceptions Index) and X11 (Budget Tax Rate, %). Their increase leads to a 13% and 11% reduction in GDP, respectively. In the first case, this is due to the fact that there is a stable relationship between the economy and corruption. Corruption clearly impedes the country's economic growth, makes its citizens poorer, and the economy is less productive, as well as constrains the development of enterprises and state institutions (especially in less developed countries), since corrupt authorities are interested in this; and this, in turn, also negatively affects economic development. Corruption also has not only economic consequences but also detrimental to the welfare of citizens as a whole - because of its suffering social functions of the state (for example, medicine and education), poverty is increasing, income inequality increases, and public trust diminishes. These factors, in turn, also have an impact on economic development (The Center for Economic Strategy, 2016). An increase in the level of budgetary load negatively affects the development of the economy, increasing the risks of shifts in business. It should be noted that in Ukraine the tax burden is at the level of Poland or Spain. However, the Ukrainian economy, institutions, the degree of civil society development and the qualifications of

management operate at a much lower level, which has a negative impact on the effectiveness of the taxation institute.

Taking into account the obtained results regarding the identification of the most sensitive factors (Index of Economic Freedom, place in the rating, Corruption Perceptions Index, Inflation Index, % and Budget Tax Rate, %) from the spheres of the general economic policy of the state, we have highlighted the peculiarities of functioning of the bankruptcy institute in the Ukrainian economy.

Firstly, there is an urgent need to identify the main shortcomings of the existing tax system, with further justification of a number of key measures for its improvement.

Secondly, the necessity of forming a favorable institutional environment for the bankruptcy procedure. It should be noted that among the main stakeholders there can be lenders, owners, top management of the enterprise, government structures and regional administrations, various FIGs, which in the technological chain will bring (or may be included) the given enterprise, etc. Therefore, the state should promote the formation of a set of health and / or reorganization procedures aimed at preserving and operating the main business of the debtor, serving as a priority for the realization of its economic interests.

Next, to determine the directions of state regulation of the bankruptcy institute, it is necessary to calculate the forecast GDP and to investigate the influence of changes in factors (indicators) on these trends. To do this, we have used trend models that allow us to predict the development of each of the factors for the future period. With this approach, it is assumed that the projected figure is formed under the influence of a large number of factors, which are either impossible or not relevant. In this case, the course of change of this indicator is associated not with factors, but with the passage of time, which manifests itself in the formation of one-dimensional time series. Taking into account this, linear, polynomial, logarithmic and exponential trends were tested in the calculations. The best result was for polynomials with a power of 2:

$$t_i = a + by + by^2 \quad (3)$$

where $t_i -$ is the trend for the input factor i,
$y -$ is the year.

The results of the calculations are given in *Table 2*. As can be seen from *Table 2*, most models show high correlation coefficients except for X3 (Economic Freedom of the World Index, EFW), X7 (Level without promise, %), X9 (Number of bankruptcy cases).

Table 2. Trend model coefficients for input and output factors

	a	b	c	R
X1	-1.40	5632.74	-5659400.07	0.96
X2	0.14	-573.42	577214.91	0.71
X3	0.47	-1878.91	1889816.00	0.35
X4	0.20	-792.73	797637.46	0.86
X5	31788.22	-128022599.46	128899962314.26	0.83
X7	0.01	-45.53	45617.34	0.62
X9	-119.06	480444.06	-484676379.76	0.52
X11	0.10	-395.48	397498.83	0.80
Y	26.53	-106560.78	107021484.65	0.98

Source: calculated by authors based on State Statistics Service of Ukraine

Presentation of results in the form of a comparative graph of real data and trend forecasts are shown in *Fig. 1,* confirms that the forecast data according to model (2) fairly well describe all fluctuations of real data.

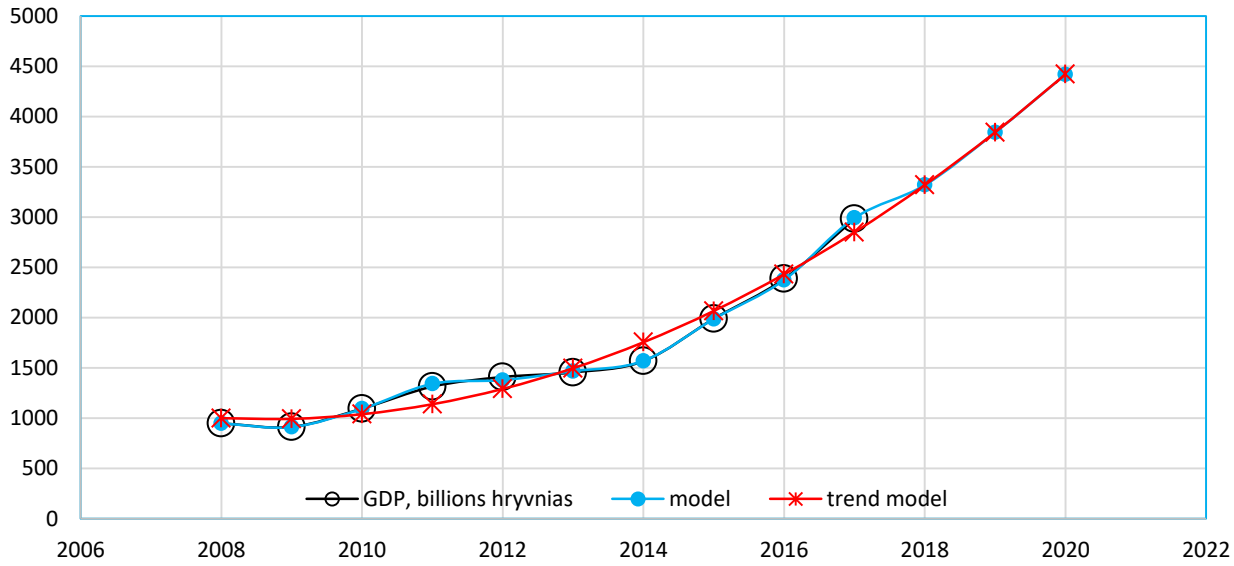

Figure 1. Comparison of real data calculated with trend models for Y (GDP)
Source: calculated by authors based on State Statistics Service of Ukraine.

Trend model shows significantly worse results. On the same graph, the forecast of the model (2) is presented for three years ahead according to the trend data calculated according to equation (3). Thus, it is clear that GDP should increase substantially over the next 3 years. Therefore, in order to evaluate the state regulation strategy, it is necessary to compare the results of the proposed strategy with the trend of GDP growth.

However, before this, it is also necessary to assess the impact of strategies on the effectiveness of the functioning of the bankruptcy institute in order to determine the direction of justification of further measures on the state regulation of the institution of bankruptcy.

In practice, it is necessary to change the factors X9 (Number of bankruptcy cases) and Y (GDP) in places (2) in model (2) and rebuild the model (2). The results of the regression analysis are given below:

$$X9=-838X1+6087X2+647X3+11160X4-0{,}092X5-9986X7-42Y-5088X11-84153$$
$$R=0.99 \quad (4)$$

As can be seen from the calculations, the correlation coefficient is also quite high. In *Fig. 2* shows comparison of real data with model.

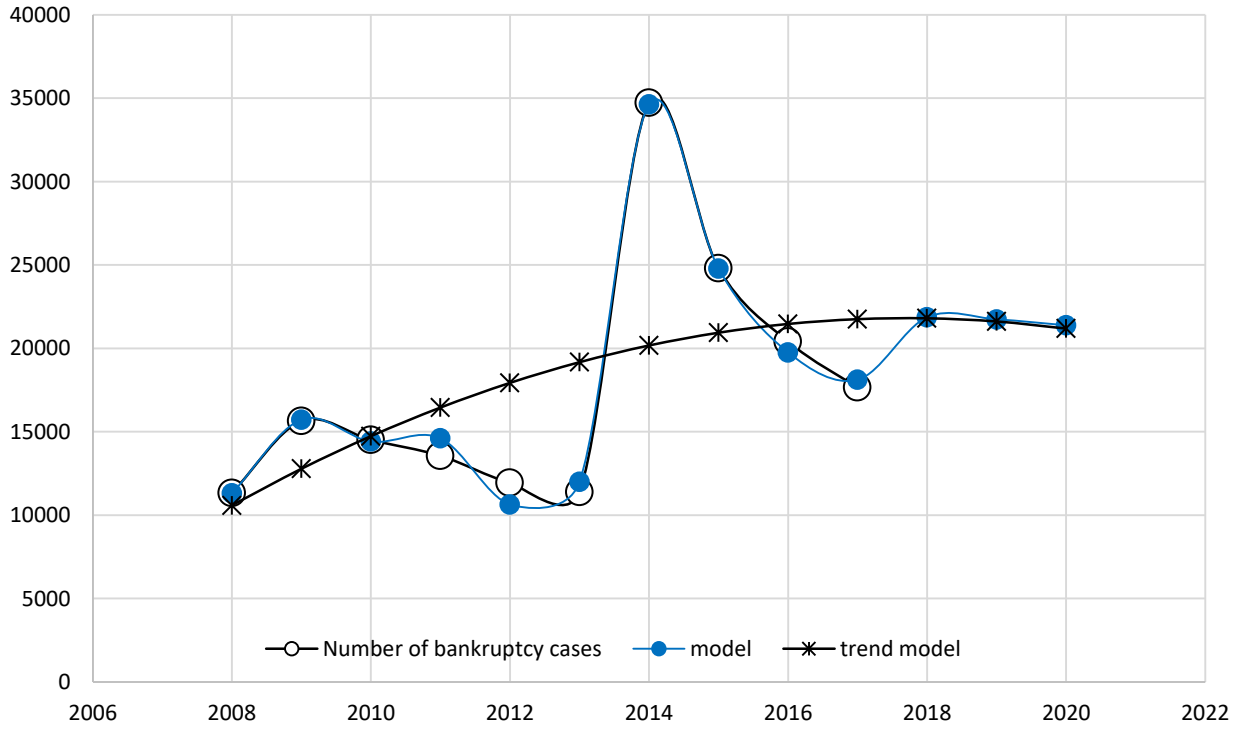

Figure 2. Comparison of real data with trend models for X9 (Number of bankruptcy cases) for model (4)
Source: calculated by authors based on State Statistics Service of Ukraine.

As can be seen from *Fig. 2*, the model (4) describes fairly well all the fluctuations of real data unlike the trend. The result of the sensitivity analysis is interesting and shown in *Table 3*.

Table 3. Analysis of the sensitivity of the number of bankruptcies to the change of factors by 10%

Sensitivity	X1	X2	X3	X4	X5	Y	X7	X11
Deviation	-37.01%	161.58%	40.62%	184.75%	-91.61%	-54.55%	-69.39%	-77.95%

Source: calculated by authors based on State Statistics Service of Ukraine.

Thus, we can see that factor X2 (Economic Freedom of the World Index EFW, place in the ranking) and X4 (Inflation Index, %) have a significant direct impact on the number of bankruptcies. In turn, factors X5 (Corruption Perceptions Index, ranking in place), X11 (Budget Tax Rate, %) and X7 (Unemployment Rate, %) have a strong retroactive effect on this indicator. Given this weight of sensitivity is significantly different from the results of trend analysis (see *Table 1*).

The next step is to build a strategy for state regulation of the bankruptcy institute, by determining how it is necessary to influence various indicators to maximize GDP by 2021. Therefore, the critical criterion is to prevent an increase in the level of bankruptcy (the number of bankruptcies). Formally, the optimization task looks like this:

$$\begin{gathered} Y_{2021}^{Model1} \rightarrow max \\ X9_{2021}^{Model3} \leq X9_{2017} \\ -p \leq \Delta x_{i,y} \leq p \end{gathered} \tag{5}$$

where Y_{2021}^{Model1}- GDP value by 2021 according to model (2);

$X9_{2021}^{Model3}$- the level of bankruptcy in 2021 according to the model (4) which should be at least 2018;

$\Delta x_{i,y}$ - change of y factor in year y relative to trend + accumulated change in previous years;

p - maximum allowable factor change (in our calculations is equal to 10%).

Since the changes in factors from the trend, and the trends themselves are nonlinear functions (3) optimization was carried out using a genetic algorithm with further refinement by the method of reduced gradients. The results of the calculation are given in *Table 4*. As can be seen from the data given, the factors X1 (place in the Doing business index rating), X2 (place in the index of economic freedom index), X5 (Corruption Perceptions Index), X7 (Unemployment rate, %) should be reduced each year, others on the contrary.

Table 4. Changes in factors over three years in accordance with (5)

	X1	X2	X3	X4	X5	X7	X9	X11
2019	-10%	-10%	10%	10%	-8%	-10%	10%	10%
2020	-10%	-10%	10%	10%	-7%	-10%	10%	10%
2021	10%	-10%	10%	10%	-7%	-10%	10%	10%
2019	43	45	117	35	2097456	9	23981	32
2020	16	42	111	42	2226182	9	26172	37
2021	-14	39	107	49	2420337	8	28320	43

Source: own research.

As a result, this will result in an increase in GDP by 24% in 2021 and a reduction in the level of bankruptcy relative to the trend, but in fact it will remain at the level of 2018 *(Table 5).* That is, it can be said that such a state policy contributes to the more effective functioning of the institution of bankruptcy. As a result of the calculations, it is possible to formulate the main provisions of the state policy on increasing the effectiveness of the functioning of the institution of bankruptcy. First of all, it is necessary to promote the country's position in the Doing business rankings, as well as the Indexes of Economic Freedom and Corruption Perceptions. On the other hand, the annual growth of 10 percent of the inflation index and the level of budgetary tax burden will also have a positive effect on the GDP dynamics.

Table 5. GDP Trend Improvement according to Model (5)

	Year	GDP	increase	Bankruptcy	Increase
1	2019	3580	8%	20292	-7%
2	2020	4448	16%	18641	-14%
3	2021	5495	24%	18121	-15%

Source: own research.

It should be noted that significant steps in this direction were made due to the adoption of the new Code of Ukraine on bankruptcy procedures, the enactment of which is scheduled for 21.10.2019, which will improve the position of Ukraine in the Doing Business rating, both in terms of the restoration of solvency, and in the overall ranking. In the long run, this will improve the investment climate and the image of the country. It should also be noted that the Code removes unnecessary barriers both for the debtor and for the creditor, regarding the procedure for restoring the debtor's solvency or recognizing it as a bankrupt. These are the procedures that were envisaged in the old law, the Commercial Procedural Code, which in fact allowed the delay, indefinitely delay the intermediate processes of restoration of solvency. The second innovation is the question of the possibility of reconciliation between the creditor and

the debtor through reorganization procedures and a global agreement. That is, the code regulates everything in such a way that the procedure to be applied really does, in the maximum number of cases, give a positive result, namely: reaching a compromise, in a certain, ideal case, and a consensus among all actors in order to: a) and save the company; b) repay the debts and claims of creditors as much as possible.

5. Conclusions

Considering that the main goal of any system of insolvency regulation is the restoration of the solvency of economically viable economic entities experiencing temporary financial difficulties, as well as the rapid withdrawal of non-viable enterprises, the main directions of support in this area should be as follows:

- planning of a responsible state body for conducting state policy in the field of bankruptcy, medium and short-term bankruptcy (objectives) in the field of bankruptcy based on analytical data and proposals from institutions of different subordination, which ensure the implementation of a unified state policy in the relevant branch of economy. The result of such planning may be specific decisions to protect the interests of the state in bankruptcy and bankruptcy proceedings, including through timely planning of budget financing of measures to restore the solvency of problem organizations (for more detail, this aspect will be dealt with in the third section);
- clarification of the priorities of support when placing orders for the supply of goods, works, services for state needs that affect the achievement of the goals of financial rehabilitation.

A clear and consistent application of a single state policy in the field of bankruptcy will allow the timely adoption of decisions on the elimination of insolvent organizations, including state-owned enterprises, thus ensuring a concentration of state efforts to restore the solvency of large strategic and system-building enterprises and the social protection of workers released following the elimination of organizations.

It should also be noted that obstacles to economic instability are caused by lack of understanding by the economic agents of the laws and the logic of such changes. However, in the absence of long-term state policy, planned changes are either not taking place (rejected) or delayed and accompanied by high costs and losses for the national economy. Among the main reasons why the functioning of the institution of bankruptcy does not lead to the expected result in Ukrainian society, one can note the following:

First, in the process of establishing an institution of bankruptcy, the principle of institutional complementarity is not taken into account, in this connection there are reactions to its perversion. The very fact that the institutes complement each other desirable economic effect is achieved only on the basis of interrelated institutional changes.

Second, the bankruptcy system is rather complex and opaque. This circumstance is connected with the heterogeneity of this institute. It consists of formal and informal rules that regulate

the relationship between economic agents in the area of insolvency, the mechanisms for enforcing these rules, as well as a set of possible interpretations of rules that determine the nature of their further use.

Thirdly, wider distribution of fictitious bankruptcy in economic practice compared with other countries. So, in Ukraine, unscrupulous lenders have many different ways to acquire property rights over the necessary property of the debtor company at various stages of bankruptcy. However, the need for evidence of direct intent makes the specified norm virtually inactive. After all, in most cases the commission of actions determined by the article may be justified by the incompetence of the leader or the owner, that is, the lack of direct intent. Also, in Ukrainian practice there is insufficient definition of peculiarities of the application of bankruptcy procedures for such specific enterprises as enterprise developers and credit unions, which actually can not be properly eliminated or sanitized under general procedures, taking into account the availability of property claims of citizen investors and so on (in more detail the problem of intentional Bankruptcy in the Ukrainian economy is investigated in the next section).

Fourthly, the existing unfavorable economic situation in the country, considering which, the implementation of the bankruptcy institute should be based on a differentiated approach to the choice of liquidation or reorganization procedures in relation to certain groups of enterprises, which guarantees the maximum increase in the cost of a company experiencing financial difficulties.

Thus, the main directions of regulation of the bankruptcy institute should include the substantiation and implementation of a system of measures to create an organizational-legal field oriented to the development of market relations, as well as to stimulate the mechanisms of market self-organization. That will allow to improve the development of the economy as a whole, including optimizing the protection of the legitimate interests of creditors and debtors, reducing the number of abuses in the implementation of the institution of bankruptcy and on this basis make it more transparent and effective. These topics will be investigated in the authors' further research.

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