

Econometric Assessment of the Effectiveness of Administrative and Legal Principles for the Formation of Sustainable Regional Development in the Context of Ensuring National Security

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The article proposes an econometric approach to assessing the effectiveness of administrative and legal principles for the formation of sustainable regional development in the context of ensuring national security. It is substantiated that the sustainability of regional development depends not only on economic, investment and social parameters, but also on the quality of regulatory and program support, implementation of regional programs, transparency of management and the ability of authorities to respond to security threats. The methodological basis of the study is a combination of index modeling, min-max normalization, entropy weighting, panel regression and frontier efficiency assessment. Within the framework of the proposed model, an index of administrative and legal capacity, an index of sustainable regional development, an index of security vulnerability and a security-adjusted index of sustainable development have been formed. This approach allows not only to compare regions by level of development, but also to determine how effectively administrative and legal potential is transformed into actual results of sustainable development. The scientific novelty lies in the construction of an integrated model that quantitatively combines legal, administrative, socio-economic and security parameters of regional development. The practical significance of the results lies in the possibility of using the model for monitoring regional policy, assessing the implementation of development programs and forming priorities for security-oriented management.

Keywords: *administrative and legal principles; sustainable regional development; national security; econometric modeling.*

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1. Introduction

The formation of sustainable development of the region in modern conditions increasingly depends not only on economic potential, investment activity or social stability, but also on the quality of administrative and legal principles that determine the ability of the regional management system to make timely decisions, ensure the implementation of development programs, coordinate resources and reduce the impact of threats to national security. Under such conditions, administrative and legal support is not a secondary management component, but a factor that directly affects the region's ability to maintain economic, social, infrastructural and environmental balance. The problem is complicated by the fact that sustainable development of the region is multifactorial. It cannot be assessed only through one indicator, for example, gross regional product, investment volume or employment level. At the same time, administrative and legal principles are also not reduced only to the presence of regulatory acts. They include the quality of regional programs, the level of transparency of management, the

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fulfillment of budget obligations, the presence of administrative conflicts, the ability of authorities to ensure the coordination of economic, social and security goals. Therefore, for a scientifically based assessment, a model is needed that combines several groups of indicators and allows us to track not only the level of development, but also the effectiveness of transforming administrative and legal potential into real results. This problem becomes particularly relevant in the context of ensuring national security. The regions of our country operate under different conditions of security burden, financial stability, infrastructure losses and social tension. Therefore, the same level of administrative and legal capacity can give different results depending on the intensity of external and internal threats. In such conditions, there is a need not only for descriptive analysis, but also for econometric assessment, which allows us to quantitatively determine the strength of the influence of administrative and legal factors on sustainable development and to establish how much security vulnerability reduces the expected result.

The relationship between administrative and legal regulation, regional sustainability, and national security has increasingly been considered as a complex interdisciplinary problem that requires both institutional interpretation and quantitative assessment. Aldrou et al. [1] emphasize that administrative and legal factors influence regional sustainable development through the quality of regulation, coordination of public authorities, legal certainty, and adaptability to a changing external environment. Similar conclusions are developed in studies that connect public administration with economic security and human rights protection, where the quality of legal governance is treated as a condition for maintaining institutional resilience under political and legal instability [2]. Dragan et al. [3] and Rushchyshyn et al. [4] further show that financial and economic security of the state depends on the effectiveness of administrative and legal mechanisms, regulatory consistency, and the ability of public authorities to prevent destabilizing risks. These studies form the institutional basis for considering administrative and legal capacity not only as a legal category, but also as a measurable factor of regional sustainability and national security. Shevchuk et al. [5] propose modelling regional sustainable development in conditions of crisis and war, showing that regional stability depends on the interaction between economic, social, institutional, and security variables. Kryshtanovych et al. [6] analyze the public and environmental aspects of restoring sustainable regional development under the negative influence of military actions, while Lošonczi et al. [7] identify the main threats to sustainable development and regional planning in the context of ensuring economic security of the state. Manuilova et al. [8] and Polukhina et al. [9] develop this approach by linking sustainable planning with economic security management, assessment methodology, and management tools. In this context, regional sustainability is no longer interpreted as a purely socio-economic result. It becomes a security-sensitive process, where the deterioration of infrastructure, fiscal stress, institutional weakness, and external shocks can significantly reduce the effectiveness of development policy.

The methodological background of the present study is also connected with the literature on governance quality, rule of law, public administration, and efficiency assessment. Studies by Kryshtanovych et al. [10] and Kryshtanovych et al. [20] highlight the importance of smart management, interaction between society and public administration, and policy coordination for sustainable development. At the international level, Hunjra et al. [11], Güney [12], Omri and Ben Mabrouk [13], Almaqtari et al. [14], Bisogno et al. [15], and Xiao et al. [16] demonstrate that institutional quality, governance effectiveness, rule of law, and public accountability have a significant influence on sustainable development goals and economic management. At the same time, Jozowicka [17] and Halkos et al. [18] show that efficiency-oriented methods, including data envelopment analysis, can be used to assess the effectiveness of sustainable development policy implementation. Kryshtanovych et al. [19] additionally demonstrate the importance of legal regulation in sectoral systems that affect safety and security. Therefore, the literature confirms the need to combine administrative and legal variables, sustainability indicators, security risks, and efficiency assessment within one econometric modelling framework.

The purpose of the study is to develop an econometric model for assessing the effectiveness of administrative and legal foundations for the formation of sustainable development of the region in the context of ensuring national security based on the integration of the index approach, entropy weighting, panel regression, and frontier efficiency assessment.

2. Methodology

The research methodology is based on the construction of a multilevel econometric model that combines index estimation, entropy weighting, panel regression and frontier efficiency assessment. Such a construction allows us to move from individual statistical indicators to an integrated quantitative assessment of the region's ability to transform administrative and legal foundations into sustainable development under such conditions of security constraints. The main idea is that the administrative and legal capacity of the region not only directly affects the level of sustainable development, but also indirectly reduces security vulnerability through better coordination of resources, implementation of development programs, transparency of management and the ability of authorities to respond to threats.

Let $i = 1, \dots, n$ denote the region, $t = 1, \dots, T$ denote the year of the study, and $j = 1, \dots, m$ denote a single indicator. The output data matrix has the form:

$$X = \{x_{ijt}\},$$

where x_{ijt} is the value of indicator j for region i in year t .

The model uses three groups of indicators. The first group characterizes the administrative and legal capacity of the region, the second group characterizes sustainable development, and the third group characterizes security vulnerability. The administrative and legal group includes the quality of regulatory and program support, implementation of regional programs, transparency of management, and the presence of administrative and legal conflicts. The sustainable development group includes economic performance, social sustainability, investment activity, and environmental balance. The security vulnerability group includes security pressure, loss of critical infrastructure, and fiscal tension.

Since the initial indicators have different scales and different directions of influence, the first stage of modeling is normalization. For stimulating indicators, the growth of which positively affects the corresponding integral index, the min-max transformation is used:

$$z_{ijt} = \frac{x_{ijt} - \min(x_j)}{\max(x_j) - \min(x_j)}.$$

For destimulators, the growth of which worsens the state of the region, inverse normalization is used:

$$z_{ijt} = \frac{\max(x_j) - x_{ijt}}{\max(x_j) - \min(x_j)}.$$

In the above formulas z_{ijt} is the normalized value of the indicator, $\max(x_j)$ and $\min(x_j)$ mean the minimum and maximum value of the indicator j in the set of regions and years. After normalization, all indicators take values in the range from 0 to 1. For stimulants, a value close to 1 means a better position of the region. For destimulators, after inverse transformation, a value close to 1 also means a better state, since the negative impact of the indicator changes to the opposite.

The second stage involves determining weighting coefficients using the entropy method. This approach allows us to take into account the information content of each indicator and reduce the subjectivity of the integral assessment. First, the proportion of the normalized value of the indicator is calculated:

$$p_{ijt} = \frac{z_{ijt}}{\sum_{i=1}^n z_{ijt}}.$$

The entropy of an indicator is determined by the formula:

$$e_j = -\frac{1}{\ln n} \sum_{i=1}^n p_{ijt} \ln(p_{ijt}).$$

The value of the information utility of the indicator is calculated as:

$$d_j = 1 - e_j.$$

The weighting factor of the indicator is determined as follows:

$$w_j = \frac{d_j}{\sum_{j=1}^m d_j}.$$

The resulting weights reflect the contribution of each indicator to the formation of the integral index. If an indicator has higher variability between regions, it receives a greater weight, since it better explains the differences in the state of regional systems. In this way, the model relies not only on expert vision, but also on the information structure of the data itself.

At the third stage, an integral index of the administrative and legal capacity of the region is constructed. It is defined as the weighted sum of normalized administrative and legal indicators:

$$ALCI_{it} = \sum_{j=1}^{m_A} w_j^A z_{ijt}^A.$$

In this formula $ALCI_{it}$ means the administrative and legal capacity index of region i in year t , w_j^A is the weight of the administrative and legal indicator, z_{ijt}^A is its normalized value, and (m_A) means the number of indicators in this group.

The index of sustainable development of the region is determined according to a similar principle:

$$RSDI_{it} = \sum_{j=1}^{m_S} w_j^S z_{ijt}^S.$$

where $RSDI_{it}$ is the index of sustainable development of the region, w_j^S is the weight of the indicator of sustainable development, z_{ijt}^S is its normalized value, and (m_S) means the number of indicators of this group.

The security vulnerability index is constructed, taking into account the fact that the normalized values of destimulators after inverse transformation mean an improvement in the state. Therefore, to obtain the vulnerability itself, the formula is used:

$$RSVI_{it} = 1 - \sum_{j=1}^{m_B} w_j^B z_{ijt}^B.$$

To combine sustainable development and security, a security-adjusted sustainable development index is used:

$$SRSDI_{it} = RSDI_{it}(1 - RSVI_{it}).$$

At the fourth stage, a panel econometric model is built. The basic model of the impact of administrative and legal principles on the sustainable development of the region has the form:

$$RSDI_{it} = \alpha + \beta_1 ALCI_{it} + \beta_2 RSVI_{it} + \beta_3 INV_{it} + \beta_4 BUDG_{it} + \mu_i + \tau_t + \varepsilon_{it}.$$

The expected direction of influence is as follows:

$$\beta_1 > 0, \quad \beta_2 < 0, \quad \beta_3 > 0, \quad \beta_4 > 0.$$

Taking into account the inertia of regional development, it is advisable to use a dynamic modification of the model:

$$RSDI_{it} = \alpha + \rho RSDI_{i,t-1} + \beta_1 ALCI_{it} + \beta_2 RSVI_{it} + \beta_3 INV_{it} + \beta_4 BUDG_{it} + \mu_i + \tau_t + \varepsilon_{it}.$$

To assess the impact of administrative and legal principles specifically on safety-adjusted sustainable development, an additional model is used:

$$SRSDI_{it} = \alpha + \gamma_1 ALCI_{it} + \gamma_2 INV_{it} + \gamma_3 BUDG_{it} + \gamma_4 SOC_{it} + \mu_i + \tau_t + \nu_{it}.$$

To test the presence of an indirect impact of administrative and legal principles through the reduction of security vulnerability, the following model is used:

$$RSVI_{it} = \delta + \theta_1 ALCI_{it} + \theta_2 BUDG_{it} + \theta_3 INFRA_{it} + \theta_4 WAR_{it} + \mu_i + \tau_t + \xi_{it}.$$

where $\alpha_0, \alpha_1, \alpha_2$, and α_3 are equation-specific intercepts; μ_i denotes unobserved region-specific effects that capture time-invariant characteristics of regions; τ_t denotes time-specific effects that capture common shocks and macro-level changes affecting all regions in year t ; ε_{it} , ν_{it} , and ξ_{it} are stochastic error terms of the corresponding equations. The inclusion of μ_i and τ_t allows the model to control for regional heterogeneity and period-specific shocks.

At the fifth stage, a frontier efficiency assessment is carried out. It allows us to determine to what extent the region transforms administrative and legal potential into the actual level of sustainable development. The theoretically possible level of sustainable development is determined by the function:

$$\text{RSDI}_{it}^* = f(\text{ALCI}_{it}, \text{INV}_{it}, \text{BUDG}_{it}, 1 - \text{RSVI}_{it}).$$

The actual efficiency of the region is calculated as:

$$\text{EFF}_{it} = \frac{\text{RSDI}_{it}}{\text{RSDI}_{it}^*}, \quad 0 < \text{EFF}_{it} \leq 1.$$

Standard forecasting metrics were used to check the quality of the models. The root mean square error is defined as:

$$\text{RMSE} = \sqrt{\frac{1}{N} \sum_{i=1}^N (y_i - \hat{y}_i)^2}.$$

The general algorithm of the study consists of the sequential execution of several stages. First, a table of initial data for regions and years is formed. Then the indicators are classified into stimulants and de-stimulants. After that, normalization is carried out, entropy weights are calculated, integral indices are constructed, panel regression estimation is performed, the efficiency frontier is determined, and alternative models are compared. It is this sequence that allows us to ensure the transparency of calculations and the reproducibility of the obtained results.

3. Results

Table 1 forms the basis for further modeling. Unlike a purely legal analysis, this system of variables allows us to translate administrative and legal principles into quantitative parameters that can be normalized, weighted, and used in an econometric model. Most importantly, the variables are divided into stimulants and disincentives, since higher regulatory quality or transparency enhances sustainable development, while administrative conflicts, infrastructure losses, and fiscal tensions worsen regional sustainability.

Table 1. Definition of variables used in the econometric model.

Group	Variable	Description	Type	Effect
Administrative and legal capacity	A_1	Quality of regional regulatory support for sustainable development	quantitative	stimulator
Administrative and legal capacity	A_2	Budget execution of regional development programs	quantitative	stimulator
Administrative and legal capacity	A_3	Transparency and accountability of regional governance	quantitative	stimulator
Administrative and legal capacity	A_4	Administrative and legal conflicts in regional governance	quantitative	destimulator
Sustainable development	S_1	Gross value added per capita	quantitative	stimulator
Sustainable development	S_2	Employment and social resilience	quantitative	stimulator
Sustainable development	S_3	Capital investment per capita	quantitative	stimulator
Sustainable development	S_4	Environmental sustainability of regional development	quantitative	stimulator
National security vulnerability	B_1	War and territorial security pressure	quantitative	destimulator
National security vulnerability	B_2	Damage to critical infrastructure	quantitative	destimulator
National security vulnerability	B_3	Fiscal stress and dependence on external support	quantitative	destimulator

Table 2. Input data for econometric modeling, 2023.

Region	A_1	A_2	A_3	A_4	S_1	S_2	S_3	S_4	B_1	B_2	B_3
Lviv	85.0	73.7	71.1	18.7	76.4	63.6	70.7	53.6	28.8	32.9	55.5
Kyiv	78.5	91.3	86.8	13.4	87.1	78.9	80.7	64.9	24.2	39.7	51.4
Dnipro	73.4	77.9	71.8	27.7	80.1	58.3	83.5	53.3	66.1	81.9	67.1
Odesa	70.7	59.5	66.8	31.3	59.2	57.1	55.1	43.3	69.1	67.3	72.2
Vinnytsia	74.3	72.5	75.8	24.0	54.6	60.2	60.5	48.7	38.4	38.9	62.5
Poltava	71.8	63.5	65.9	34.2	74.1	56.7	69.8	50.1	46.8	51.9	71.4
Zakarpattia	64.6	56.0	58.3	41.8	50.3	54.9	45.5	45.0	24.8	28.7	71.4
Kharkiv	68.5	66.6	63.9	36.5	71.2	51.2	70.4	49.4	86.7	93.0	73.5

Table 2 serves as a starting point for the modeling. It shows that regions with high administrative and legal indicators do not always automatically have the best security position. For example, the Dnipro and Kharkiv regions have a relatively developed economic component, but high security pressure reduces the overall stability.

Table 3 shows that in the group of administrative and legal indicators, the implementation of budget development programs has the greatest weight, $A_2 = 0.462$. This means that not only the presence of regulatory acts, but also the ability to ensure their financial implementation is a key factor in administrative and legal efficiency. In the group of sustainable development, the most important is the investment indicator, $S_3 = 0.311$, and in the group of security vulnerability, the most important is fiscal tension, $B_3 = 0.472$. Therefore, not only direct military pressure is dangerous for the region, but also the weakness of the budgetary basis for responding to threats.

Table 3.

Group	Variable	Entropy weight
A	A_1	0.224
	A_2	0.462
	A_3	0.169
	A_4	0.145
S	S_1	0.128
	S_2	0.287
	S_3	0.311
	S_4	0.274
B	B_1	0.306
	B_2	0.222
	B_3	0.472

Table 4 shows the difference between the conventional sustainable development index and the security-adjusted result. The Kyiv region retains its leading position in all parameters, as it combines high administrative and legal capacity with relatively low security vulnerability. At the same time, the Dnipro and Kharkiv regions have a noticeably lower SRSDI, although their RSDI remains relatively high. Thus, the model demonstrates that sustainable development in frontline or high-risk regions requires adjustment through the security component.

Table 4. Integral indices and ranking of regions, 2023.

Region	ALCI	RSDI	RSVI	SRSDI	Rank
Kyiv	0.917	0.940	0.226	0.728	1
Dnipro	0.738	0.647	0.794	0.134	2
Lviv	0.742	0.621	0.248	0.467	3
Kharkiv	0.462	0.551	0.955	0.025	4
Poltava	0.534	0.447	0.651	0.156	5
Odesa	0.418	0.446	0.798	0.090	6
Vinnytsia	0.618	0.305	0.451	0.167	7
Zakarpattia	0.262	0.271	0.497	0.136	8

Table 5 confirms the main hypothesis of the study. The coefficient for ALCI is positive and is 0.187, which means a positive impact of administrative and legal capacity on the sustainable development of the region. The coefficient for RSVI is negative and statistically significant, $p = 0.018$, so the increase in security vulnerability reduces the effectiveness of regional development. Investment activ-

Table 5. Results of dynamic panel regression.

Variable	Coefficient	Std. error	p-value
const	-0.282	0.133	0.034
$RSDI_{t-1}$	0.029	0.218	0.894
ALCI	0.187	0.100	0.060
RSVI	-0.209	0.088	0.018
Investment	1.241	0.357	0.001
Year 2021	-0.048	0.046	0.295
Year 2022	0.004	0.054	0.941
Year 2023	-0.017	0.053	0.745

ity has the strongest impact, which is expected, because it is it that transforms administrative decisions into material, production and infrastructure results.

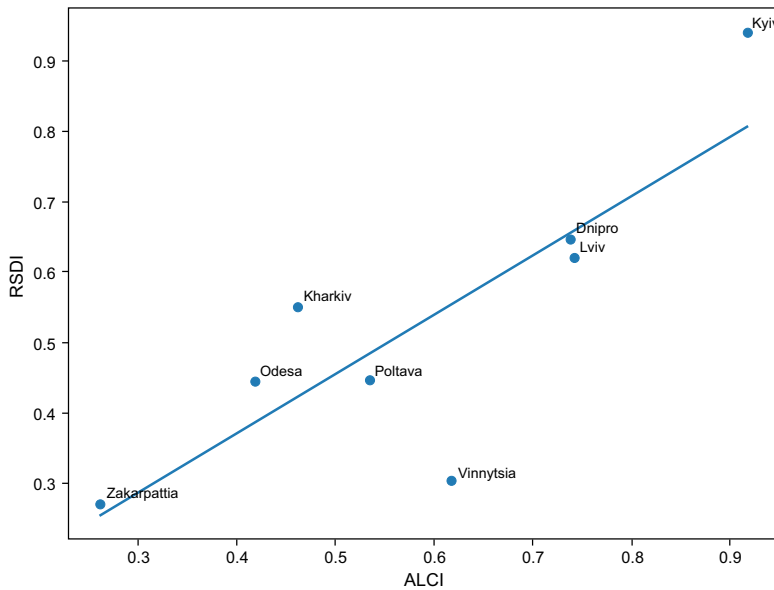


Figure 1. Administrative-legal capacity and sustainable development.

ulatory and budgetary instruments. The Vinnytsia region has the lowest value, where a relatively good ALCI is not transformed into a sufficiently high RSDI. Therefore, the management problem lies not only in the availability of administrative and legal foundations, but also in the practical quality of their implementation.

Figure 1 shows a positive relationship between administrative and legal capacity and sustainable development. Regions with higher ALCI tend to have higher RSDI, but the scatterplot shows that administrative and legal frameworks do not operate in isolation. Their effect is amplified or attenuated by investment activity, fiscal sustainability, and security pressures.

Table 6 shows that the Kyiv and Dnipro regions are the most effective in transforming administrative and legal potential into a sustainable development result. The Lviv region has a high, but not maximum, efficiency indicator, which means that there is a reserve for better use of reg-

Table 6. Efficiency scores of regions, 2023.

Region	Observed RSDI	Frontier RSDI*	Efficiency
Kyiv	0.940	0.940	1.000
Dnipro	0.647	0.647	1.000
Lviv	0.621	0.657	0.945
Zakarpattia	0.271	0.290	0.935
Kharkiv	0.551	0.604	0.912
Poltava	0.447	0.572	0.781
Odesa	0.446	0.581	0.767
Vinnytsia	0.305	0.504	0.604

The results obtained confirm that the administrative and legal frameworks for the formation of sustainable development in the region have a statistically positive impact on the integral index of regional sustainable development. At the same time, security vulnerability reduces development effectiveness, which is especially noticeable for regions with high pressure of military and fiscal risks.

4. Discussions

The obtained results are consistent with the main conclusions of previous studies, according to which administrative and legal capacity is an important precondition for regional sustainability and security resilience. The positive effect of the Administrative and Legal Capacity Index on the Regional Sustainable Development Index confirms the position of Aldrou et al. [1], who argued that legal certainty, administrative coordination, and adaptation to a changing external environment shape the trajectory of regional development. The results also support the conclusions of Albalawee et al. [2], Dragan et al. [3], and Rushchyshyn et al. [4], who showed that public administration, legal regulation, and financial security are closely connected. In the proposed model, this relationship is reflected by the fact that regions with stronger administrative and legal capacity are more likely to achieve higher

sustainable development outcomes, provided that fiscal and investment conditions do not limit the implementation of regional policy. The negative influence of the Regional Security Vulnerability Index on sustainable development confirms that crisis and war conditions substantially modify the relationship between governance capacity and development results. This finding corresponds to the studies by Shevchuk et al. [5], Kryshchanovych et al. [6], Lošonczi et al. [7], Manuilova et al. [8], and Polukhina et al. [9], where sustainable development is interpreted through the prism of economic security, military threats, environmental pressure, and regional planning risks. The results show that even a relatively high level of administrative and legal capacity may not fully compensate for infrastructure destruction, fiscal stress, and direct security pressure. This is especially important for security-sensitive regions, where traditional indicators of economic growth may overestimate real sustainability if they are not adjusted for vulnerability. Therefore, the use of the security-adjusted sustainable development index provides a more realistic assessment of regional resilience. The efficiency frontier results provide an additional interpretation that expands the findings of governance and sustainability studies. The fact that some regions transform administrative and legal potential into sustainable development more effectively than others confirms the relevance of efficiency-based approaches used by Jozowicka [17] and Halkos et al. [18]. At the same time, the obtained results are in line with the broader governance literature, where institutional quality, rule of law, and public accountability are viewed as determinants of sustainable development performance [11–16]. The model also supports the conclusions of Kryshchanovych et al. [10], Kryshchanovych et al. [19], and Kryshchanovych et al. [20], who emphasized the importance of legal regulation, smart management, and effective interaction between society and public administration. Thus, the proposed econometric approach makes it possible not only to rank regions, but also to identify the gap between formal administrative and legal capacity and its actual contribution to sustainable development under national security constraints.

5. Conclusions

The study proposes an econometric approach to assessing the effectiveness of administrative and legal foundations for the formation of sustainable development in the region in the context of ensuring national security. The developed model combines index assessment, entropy weighting, panel regression and frontier efficiency assessment. Such a construction allows us not only to determine the overall level of development of the region, but also to assess the extent to which administrative and legal capacity is transformed into real results of sustainable development. The proposed system of indicators includes three key components. The first component characterizes the administrative and legal capacity of the region, the second reflects sustainable development, and the third assesses security vulnerability. Unlike approaches that consider these parameters separately, the proposed model allows combining them into a single calculation system. Thus, the study creates a basis for quantitative analysis of how the quality of administrative and legal mechanisms affects regional stability. Using the entropy method allows reducing subjectivity when determining the weights of indicators. Indicators with higher information variability receive greater weight in the integral index. Due to this, the model does not depend exclusively on expert assessments, but relies on the structure of the data itself. At the same time, the division of indicators into stimulants and de-stimulants ensures the correct interpretation of both positive and negative factors of regional development.

The construction of the administrative and legal capacity index, the sustainable development index and the security vulnerability index allows us to obtain a multidimensional representation of regions. The security-adjusted sustainable development index is of particular importance, since it shows that high socio-economic results can significantly decrease under the influence of military, infrastructural and fiscal threats. Thus, sustainable development in the context of national security cannot be assessed without taking into account the level of regional vulnerability.

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Економетрична оцінка ефективності адміністративно-правових засад формування сталого розвитку регіону в контексті забезпечення національної безпеки

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У статті запропоновано економетричний підхід до оцінки ефективності адміністративно-правових засад формування сталого розвитку регіону в контексті забезпечення національної безпеки. Обґрунтовано, що сталість регіонального розвитку залежить не лише від економічних, інвестиційних і соціальних параметрів, а й від якості нормативно-програмного забезпечення, виконання регіональних програм, прозорості управління та здатності органів влади реагувати на безпекові загрози. Методологічною основою дослідження є поєднання індексного моделювання, min-max нормалізації, ентропійного зважування, панельної регресії та фронтирної оцінки ефективності. У межах запропонованої моделі сформовано індекс адміністративно-правової спроможності, індекс сталого розвитку регіону, індекс безпекової вразливості та безпеково скоригований індекс сталого розвитку. Такий підхід дозволяє не лише порівнювати регіони за рівнем розвитку, а й визначати, наскільки ефективно адміністративно-правовий потенціал трансформується у фактичні результати сталого розвитку. Наукова новизна полягає у побудові інтегрованої моделі, яка кількісно поєднує правові, управлінські, соціально-економічні та безпекові параметри регіонального розвитку. Практичне значення результатів полягає у можливості використання моделі для моніторингу регіональної політики, оцінювання виконання програм розвитку та формування пріоритетів безпеково орієнтованого управління.

Ключові слова: адміністративно-правові засади; сталий розвиток регіону; національна безпека; економетричне моделювання.