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DETERMINANTS OF THE GROWTH OF THE FINANCIAL-ECONOMIC POTENTIAL OF RURAL TERRITORIAL COMMUNITIES OF UKRAINE

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ABSTRACT

The article considers the determinants of the growth of the financial-economic potential of rural territorial communities of Ukraine. A methodical approach to assessing the determinants of the growth of financial-economic potential of rural communities in terms of three components which would be able to independently form the functional basis of resource orientation of territories for socio-economic development and cooperation in the business environment is developed. The effectiveness of budget policy in increasing the financial-economic potential of rural communities to fill rural budgets with a resource base to ensure their financial capacity and coordination of socio-economic development, in the long run, is proved. The model of the growth of the financial-economic potential of rural territorial communities is developed. The main factors and criteria for the growth of the financial-economic potential of the rural territorial community are identified. Indicators of the growth of financial-economic potential of rural territorial communities (RTC) in the regional system are presented. The share of tax revenues in the revenues of rural budgets of European countries is determined. The size of incomes and expenses of rural territorial communities on average per one region is analyzed. An algorithm for diagnosing the growth of financial-economic potential of rural territorial communities in the regional system has been developed. The forecast integrally normalized index of the growth of financial-economic potential of rural territorial communities of Ukraine by its components in the regional system of Ukraine is determined.

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INTRODUCTION

Globalization and European integration in developing countries have significantly affected the way of the management of the development of cities and territories. The introduction of the concept of economic growth, which is spreading rapidly, is becoming an important mechanism for strengthening the national potential of the state, regions and rural communities to solve economic, social and environmental problems

(Martynenko, 2021; Miklovda *et al.*, 2021). The state of economic growth of the country directly depends on the financial capacity of communities and their ability to engage in local development in its territory for ensuring and rational use of endogenous potential, as well as the effective organization of the life cycle of its inhabitants with uninvolved sources of development. It should be noted that the inclusion of increasing the financial capacity of rural communities is a multifaceted

component of their financial and economic potential and meets the priorities of modern decentralization, determined by state and regional policy on a systemic approach, thus ensuring economic growth and development both at the state and local levels. At the same time, the introduction of new European approaches to the management of rural financing instruments is one of the main conditions for the efficiency and independence of local authorities to increase the foundation and gradual introduction of socio-economic levers which improve the legitimate interests of agribusiness to attract, accumulate, distribute and use public and private funds invested from external and internal sources. Accordingly, the principle of inclusion of the growth of financial and economic potential through the processes of financial support of the economic growth of rural territorial communities is closely interrelated with the principles of budget regulation, taxation and local autonomy, as well as comprehensive financial support from the state. However, the latter principle is insufficiently regulated at the state level, which offsets its influence at the local level, as only certain elements of the financial security system and their interaction are involved in this process. This activates rural areas to increase the favourable investment climate, local financial consolidation with the formation of a new financial culture.

The works of such Ukrainian and foreign scientists as Avramchenko *et al.* (2016), Batanov (2008), Beschastnyi (2005), Bończak-Kucharczyk (1998), Chernov and Mushchynska (2016), Davulis (2009), Hillery (1955), Kovenko (2012), Murkovich (2010), Riabushka (2014), Zabkowicz (2017) are devoted to the study of the development of territorial communities as subjects of socio-economic development management. The following scientists studied the issues of resource provision for the development of administrative-territorial units: Ivanova (2016); Ivanova and Bielikova (2016), Kaminska (2011), Lunina (2016), Patytska (2017), Pidkuiko (2010), Popova (2015), Pukhtynskiy (2003), Sember (2015), Smelser and Schnore (1973), Vakhovych and Kaminska (2010); Vakhovych and Zabediuk (2011). The following scientists were engaged in the study of the financial policy of the economic growth of rural territorial communities Kozoriz *et al.* (2010), Pelehaty and Patytska (2016), Storonianska and Pelehatyi (2015), Suchyk and Kravchuk (2016), Taptunova (2016), Tiebout (1956), Trusova (2016);

Trusova *et al.* (2019); Trusova *et al.*, (2020a); Trusova *et al.* (2020b), Zach (2017) which created a basis for theoretical and methodological bases of the formation of financial support and development of territorial communities in the conditions of decentralization.

However, it should be noted that the main problem of the available financial and economic potential for the formation of inclusion of economic growth of rural communities in the new conditions of distribution and use of resources remains insufficient to meet their domestic needs. Therefore, new scientific provisions on the introduction of methods of inclusive growth of financial and economic potential of rural communities need to be further developed, which should be based on assessing the appropriate state of financial security and stimulating their potential to rationally use the resource base. The priority of this study is to develop a methodological approach to assessing the determinants of the growth of financial and economic potential of rural communities in terms of three components (effectiveness of financial and budget support, resource efficiency and economic growth opportunities), able to independently form the functional basis of resource orientation of territories for socio-economic development and intensification of cooperation in the business environment.

METHODOLOGY

Achieving the effectiveness of fiscal policy to increase the financial and economic potential of rural communities and filling rural budgets is possible through planning, implementation and evaluation of their financial capacity to coordinate socio-economic development measures in the long run. The budget vector of the development is provided utilizing the program-target method which systematizes: formation of the medium-term budget plan, rendering of qualitative services to the population through optimum use of budgetary funds; raising public awareness of the effectiveness of community budget expenditures in rural areas; satisfaction of consumers of social services through systemic elements of financial and economic potential (Avramchenko *et al.*, 2016).

This system allows establishing a purposeful organization of financial and economic activities of local governments, taking into account the effectiveness of relations between business stakeholders in the economic growth of rural communities, and achieving a

synergistic effect in the process of increasing their financial capacity (Figure 1).

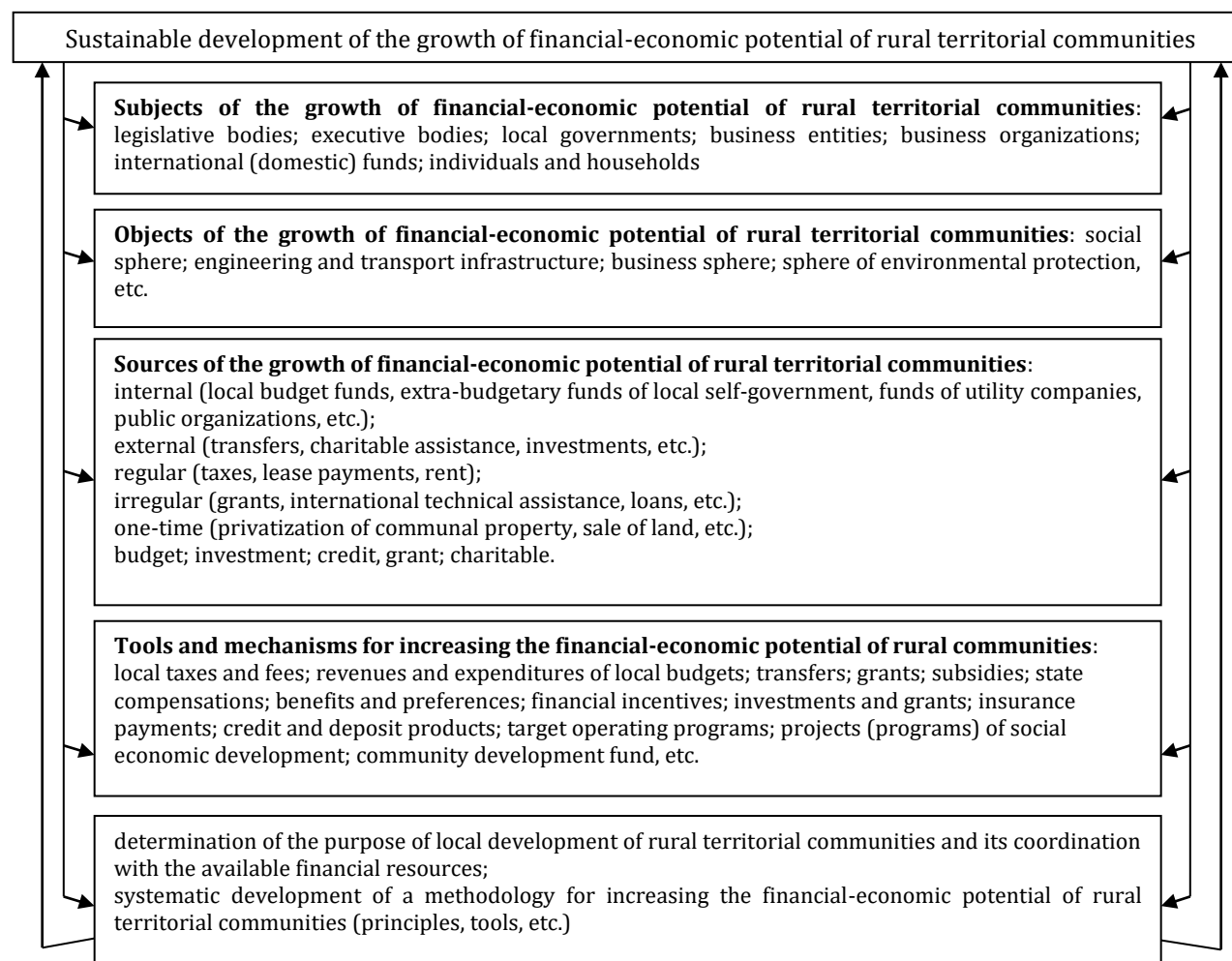


Figure 1. Model of the growth of financial-economic potential of rural territorial communities.

The optimal combination, as well as the systematic and coordinated use of financial resources of all entities that are able to ensure the financial independence of rural areas, is crucial for the growth of financial-economic potential of rural territorial communities (Trusova *et al.*, 2019; Chala, 2020). This coherence allows to improve the functions of the production and non-production facilities, their economic and social status and, ultimately, to develop the business environment, taking into account the interests of stakeholders in this process. At the same time, the effectiveness of the system to ensure the inclusion of the growth of financial-economic potential of rural communities should take into account the needs and interests of the local community in a particular region of the country. The authors believe that the financial-economic potential provides the ability of the rural community to attract, accumulate and

effectively use financial resources from various sources in order to solve problems of local importance. Ideally, all communities that are already united and at the appropriate level ensure the viability of all subjects of financial relations, as well as their interaction in order to achieve and ensure the balanced development of industries in certain areas should be financially viable (Figure 2).

It is proposed to identify external factors influencing the formation of sources of the growth of financial-economic potential of the rural territorial community. These factors are involved in the system through local governments and donor organizations, with their periodic use on a non-repayable basis to ensure socio-economic projects; lending (provided on terms of payment and return); self-financing, through direct participation in the process of financing and use of own

resources. The methodical approach to assessing the determinants of the growth of financial-economic potential of rural territorial communities distinguishes its structural composition by normative-legal (formally

official) component, informal institutional component, a component of socio-economic development institutions in decentralization, financial-budgetary component and functional basis.

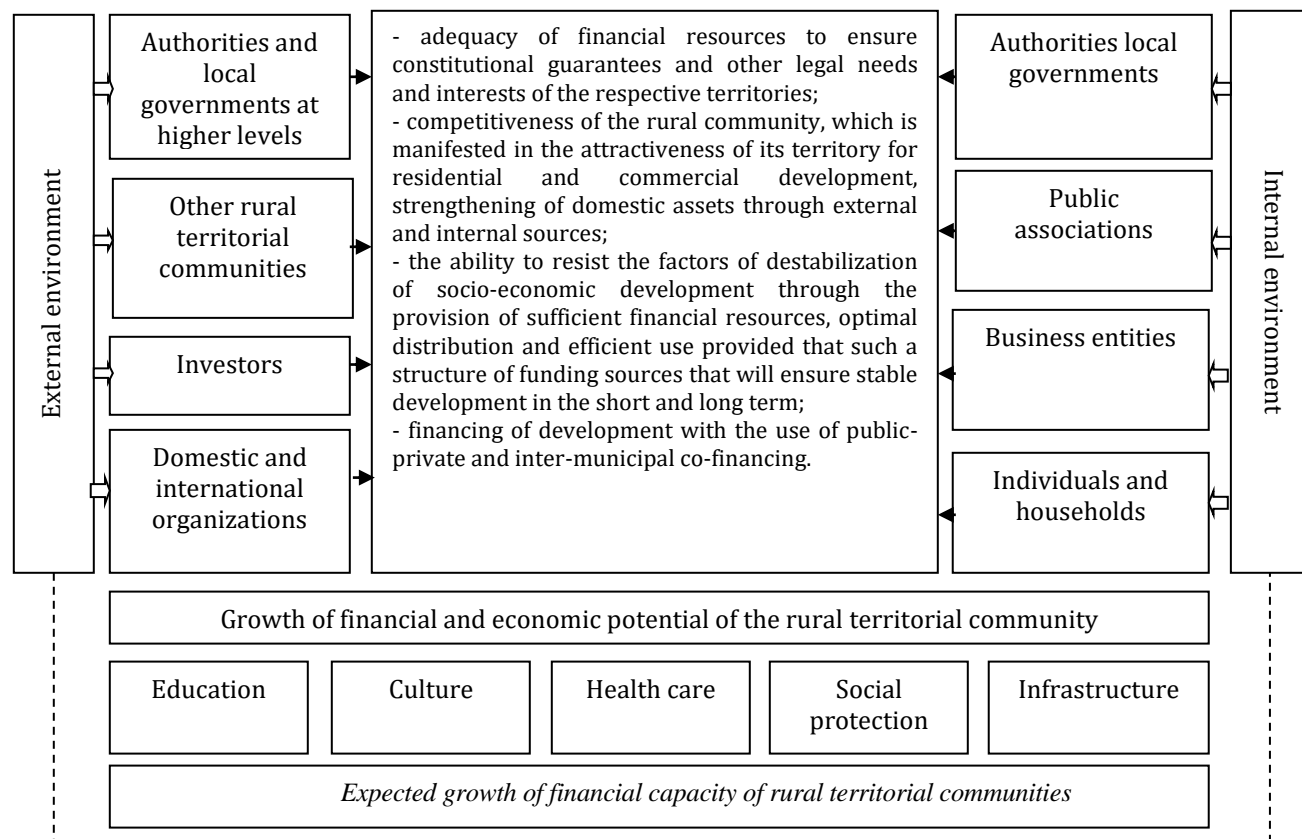


Figure 2. The main factors and criteria for the growth of financial and economic potential of the rural territorial community.

It should be noted that according to the above approach, the financial capacity of rural territorial communities is possible only at the regional level, as it allows determining the rating of the growth of their financial-economic potential by the above components (Hillery, 1955).

In particular, in the section of the methodological approach to the information support of the “Regulatory” component is the indicator “Transparency Index of Regions”. At the local level of rural development, it should have the largest share, which according to the European Economic Area Index, reflects the degree of convergence of regional economic systems with the EU, through the deepening of trade and economic relations between individual countries and between EU member states (Kryvenko, 2021; Pankratova, 2021). This

improves both the institutional and business environment for the implementation of the reforms provided in Section IV UA “Trade and Trade-Related Issues” in the regions of the country (Bończak-Kucharczyk *et al.*, 1998; Skica *et al.*, 2013). The transparency index of the regions is calculated by the formula (1) (Bończak-Kucharczyk *et al.*, 1998; Skica *et al.*, 2013):

$$IEIP = STER \times W_{STER} + SISP \times W_{SISP} \quad (1)$$

Where, *IEIP* – Index of European integration economic progress of the region; *STER* – sub-index of the depth of trade-economic relations with the EU; *SISP* – sub-index of institutional support for European integration progress; W_{STER} , W_{SISP} – respectively, the share of sub-indices.

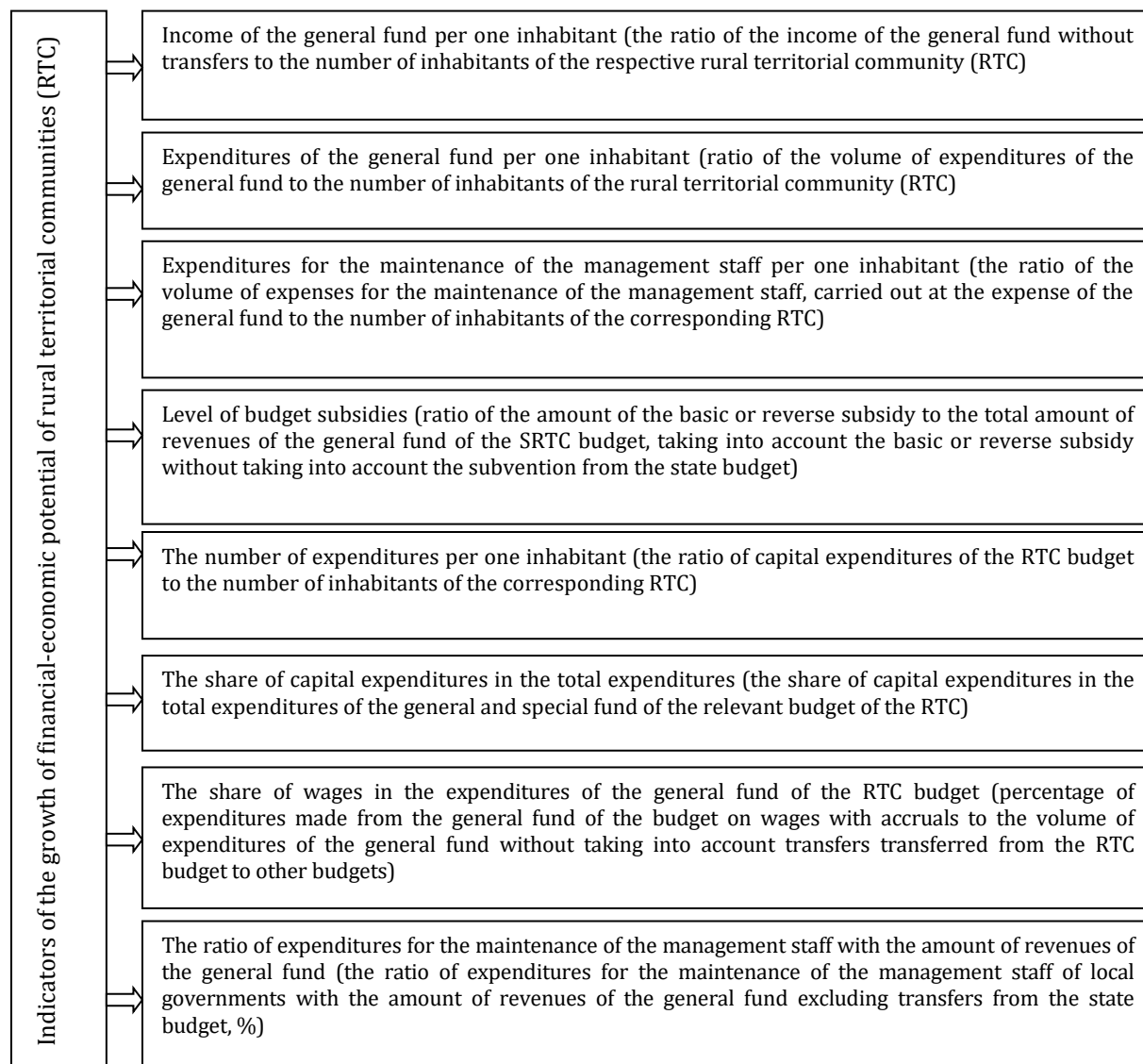


Figure 3. Budget indicators of the growth of financial-economic potential of rural territorial communities (RTC) in the region

Source: compiled by the authors according to data (Bończak-Kucharczyk *et al.*, 1998; Pukhtynskyi *et al.*, 2003; Kozoriz *et al.*, 2010; Pidkuiko, 2010).

The sub-index of the depth of trade and economic relations with the EU characterizes the equivalent state of the dynamics of trade and financial-investment relations between the regions, the share of which is 65%. The sub-index of institutional support for European progress reflects the quality of ensuring the inclusion of the growth of financial-economic potential of rural territorial communities in the region for the implementation of pro-European reforms, the share of which is 35% (Bończak-Kucharczyk *et al.*, 1998). In

accordance with the “U-LEAD with Europe” and Program the SKL International project, individual financial (budget) indicators of rural territorial communities (Bończak-Kucharczyk *et al.*, 1998), are assessed, which are presented in Figure 3.

According to the methodological approach, the growth of financial-economic potential of rural territorial communities in the regional system on the above components is estimated using the indicators listed in Table 1.

Table 1. Indicators of the state of the growth of financial-economic potential of rural territorial communities in the regional system.

Indicators	
1.	Normative-legal component (formal official institutional component) – readiness of the region to function effectively in the conditions of influence of normative-legal acts
1.1	Number of formed territorial communities, units
1.2	Index of transparency of regions (openness and readiness to implement positive legislative changes)
1.3	European Economic Progress Index
2.	Informal institutional component – business reputation and climate, mutual relations, willingness and ability to cooperate, work together, communicate between community representatives in the region
2.1	Number of agreements on cooperation of rural territorial communities, units
2.2	Number of rural territorial communities that use the instrument of inter-municipal cooperation, units
2.3	Number of elders in the region, units
2.4	The number of elected elders in the communities of the region, units
3.	Institutions – the presence of institutions, organizations, entities that promote effective economic growth in a decentralized environment
3.1	Number of administrative service centers, units
3.2	Number of support schools, units
3.3	Number of hospital districts, units
3.4	Number of local governments that have received powers in the field of architectural and construction control, units
4.	Financial-budgetary, infrastructural component – existence of system of effective distribution and use of financial, budgetary and other fund resources
4.1	Own budget revenues per 1 inhabitant, USD
4.2	The level of rotation of communities in the region, %
4.3	Costs for the maintenance of the community management staff in the region, thousand USD
4.4	Capital expenditures per 1 inhabitant, USD
5.	Functional basis – the presence of a developed economic system of agribusiness entities, able to effectively reproduce economic resources on the basis of viability, sustainability (economic foundation for the implementation of ideas of economic development of the region in a decentralized environment)
5.1	Economic component
5.1.1	Gross regional product per 1 person, thousand USD
5.1.2	Capital investment per 1 person, thousand USD
5.2	Social component
5.2.1	Incomes of the population, thousand USD
5.2.2	Labor market capacity, thousand people
5.2.3	Total living area, m ²
5.3	Ecological component
5.3.1	The total amount of accumulated waste per 1 inhabitant, thousand tons
5.3.2	The amount of waste disposal
5.3.3	Emissions of pollutants into the air, thousand tons
5.3.4	Capital investment in environmental protection per 1 person, USD

Source: developed by the authors.

Assessment of the level of the growth of financial-economic potential of rural territorial communities in the regional system is based on the calculation of the favorable index of its components, calculated as the geometric mean of the normalized values of indicators (Pelehatyy and Patytska, 2016). Normalized values are determined for indicators-stimulators by formula (2), for destimulators – by formula (3) (Pelehatyy and Patytska, 2016):

$$\bar{x}_i = \frac{x_i - x_{min}}{x_{min,max} - x_{min}}, \quad (2)$$

$$\bar{x}_i = \frac{x_{max} - x_i}{x_{max} - x_{min}}, \quad (3)$$

where, x_i – the value of a certain indicator for the i -th region with their number n ; x_{max} , x_{min} – maximum and minimum value of indicators among regions. The number of indicators within each of the five groups is $j = 1, m$, so the index that characterizes the state of the growth of financial and economic potential of rural communities in the regional system on the group of

indicators of the institutional component is determined by formula (4) (Storonianska and Pelekhatyi, 2015):

$$I_j = \sqrt[m]{\prod_{j=1}^m x_{ij}}, \quad i = \overline{1, n}, \quad (4)$$

The index that characterizes the state of the growth of financial and economic potential by the institutional component between the regional system of the country

is determined by formula (5) (Storonianska and Pelekhatyi, 2015):

$$I_j = \sqrt[n]{\prod_{i=1}^n I_{ij}}, \quad k = \overline{1, 5}, \quad (5)$$

where, $k = 5$ – the number of groups of the institutional component for the growth of financial and economic potential of rural communities.

Table 2. Matrix of the state of the growth of financial-economic potential of rural territorial communities in the regional system.

Components of the growth of financial-economic potential of RTC	Group 1				...	Group 5				I_{int}
	K_{11}	K_{12}	K_{1m}	I_{1i}		K_{s1}	K_{s2}	K_{sm}	I_{Si}	
R1	\bar{x}_{111}	\bar{x}_{121}	\bar{x}_{1m1}	I_{11} $= \sqrt[m]{\prod_{j=1}^m x_{1j1}}$	...	\bar{x}_{s11}	\bar{x}_{s21}	\bar{x}_{sm1}	$I_{s1} = \sqrt[m]{\prod_{j=1}^m x_{sj1}}$	$I_{int 1} = \sqrt[s]{\prod_{k=1}^s I_{k1}}$
R2	\bar{x}_{112}	\bar{x}_{122}	\bar{x}_{1m2}	I_{12} $= \sqrt[m]{\prod_{j=1}^m x_{1j2}}$	...	\bar{x}_{s12}	\bar{x}_{s22}	\bar{x}_{sm2}	$I_{s2} = \sqrt[m]{\prod_{j=1}^m x_{sj2}}$	$I_{int 1} = \sqrt[s]{\prod_{k=1}^s I_{k2}}$
...
Rn	\bar{x}_{11n}	\bar{x}_{12n}	\bar{x}_{1mn}	I_{1n} $= \sqrt[m]{\prod_{j=1}^m x_{1jn}}$	...	\bar{x}_{s1n}	\bar{x}_{s2n}	\bar{x}_{smn}	$I_{sn} = \sqrt[m]{\prod_{j=1}^m x_{sjn}}$	$I_{int n} = \sqrt[s]{\prod_{k=1}^s I_{kn}}$
Integral value	-	-	-	$I_{int} = \sqrt[n]{\prod_{i=1}^n I_{1i}}$	...	-	-	-	$I_{sint} = \sqrt[n]{\prod_{i=1}^n I_{Si}}$	$I_{INTEGR} = \sqrt[s]{\prod_{k=1}^s I_{kint}}$

Source: developed by the authors

According to the calculation of the normative values and the above indices, it is possible to compile a matrix of the state of the growth of financial and economic potential of rural territorial communities in the regional system (Table 2). The regional system of the growth of financial and economic potential of rural territorial communities is a platform, basic or subregional level, where calculations of the studied potential can be carried out

for rural communities that are parts of the united rural areas or for subregional formations are separated by economic rather than administrative territorial feature, provided the necessary basis of information support. In addition, the study of the state of the growth of financial and economic potential of rural territorial communities in the regional system is appropriate to carry out in the dynamics, using the form of a matrix (Table 3).

Table 3. Matrix of the state of the k-th component of the growth of financial-economic potential of rural territorial communities in the dynamic dimension of the regional system.

Components of the growth of financial-economic potential of RTC	1 year			I_{1i}	...	μ year			$I_{\mu i}$	I_{int}
	K_{11}	K_{12}	K_{1m}			$K_{\mu 1}$	$K_{\mu 2}$	$K_{\mu m}$		
R1	\bar{x}_{111}	\bar{x}_{121}	\bar{x}_{1m1}	I_{11}	...	$\bar{x}_{\mu 11}$	$\bar{x}_{\mu 21}$	$\bar{x}_{\mu m1}$	$I_{\mu 1}$	$I_{int 1}$
				$= \sqrt[m]{\prod_{j=1}^m x_{1j1}}$					$= \sqrt[m]{\prod_{j=1}^m x_{\mu j1}}$	$= \sqrt[s]{\prod_{k=1}^{\mu} I_{k1}}$
R2	\bar{x}_{112}	\bar{x}_{122}	\bar{x}_{1m2}	I_{12}	...	$\bar{x}_{\mu 12}$	$\bar{x}_{\mu 22}$	$\bar{x}_{\mu m2}$	$I_{\mu 2}$	$I_{int 1}$
				$= \sqrt[m]{\prod_{j=1}^m x_{1j2}}$					$= \sqrt[m]{\prod_{j=1}^m x_{\mu j2}}$	$= \sqrt[\mu]{\prod_{k=1}^{\mu} I_{k2}}$
...
Rn	\bar{x}_{11n}	\bar{x}_{12n}	\bar{x}_{1mn}	I_{1n}	...	$\bar{x}_{\mu 1n}$	$\bar{x}_{\mu 2n}$	$\bar{x}_{\mu mn}$	$I_{\mu n}$	$I_{int 1}$
				$= \sqrt[m]{\prod_{j=1}^m x_{1jn}}$					$= \sqrt[m]{\prod_{j=1}^m x_{\mu jn}}$	$= \sqrt[\mu]{\prod_{k=1}^{\mu} I_{kn}}$
Integral value	-	-	-	$I_{1int} = \sqrt[n]{\prod_{i=1}^n I_{1i}}$	...	-	-	-	$I_{\mu int} = \sqrt[n]{\prod_{i=1}^n I_{\mu i}}$	$I_{INTEGR} = \sqrt[\mu s]{\prod_{k=1}^{\mu \Pi} I_{kint}}$

Source: developed by the authors

Table 4. Intervals of the values of indicators of the state of the growth of financial-economic potential of rural territorial communities in regional system

Indicator values (interval)	The level of favorable growth of financial and economic potential
> 0.8 – 1	High
> 0.6 – 0.8	Above average
> 0.4 – 0.6	Average
> 0.3 – 0.4	Below average
0 – 0.3	Low

Source: developed by the authors

For the clarity of an estimation of a condition of the growth of investigated potential the method of “traffic lights” is used which allows to display groups of regions with cardinaly different indicators and in various colouring on intervals given in Table 4. Thus, in the conditions of economic modernization by factors of the growth of financial and economic potential of rural territorial communities in the regional system of the country and strengthening of integration processes with EU, it is possible to fill the domestic-regional market with consumers, thus providing business entities with

lower barriers to the movement of resources, accompanied by the institutional and regulatory framework of the process.

RESULTS AND DISCUSSION

The processes of the financial-economic potential of rural territorial communities formation in European countries

Most European countries have passed the stage of reforming the administrative-territorial system and forming the effective financial and economic potential of

rural territorial communities in terms of local self-government. The World Bank, in the context of "Decentralization and local democracy in the world" (Decentralization and Local Democracy..., 2008) states: EU countries have two key features that distinguish them from all other geopolitical regions of the world. First, each part of the EU is governed by local government. Second, all EU states recognize a discrete set of fundamental principles on the basis of which local self-government is formed and developed. These principles are reflected and enshrined in the European Charter of Local Self-Government, the European Convention on the Participation of Foreigners in Public Life at Local Level, the European Framework Convention on Trans frontier Cooperation between Territorial Communities or Authorities, the European Charter of Cities, the European Charter for Regional or Minority Languages. protection of national minorities, etc. (Skica *et al.*, 2013). Small EU countries (Bulgaria, Estonia, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Slovenia) are characterized by the presence of only one level of local self-government – municipalities. Eleven EU countries (Greece, Denmark, Ireland, the Netherlands, Portugal, Romania, Slovenia, Hungary, the Czech Republic, and Sweden) have a two-level system: regions and municipalities. Six EU Member States have a three-level system: two unitary states (Poland and France) and four federal states (Belgium, Italy, Spain and Germany). The United Kingdom (which has currently initiated the process of leaving the EU, but which has also undergone the stage of local government reform) is characterized by the presence of both one-level and two-level local government structure, depending on the peculiarities of

rural development (Decentralization and Local Democracy..., 2008; Skica *et al.*, 2013).

Instead, highly urbanized states are characterized by large-scale amalgamation of municipalities, so the question arises to restore governance at the level of "infra-community", i.e. within the community (Sweden, UK). This encourages the inclusion in the components of the growth of financial-economic potential of the community – the social component (i.e., "minor local entities"). Countries such as Bulgaria and Portugal are developing in this direction at the level of local self-government, where rather large municipalities operate, relying on information institutions. It should be noted that local governments in the EU are empowered in the field of land planning and management, culture and sports, preschool and secondary education, and maintenance of parks, local roads, water supply and sewerage, public transport in rural communities. The main source of income for rural communities in the EU is tax revenues and intergovernmental transfers (Decentralization and Local Democracy..., 2008; Chala, 2020). In the EU countries, the share of tax revenues in the revenues of municipal budgets ranges from 11.5 to 76.0% (Figure 4).

The main tax revenues of rural communities in European countries are their tax revenues, in particular local taxes and fees, which, as in Ukraine, are directly influenced by local governments. It should be noted that among all types of tax revenues, local tax revenues in the EU are growing the fastest. In France and the United Kingdom, these revenues increased 5.0 times (Taxations and Customs...). That is, in EU member states, local taxes and fees are a significant source of growth in the financial and economic potential of rural communities.

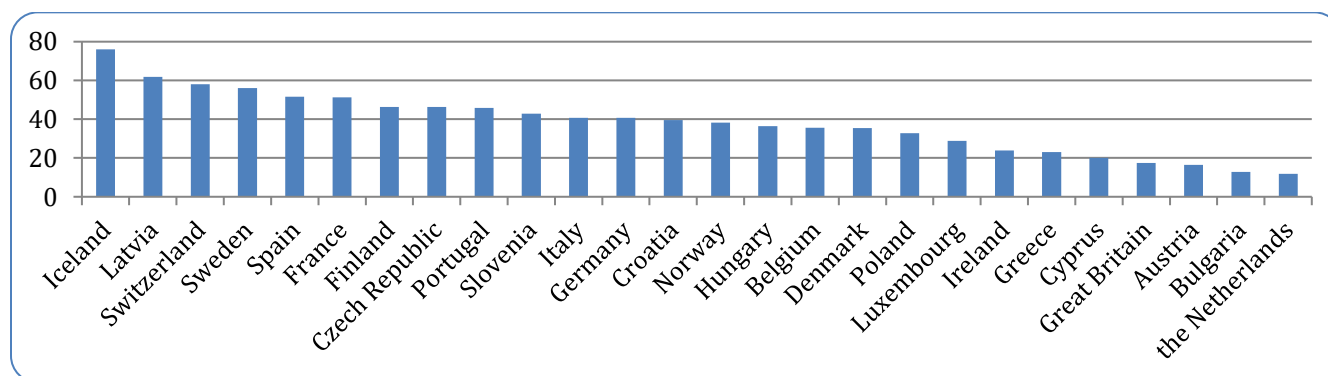


Figure 4. The share of tax revenues in the revenues of rural budgets of European countries in 2020

Source: built by the authors according to data (Taxations and Customs...; Decentralization and Local Democracy..., 2008; Chala, 2020).

The key mission to ensure the financial relationship between rural communities and businesses is given to the fiscal system (i.e., local budgets). Therefore, the assessment of the effectiveness of the use of financial and economic potential of rural territorial communities on average per region in the country (on the example of Ukraine) was conducted based on its budget component

(Kasperovich, 2018).

The criterion that allows to determine the level of adequacy of the budget potential of rural territorial communities and their compliance with the financial capacity of the regional system is to compare own revenues and expenditures in the budget per capita in rural areas (Figure 5).

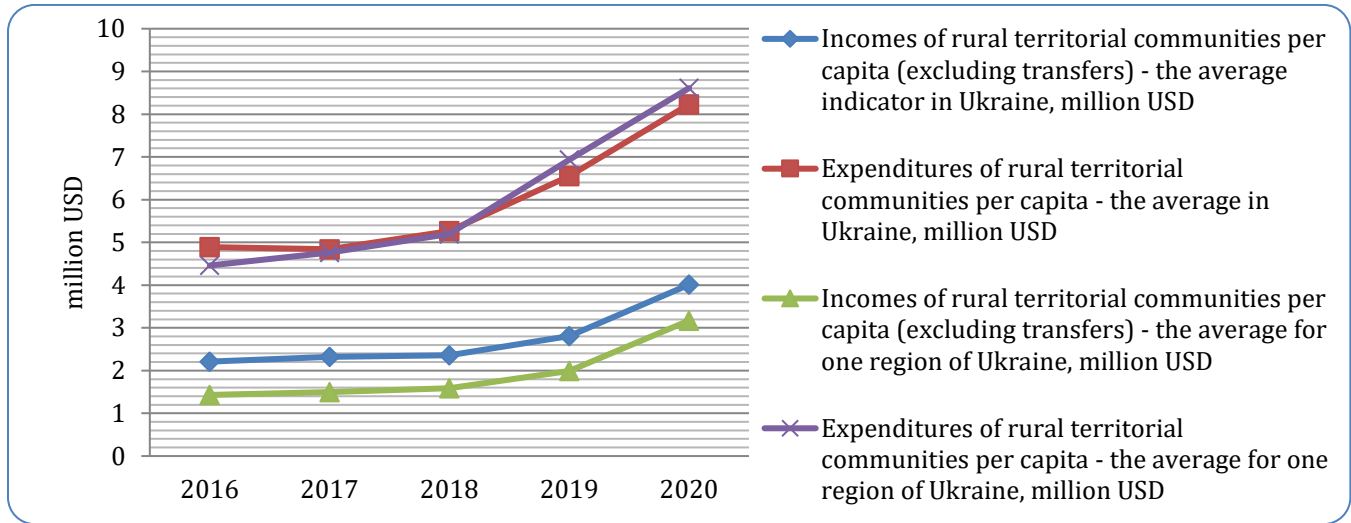


Figure 5. Incomes and expenditures of rural territorial communities as a whole on average per one region of Ukraine for 2016-2020, million USD

Source: built by the authors according to data (Ukrainian Institute for the Future; Kasperovich, 2018; Trusova *et al.*, 2019; Chala, 2020; Trusova *et al.*, 2020b)

Starting from 2018, there has been a tendency in Ukraine to increase the amount of tax revenues to the budgets of rural territorial communities (amounted to 3.28 billion USD). In 2020, compared to 2016, their size increased 1.7 times, but this did not significantly affect

their share in the budget structure (Figure 6). The structure of revenues in the budget of rural territorial communities on average per one region in Ukraine for 2016-2020 has undergone some changes (Figure 7).

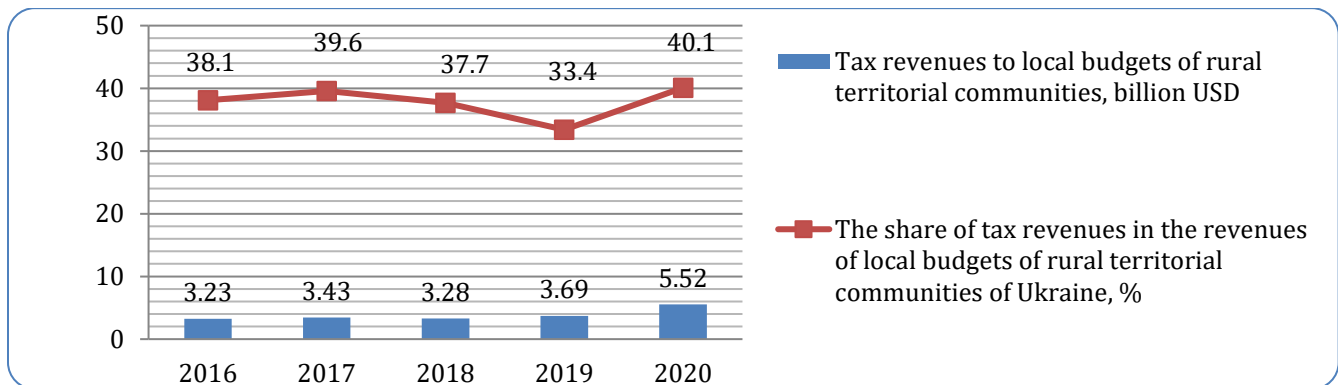


Figure 6. Tax revenues to rural budgets and their share in the revenues of rural territorial communities of Ukraine for 2016-2020

Source: built by the authors according to data (Ukrainian Institute for the Future; Kasperovich, 2018; Trusova *et al.*, 2019; Chala, 2020; Trusova *et al.*, 2020b).

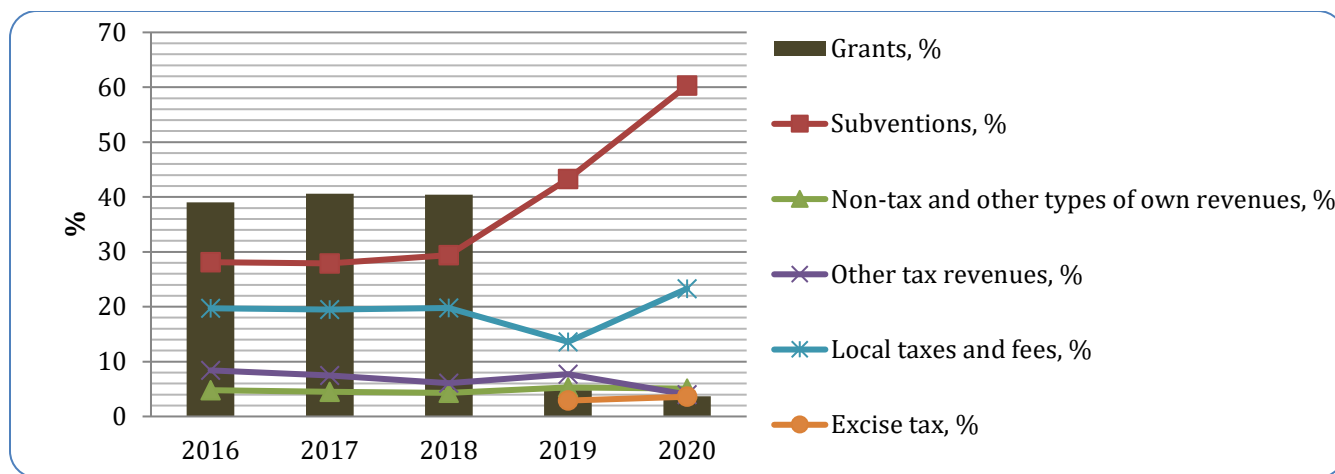


Figure 7. The structure of revenues in the budget of rural territorial communities on average per one region of Ukraine for 2016-2020, %

Source: built by the authors according to data (Ukrainian Institute for the Future; Kasperovich, 2018; Trusova *et al.*, 2019; Chala, 2020; Trusova *et al.*, 2020b)

Forecasts of the financial-economic potential of rural territorial communities in Ukraine

The presence of significant socio-economic differentiation of the development of rural territorial communities in the regions of Ukraine and the need to reduce it requires determining the level of their financial capacity to identify generating reserves to increase their financial-economic potential. This allows a comprehensive assessment of the state, strengths and weaknesses of the functioning of rural community budgets in ensuring the socio-economic development of the regional system. The algorithm for diagnosing the integrated level of the growth of financial-economic

potential of rural communities in the regions is shown in Figure 8.

Thus, in 2020, two regions of Ukraine (Vinnytskyi and Kyivskyi regions) accounted for 1/3 of total own revenues in the budgets of rural communities in the country as a whole, which indicates a significant economic differentiation in decentralized regions. The largest volume per capita is in Vinnytskyi (5.54 thousand USD) and Kyiv (5.34 thousand USD) regions of Ukraine (Figure 9). In addition to the above, the regions with high own incomes per capita of rural communities include Zaporizkyi, Dnipropetrovskyi, Odeskyi, Kharkivskyi and Lvivskyi regions (Bondar *et al.*, 2021).

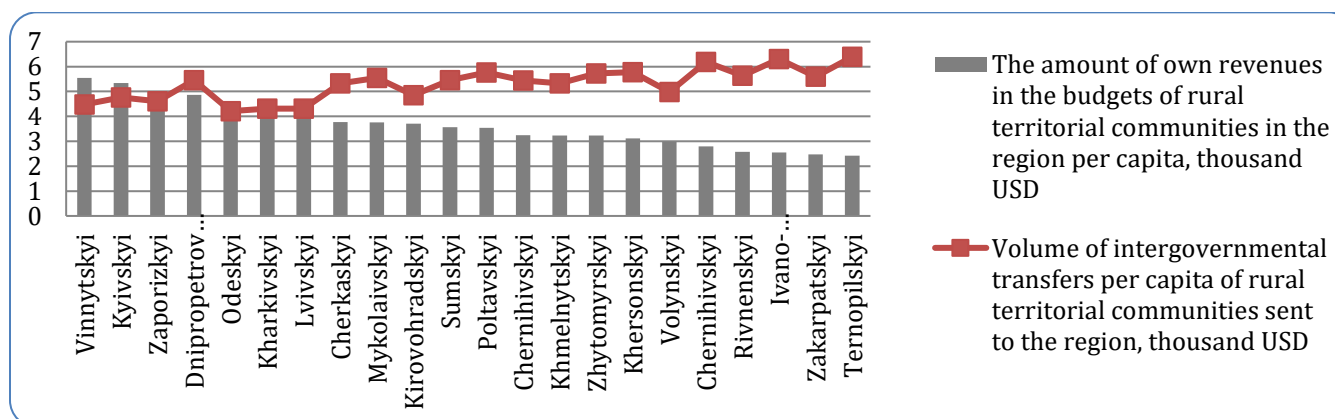


Figure 9. Own revenues in the budget of rural territorial communities and inter-budgetary transfers per capita in the region of Ukraine for 2020, thousand USD

Source: built by the authors according to data (Kasperovich, 2018; Trusova *et al.*, 2019; Chala, 2020; Trusova *et al.*, 2020b)

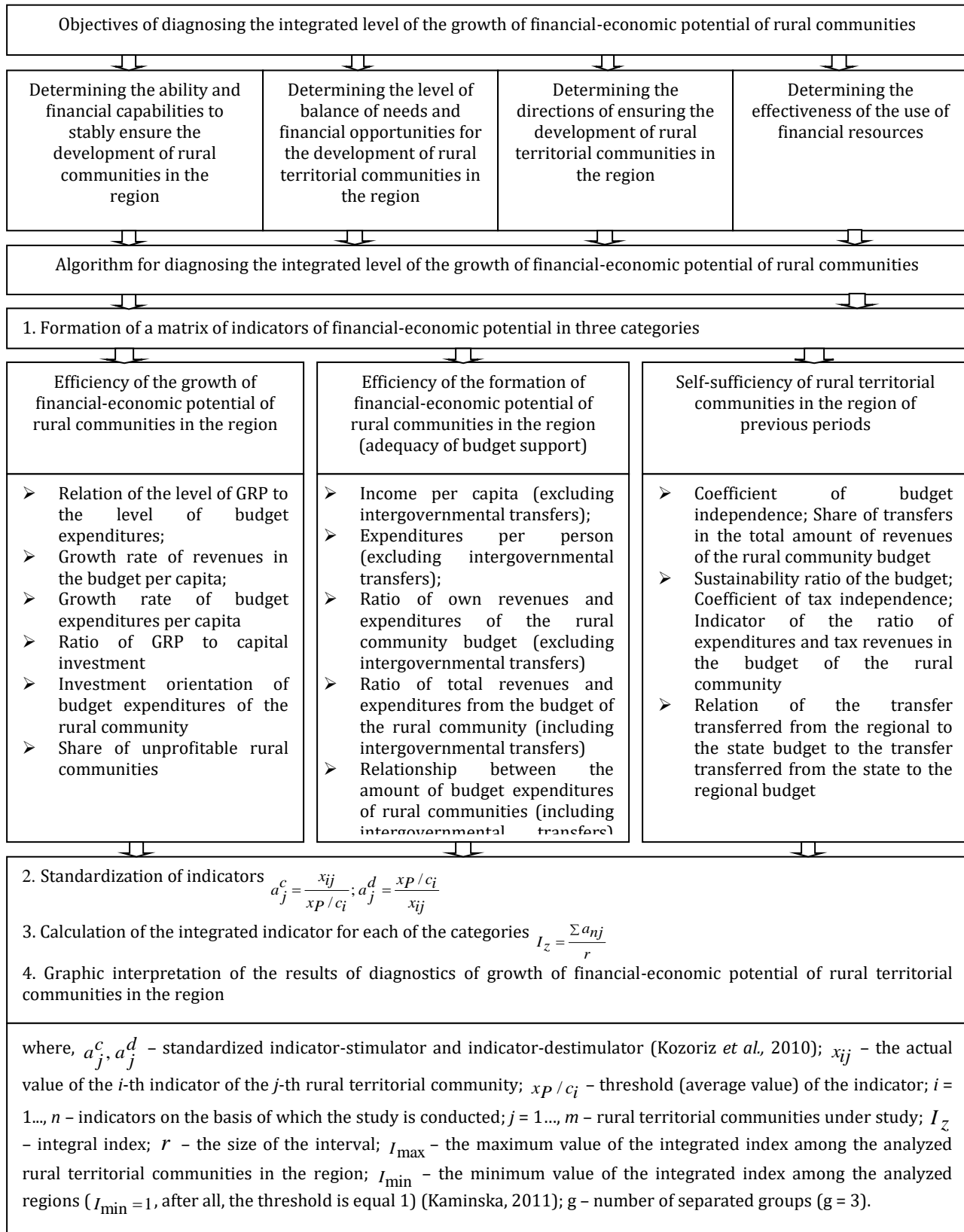


Figure 8. Algorithm for diagnosing the growth of financial-economic potential of rural territorial communities in the regional system.

Given that the volume of inter-budgetary transfers per capita of rural territorial communities sent to the region on average 1.3 times exceeds the amount of own revenues of local budgets of rural communities in Ukraine, so their financial insolvency according to the established distribution of tax revenues and budget security can be discussed.

The reason for this is the loss of the relationship between the amounts of own income and expenditures that need financing. An integrated indicator of the growth of financial and economic potential of rural

territorial communities in the regions of Ukraine allows characterizing their capacity through the level of effectiveness of the financial and economic policy of local governments and the activities of the central government.

According to Figures 10-12, in 2016-2020 the highest level of the growth of financial and economic potential of rural territorial communities, which tends to increase provides Vinnytskyi, Dnipropetrovskyi, Zhytomyrskyi, Kyivskyi and Chernihivskyi regions; the lowest – in Volynskyi, Ternopilskyi, Khersonskyi regions.

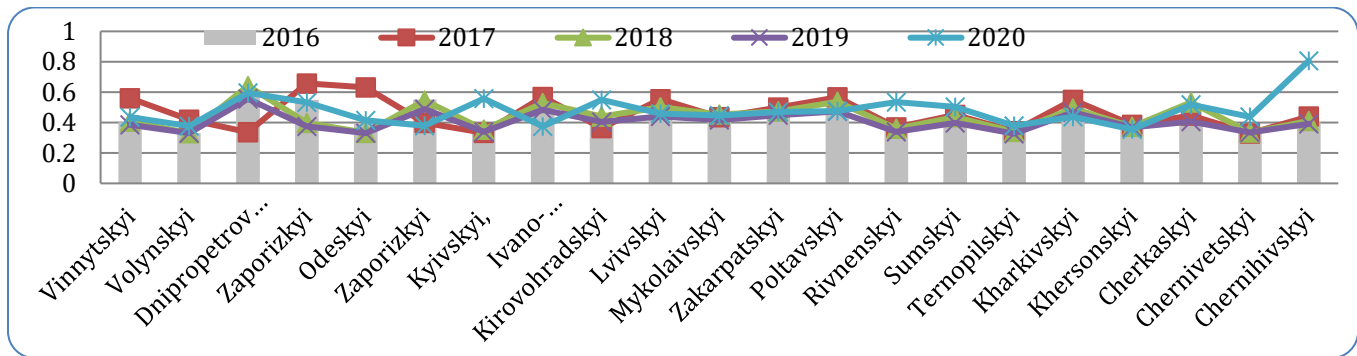


Figure 10. Integrated indicator of self-sufficiency of rural territorial communities in regions of Ukraine for 2016-20.

It should be noted that during the study period the share of rural territorial communities with a low level of ability to grow financial and economic potential decreased (for the period 2016-2020 from 19 to 15 regions). At the same time, in the Carpathian region there is a steady trend of low integrated indicators, namely Ivano-Frankivskyi territory of rural communities is important 0.3756, Zakarpatskyi – 0.469, Lvivskyi – 0.4593 and Chernivetskyi – 0.4388. To find out the reasons for such indicators, it is advisable to analyze the main indicators that have been used to diagnose the level of the growth of financial and economic potential of the regions in previous periods. In 2016-2020, the level

of self-sufficiency of rural territorial communities in the regions of Ukraine is unstable ($I_z \leq 1$). This is evidenced by the low coefficient of budget independence (Figure 11), which shows the dependence of the level of financial capacity of communities from transfers to local budgets from the state budget (determined by the ratio of local budget revenues and local budget revenues taking into account interbudgetary transfers). In 2020, only rural territorial communities of Vinnytskyi, Zaporizkyi, Dnipropetrovskyi, Zhytomyrskyi, Kyivskyi, Sumskyi and Kharkivskyi regions were characterized by sufficient budget support and effective growth of financial and economic potential (Figures 11-12).

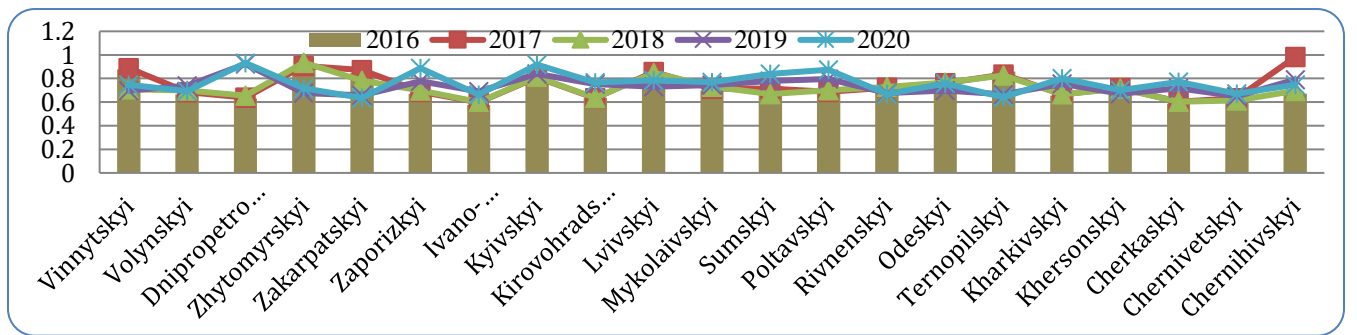


Figure 11. Integral indicator of adequacy of budget support of rural communities in regions of Ukraine for 2016-20.

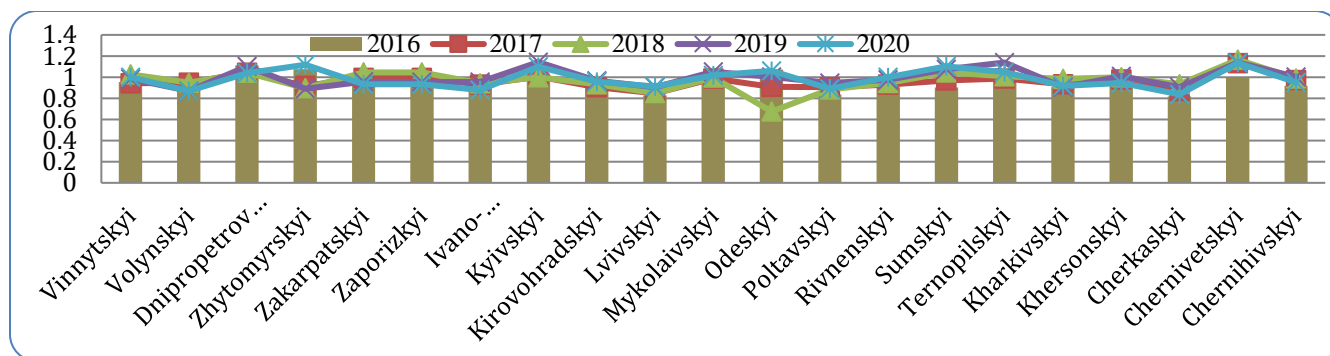


Figure 12. Integral indicator of the effectiveness of the growth of financial and economic potential of rural territorial communities in the regions of Ukraine for 2016-2020.

Thus, rural territorial communities in the regions of Ukraine are characterized by insufficient budget support. The need for financial resources averaged 25.7% in 2020. (ranging from 6.76% in Dnipropetrovskyi region and to 51.60% in Volynskyi region). The highest level of financial capacity (0.2830 and 0.1160) is in the budgets of rural communities of Vinnytskyi and Kyivskyi regions, the lowest – in the Mykolaivskyi region. Instead, 14 regions are characterized by inefficient financial policy – unused financial opportunities of rural communities in 2020 were on average in the regions of Ukraine 8.56% (the highest figure was in the Volynskyi region – 13.1%). Financial opportunities in rural communities of the Carpathian region indicate the complete inefficiency of the formation of financial and economic potential. The budgets of rural communities in all regions of Ukraine are dependent on external sources of funding – the level of dependence in Ukraine varies within 52.42%. The highest level of dependence is in Ternopilskyi (64.7%), Zakarpatskyi (62.1%), Volynskyi (62.41%), Ivano-Frankivskyi (62.44%) and Rivnenskyi (62.01%) regions. It should be noted that the regional policy of the EU member states has traditionally used financial instruments to increase the financial and economic potential of rural territorial communities, which acquire different meanings for different countries. The relative importance of financial instruments changes over time, which are divided into five major groups (Decentralization and Local Democracy..., 2008):

- means of restraining the location of new rural territorial communities in overcrowded regions (densely populated and overcrowded areas of France);
- spatial organization of economic activity of the country (mechanism of state influence on sectoral markets by

- placing agribusiness entities in rural communities (public sector in Italy);
- state financial incentives for rural territorial communities (grants, loans, investments, subsidies, etc.);
- creation of infrastructure on the territory of rural communities (concession mechanisms in the field of transport, applied in the Scandinavian countries);
- “soft” means of stimulating socio-economic development and growth of financial and economic potential of rural territorial communities (creation of an acceptable business environment, support of information networks, consulting, education, research and technical activities).

Financial instruments to stimulate the financial and economic potential of rural communities exist in almost all EU member states.

Financial instruments such as investment grants, interest rate subsidies are used in Belgium, Germany, Greece, Norway, Portugal, and the United Kingdom; tax benefits – in Finland, France, Greece, Italy; labor subsidies – in Austria, Belgium, France, Ireland, Sweden and the United Kingdom; cross-border benefits – in Finland, Sweden in order to interest firms to place production or investment in problem regions (Decentralization and Local Democracy..., 2008). A fairly common financial instrument for implementing regional policy to increase the financial-economic potential of rural communities in the EU is an investment grant – a direct EU financial contribution to support socio-economic projects in rural areas that represent EU interests or contribute to the EU program or policy. The size of the investment grant depends on the objectives and budget of the fund and varies from several hundred to hundreds of thousands EUR (Taxations and Customs...). The authors note that the use of financial instruments to stimulate and develop rural territorial

communities in the regional system of EU member states is somewhat different (Table 5).

Table 5. Financial instruments for stimulation and development of rural territorial communities in the regional system of the European Union member states

EU member states	Financial instruments for increasing the financial-economic potential of rural communities							
	Basic grants	Subsidies	Tax benefits	Employment subsidies	Transport benefits	Regional loans	Special funds	Investment grants
Australia	+	-	-	+	-	-	-	-
Belgium	+	+	-	+	-	-	-	-
Great Britain	+	+	-	+	-	-	-	-
Greece	+	+	+	-	-	-	-	-
Denmark	+	-	-	-	-	-	-	-
Ireland	+	-	-	+	-	-	-	-
Spain	+	-	-	-	-	-	+	+
Italy	+	-	+	-	-	-	+	+
Luxembourg	+	-	-	-	-	-	-	-
Netherlands	+	-	-	-	-	-	-	-
Germany	+	+	+	-	-	+	+	+
Portugal	+	+	-	-	-	-	-	-
Finland	+	-	+	-	+	-	-	-
France	+	-	+	+	-	-	-	-
Sweden	+	-	-	+	+	-	-	-

Source: compiled by the authors according to data (Taxations and Customs...; Chala, 2020)

The transfer method of financial equalization of budgets of rural territorial communities, the instruments of which are direct grants, indirect (tax splitting) transfers, targeted and general transfers, is one-time and fixed-

term, requires counter-financing or does not provide any requirements. In OECD member countries with a high level of decentralization and broad tax autonomy of local governments, this method is almost not used (Table 6).

Table 6. Transfer financing of budgets of rural territorial communities in OECD member countries

OECD member country	Type of transfers	Alignment form	Dependence on transfers	The share of transfers in the budget revenues of rural communities
Poland	Target (non-target)	Vertical	High	49.3
Norway	Target	Horizontal	Average	44.2
Portugal	Non-target	Vertical	Low	28.1
Great Britain	Target	Vertical	High	68.6
Sweden	Target	Vertical	Low	28.7
Denmark	Target	Vertical	High	58.2
Finland	Target	Vertical	Low	30.3
Germany	Target (non-target)	Vertical	Average	36.1
Austria	Target	Vertical	High	61.9
Switzerland	Target	Vertical	Low	11.2
Italy	Target	Vertical	Average	39.3
Spain	Target	Vertical	High	56.4
Canada	Target	Vertical	High	47.3

Source: compiled by the authors according to data (Taxations and Customs...; Chala, 2020)

In European countries, the source of filling the resource base of the budget of rural communities are taxes that account for more than 70% of total revenues, in particular due to the mechanisms of property taxation. Thus, the share of property tax in the tax revenues of the

budget of rural communities in the UK is from 99%, in France and Spain – to 30-40%. Powerful potential has income tax (both individual and corporate). In Germany, the source of budget revenue for rural communities is the removing of VAT.

The share of non-tax revenues varies on average from 10% to 30%. In Belgium it is slightly higher 30%, in the USA – 27%, in Sweden – 15%, Austria and in Great Britain – 14% (Taxations and Customs...; Chala, 2020). According to the methodological approach to assessing the determinants of the growth of financial and economic potential of rural territorial communities in the implementation of legislative initiatives for the implementation of regulatory procedures and implementation of European directives (principles), the

forecasted integrally normalized index for the “Normative-legal (formal official)” component is calculated and the most active regions of Ukraine are singled out – Vinnytskyi, Lvivskyi, Zaporizkyi, Dnipropetrovskyi, Cherkaskyi and Zhytomyrskyi regions (Figure 13). With the resource base of the leading regions and the introduction of the latest rules of economic growth of rural communities on their territory, it allows them to join the developed European and world markets.

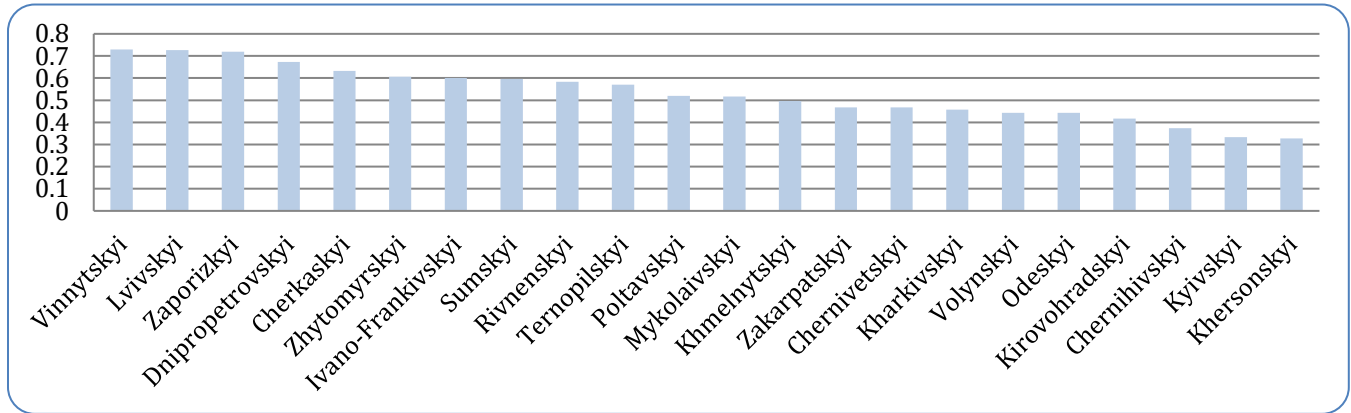


Figure 13. Forecast integrally normalized index of the growth of financial-economic potential of rural territorial communities in the regions of Ukraine according to the “Normative-legal (formally official)” component for 2021-22.

The projected integrally normalized values of inclusion of the growth of financial-economic potential of rural territorial communities on “Informal institutional” component (business reputation and climate, mutual relations, financial capacity, joint work, communications between community representatives in the region) are given in Figure 14. Thus, the projected state of the informal institutional component of the financial-

economic potential of rural territorial communities in the regional system of Ukraine is characterized by significant divergences. Only Vinnytskyi region provides growth of financial-economic potential of rural communities above average; Khmelnytskyi and Poltavskyi regions have below-average growth rates, but twice as low as in the Ivano-Frankivskyi region; all other regions have low-capacity growth.

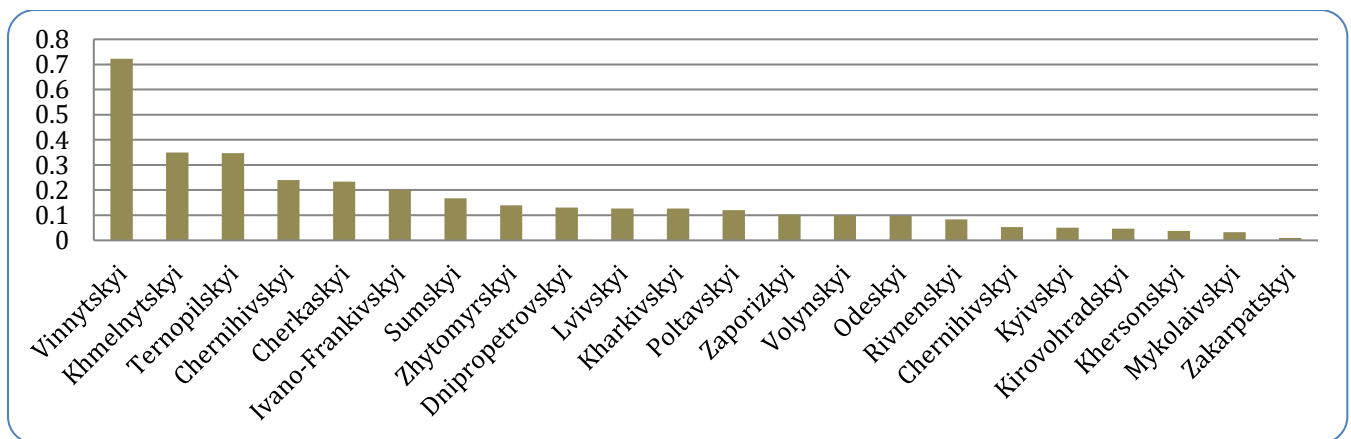


Figure 14. Forecast integrally normalized index of the growth of financial-economic potential of rural territorial communities in the regions of Ukraine according to the “Informal Institutional” component for 2021-2022.

Forecast integrally normalized values of the growth index of financial-economic potential of rural communities according to the component “Institutions

of socio-economic development in decentralization”, which contribute to the effective economic growth of regions in decentralization, are shown in Figure 15.

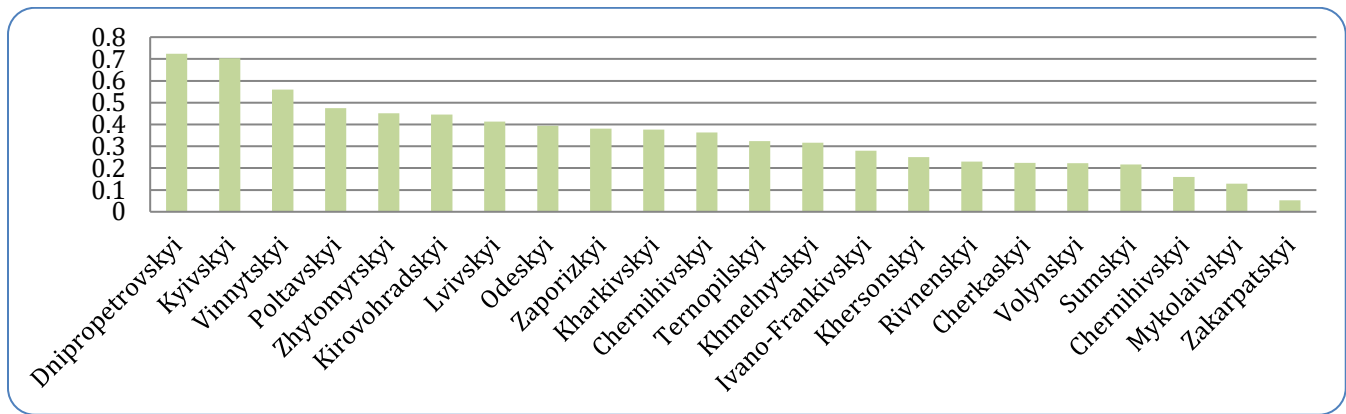


Figure 15. Forecast integrally normalized index of the growth of financial-economic potential of rural territorial communities in the regional system of Ukraine according to the component “Institutions of socio-economic development in the conditions of decentralization” for 2021-2022

The quality of institutions of socio-economic development in the context of decentralization as part of ensuring the growth of financial-economic potential of rural communities in Ukraine is characterized by significant divergences and the absence of leading regions. Dnipropetrovskiy and Kyivskiy regions have values of the forecast integrated index above the average; such regions as Vinnitskiy, Poltavskiy, Zhytomyrskiy and Kirovohradskiy are of medium importance, and Mykolaivskiy and Zakarpatskiy regions are of low importance. Forecast normalized values of indicators for the “Financial and budgetary” component

(the presence of a system of efficient allocation and use of financial and budgetary and other stock resources), are shown in Figure 16.

Thus, ensuring the growth of financial-economic potential of rural communities will allow the Vinnitskiy region-leader to develop at a sufficient level, due to the presence of a significant resource base capable of bringing revenues to the community budget. Odeskiy and Mykolaivskiy regions are characterized by a higher average level of the growth of financial and economic potential of rural communities, Khersonskiy region – a average level.

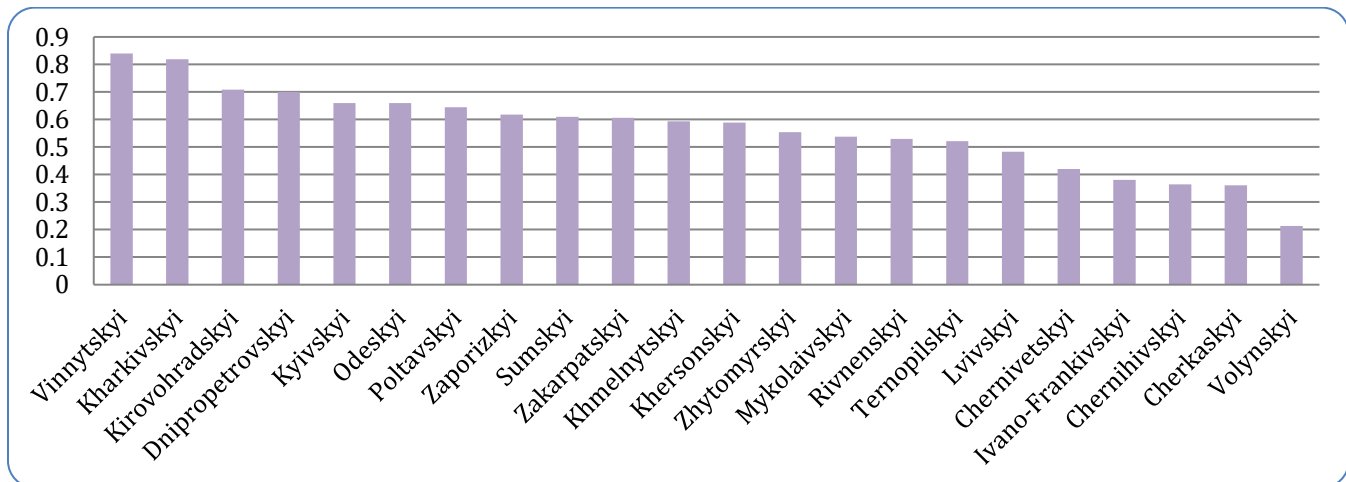


Figure 16. Forecast integrally normalized index of the growth of financial-economic potential of rural territorial communities in the regional system of Ukraine according to the “Financial and budgetary” component for 2021-2022.

Forecast integrated normalized values of the growth of financial-economic potential of rural communities on the component “Functional basis” (the presence of a developed and capable financial support system capable

of effectively reproducing economic resources on the basis of viability, sustainability as an economic foundation for economic development in the region) are presented in Figure 17.

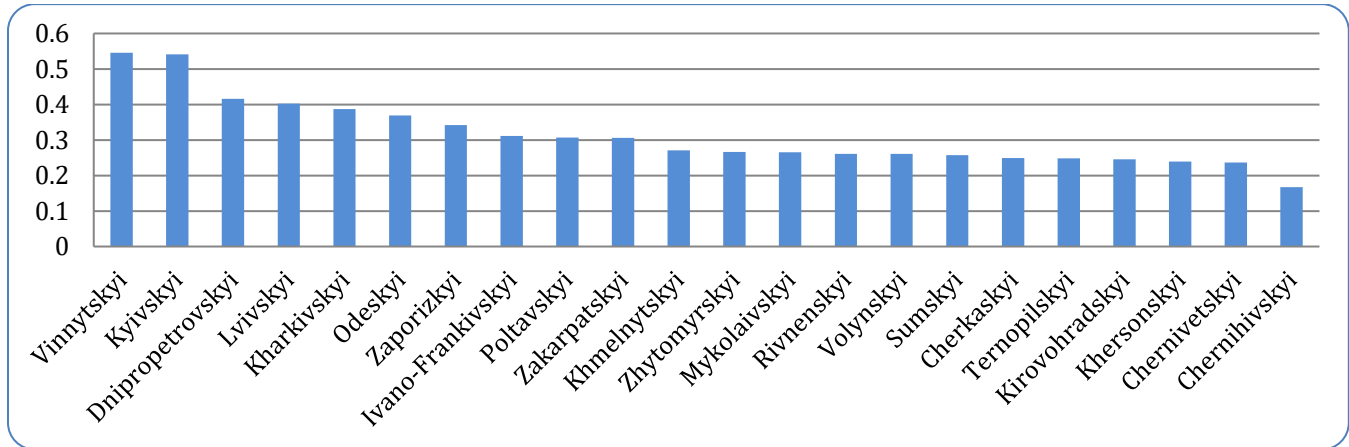


Figure 17. Forecast integrally normalized index of the growth of financial-economic potential of rural territorial communities in the regions of Ukraine by component “Functional basis” for 2021-2022.

The highest projected indicators of the development of the functional basis for the growth of financial-economic potential of rural territorial communities are typical in those regions of Ukraine that have a high place in the rural agglomeration, as their formations are more balanced in terms of economic growth. Accordingly, the development of the functional basis, from the standpoint of sustainable development distinguishes their highest locations. However, the value of the forecast integrated

index indicates a relatively low complex balance of indicators (interrelated economic, social and environmental components of the functional basis in the integrated index do not exceed the level – 0.55 for the leading regions (Vinnytskyi and Kyivskyi regions). The general forecast integrally normalized index of the growth of financial-economic potential of rural territorial communities on set of components within the regional system of Ukraine is presented in Figure 18.

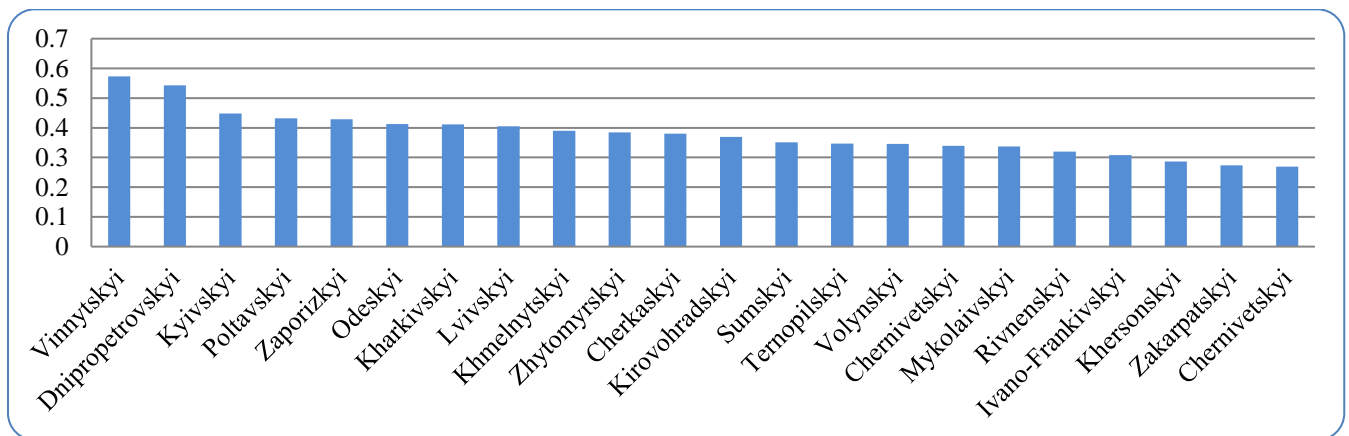


Figure 18. Forecast integrally normalized index of the growth of financial and economic potential of rural territorial communities in the regional system of Ukraine on the set of components for 2021-2022.

Thus, in the regions of Ukraine there is an average and low level of the growth of financial-economic potential of rural territorial communities. However, the greatest degree of its growth is observed in Vinnytskyi,

Dnipropetrovskyi and Kyivskyi regions, which occupy I, II and II place in the ranking, respectively. This indicates a sufficiently developed destination of industrial complexes and agriculture in the regions, which have a

significant functional basis for the intensification of economic development and the location of rural communities.

CONCLUSIONS

Thus, local governments in the EU and developing countries have the tools to ensure the economic development of the territory and the formation of a stable level of financial-economic potential of rural communities, which allows them to effectively perform their functions to stabilize economic development by determining the need for financial and budgetary support of rural territorial units, which would meet certain requirements and conditions of state development. The transfer to the local level of authority should be accompanied by the transfer of appropriate financial resources. Effective local self-government within the given powers and resources must function to ensure the economic development of rural areas, attract investment resources and preserve and develop business structures operating in the territory. The rural agglomeration should provide organizational, legal, analytical, informational and logistical support to the activity. Therefore, from the standpoint of effective growth of financial-economic potential of the rural agglomeration, it is necessary to ensure effective interaction with other participants in the intergovernmental and business environment provided the maximum use of funds for the formation of their functional basis in the long run. In addition, cooperation with business entities should be an incentive to increase the financial-economic potential of rural communities. This is a step towards creating a positive investment environment for the communities and ensuring their financial capacity. The main instruments of the rural territorial community in this case should be local taxes, fees, and powers in the field of land management.

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