Assessment of Bulgarian municipalities in providing basic services and shaping the local business environment

Hodnotenie poskytovanie základných služieb a formovania miestneho podnikateľského prostredia bulharskými municipalitami

Nikolay Tsonkov[a*]

[a] University of National and World Economy, ORCiD: https://orcid.org/0000-0002-9169-6511

Abstract: Socio-economic processes in Bulgaria in recent decades have led to demographic collapse. This collapse is expressed in the reduction and concentration of the population in certain places. This process leads to the shrinkage of cities, with small municipalities being the most affected. Normally, after the next census, an inventory of the localities should be made in terms of the basic services they provide to the population and the implementation of territorial development policies, including forming a favorite local business ecosystem. The author's main purpose is to evaluate Bulgarian municipalities' performance, which is the key to establishing good living conditions and a friendly business ecosystem for investment attractiveness. In this regard, the author proposes the regional investment index for municipalities' evaluation. The present research is completed with a sociological survey on the attitudes of businesses, the population, branch organizations, and other civil structures towards the state and the functioning of municipalities in the Bulgarian state. The regional investment index applies to two Bulgarian municipalities (Balchik and Pomorie) in Bulgaria's Black Sea region. With the help of the assessment model, the conditions and business environment in the municipalities can be measured, individual municipalities can be compared and it has practical-applied value for local authorities and citizens as well as for the state and business.

Key words: Municipality. Local business ecosystem. Basic services. Territorial capital. Regional investment index.

JEL Classification: R5. R58.

---

[*] Corresponding author: Nikolay Tsonkov
University of National and World Economy, 1700 Bulgaria, Sofia, 19 "8th December" Str.
email: n.tzonkov@unwe.bg.

Introduction

In modern Bulgaria, the municipality, or its varieties (with different names in certain periods) is the basic administrative-territorial unit. The municipality is responsible for establishing good living conditions, a friendly business ecosystem, and territorial development (Angelova, 2020). The main institution which conducts the policy of self-government is the municipality. The basis and principles of local self-government are contained in the basic state document - the Constitution. Of course, the municipality as the basic unit of local government is guided by the constitutional principles relating to the separation of powers. The main role of Bulgarian municipalities is to establish basic conditions for living, working, and places and environments for spending free time.

In recent years we find a deficit in research focusing on the functioning of municipalities in Bulgaria. Due to the fact that most of the Bulgarian municipalities are losing their population, they can hardly perform their basic functions and provide basic services to their inhabitants (electricity, water, public transport, public works, mobility, etc.) (Preshlenova, 2021). Due to this reason, the analysis shows big differences in Bulgarian municipalities (Velinov, 2022). These circumstances provoked the author's research interest and the need to investigate the state of municipalities. At the same time, the logical question arises of how Bulgarian municipalities can be assessed and compared. That is why the author proposes a model for analysis and evaluation of the municipalities in Bulgaria by applying the regional investment index developed by the author and conducting a sociological survey of different groups of society about their attitudes towards the basic municipal services provided. In the presentation, the author will attempt to discuss and justify the use of indicators that form the regional investment index. The index has been approbated and applied to two municipalities in Bulgaria located on the Black Sea coast - Balchik and Pomorie. On the other hand, the developed regional investment index allows for the assessment of the territorial capital, potential, and ability to attract investments..

1. Theoretical background

Regional communities and municipalities are an essential component of any state (Tsonkov, 2019). Collectively, regional communities, local government, and state policy guide the development of the economy of a particular territory. Their proper functioning creates the conditions for the development of the territory. As we know, within each municipality the basic elements are the natural complex (the territory), the regional economy (the local economy), and the regional community (the population). The state and the municipalities have the main role to

manage the three systems and to form the conditions for their proper interaction and functioning. All of this can be expressed as an outcome by measuring the effectiveness of municipal governance and policy. We could approach this in different ways. One relates to the evaluation of individual urban governance systems such as transport, utilities, public works, housing, economy, waste management, etc. Another one includes measuring administrative capacity, the effectiveness of policies implemented, the efficiency of administration, services provided, and local regulatory regimes.

In the literature, we can find various studies related to the evaluation of municipalities. A similar study is by the OECD (OECD, 2021), which analyses and evaluates Polish municipalities. The authors define the size and population of municipalities as the main criteria. The mentioned study is complemented by the development of a questionnaire and a survey of local communities. The main challenges for the development of municipalities and local self-government are the lack of leadership, lack of a stable legislative framework, lack of financial resources, lack of the effects of policies, etc. In the study under review, we see much in common with the author's sociological survey and the identified deficits in Bulgarian municipalities.

The study conducted in Slovakia is similar (Boďa, Cole, Murray Svidroňová, Gubalová, 2022). In it, the authors systematize much of the available theory related to the functioning and development of municipalities. The basis of their study is the evaluation of small and medium-sized municipalities in Slovakia according to selected criteria. The main groups of criteria used to evaluate Slovak municipalities are demographic structure, unemployment, the concentration of the Romano population, road network, commercial centers, health care, schools, and culture.

In the Bulgarian scientific literature, we find a variety of studies related to Bulgarian municipalities. Some economists analyze the factors of financial stability of rural municipalities in Bulgaria (Aleksandrova-Zlatanska, 2019). Through the authors' proposed model for assessing municipalities, their financial management and stability can be analyzed. The same authors propose a model for assessing fiscal discipline in Bulgarian municipalities (Aleksandrova-Zlatanska, 2020). Other researchers assess Bulgarian municipalities by exploiting the GIS platform. Such is the research where the authors map and evaluate ecosystems and the services they offer (Nedkov et al., 2018). Other authors also use GIS to investigate ecosystem services in mountainous areas, analyzing the municipality of Karlovo (Koulov et al., 2017). Another major strand dedicated to measuring the public services delivered by municipalities focuses on the digitization of these processes and the effectiveness of city e-government platforms. In this direction, we can measure the development of e-government and the public services it provides (Zhao, 2010). According to some authors, the evaluation of e-

services in municipalities is related to the structure of the public administration (Di Giulio, Vecchi, 2023). Each administrative structure is different, and each must be approached individually when digitalizing processes and services. We could summarize that the measurement of services provided by municipalities should be analyzed in the context of the new digital economy and the requirements for local governance in the changed environment (Rodríguez Bolívar, 2017).

Generally, regional economic research has an important role in revealing trends and tendencies in the socioeconomic development of regions and countries. Objectively speaking, there is a direct link between national and regional economic indicators and local economic development, including regional competitiveness (Capello, 2009). In turn, regional competitiveness is a driver for regional economic growth and attracting foreign direct investment. Therefore, there is a need to strengthen applied regional economic research and observation to uncover the factors and interlinkages between regional economies. Such research will highlight the drivers of growth and competitiveness that lead to increased investment attractiveness of regions.

As a result, it is necessary, for example, to examine the regions and, particularly, the municipalities in Bulgaria in terms of their investment attractiveness and capacity to attract foreign direct investment. In this way, a regional investment index can be formed based on groups of indicators that are ranked in terms of weight and importance.

There are attempts in the world of scientific literature to apply such complex indices to the needs of regional studies. One study analyses the state of regions in Indonesia, and the authors assume that the investment attractiveness of regions depends on two indices. In essence, it can be assumed that the regional investment index (RII) adopted in this study combines two sub-indices, a regional investment efficiency index, and a regional investment potential index. These two indices are used by Indonesian scholars. The former shows how investment attractiveness is calculated relative to the size of the economy. The second shows the factors that are expected to affect a region's attractiveness for investors, such as regional output, per capita income, inflation, exports, imports, unemployment, regional minimum wage, infant mortality, life expectancy, and others (Kusumastuti, Alhempi, 2020).

The second study, which is relevant to the researched topic, also analyses the state of regions. It can be assumed that in the Regional Investment Climate Index thus developed there are some similarities with the Regional Investment Index proposed in this paper. The Regional Investment Climate Index was developed jointly by the Boston Consulting Group and the

Agency for Strategic Initiatives of the Russian Federation. It includes 44 factors and is designed to help examine individual countries and regions (Nikitin, Chupsheva, Kustarin, 2018).

In essence, business attractiveness indices have been a key tool in international economic development for decades. Analysts and researchers working in the field of economic development around the world find such indices useful in determining ways to improve the investment climate of their countries. However, most of these indices have a critical limitation: they compare results across countries, even though many of the most important economic considerations are local in nature. The fact is that countries rarely grow all at once - often one region can be decades ahead of another part of the country.

To provide a more accurate picture that considers the specificities of different regions, the Boston Consulting Group, and the Russian Agency for Strategic Initiatives (ASI) have developed a tool to compare the investment climate in different regions of a country. With the help of the index, they have developed to analyze the investment climate, experts can obtain information on regional development, including the factors that are important for development. Such research models help the government find the most correct and adequate solutions concerning improving the investment attractiveness of the country.

Besides these two studies, other attempts to assess investment attractiveness can be found. In such studies, the authors propose a framework of indicators to measure the regional investment environment and attractiveness (Vershinina, Zhdanova, Maksimova, 2015). The main indicators are market potential, financial capacity, labor potential (population of working age, number of the population engaged in science, population with higher education, etc.), infrastructure capital, and level of regional investment risk.

We can also find studies in Bulgaria that measure the investment capacity of municipalities (Kalcheva, 2015). In the mentioned study the authors use comparative analysis, and historical and logical analyses to analyze municipalities in the period 2003 - 2014.

2. Material and methods

The study of municipalities requires the use of a network and spatial approach. The basis of the methodology proposed by the author is the development of a model for the assessment of the local environment (including the business ecosystem). This research methodology is based on two main models. One has been applied to municipalities in Russia (Nikitin, Chupsheva, 2018), and the other has been approbated for the analysis and evaluation of municipalities in Slovakia (Boďa, Cole, Murray, Svidroňová, 2022). The methodology for forming the Regional Investment Climate Index focuses on four key business areas: regulatory

environment; institutions that support business; infrastructure and resources; and the strength of small and medium-sized businesses.

Each strand examines several individual parameters related to state and local regulation of business conditions. For example, such regulatory instruments include business registration procedures, the effectiveness of governmental and nongovernmental business support instruments, the quality and availability of labor, and the maturity of small businesses in the region. In practice, the model includes 44 indicators, combining statistics and data from surveys and expert opinions.

In the above-mentioned research in Russia, we can distinguish two stages. The first covers the evaluation of indicators. The second stage is also important because it concerns the capacity of central and local institutions to manage the process not only of attracting investment but also of improving attractiveness.

The second model is proposed by authors from Slovakia, who compare municipalities characterized by a population of more than 1 000 people. Their algorithm encompasses 5 stages and is based on the DEA model. The research is based on 115 municipalities with over 1000 inhabitants in the Banská Bystrica region. The model explains measurable aspects in these areas: population structure [PS], unemployment [Un], the concentration of the Romany population [RC], road accessibility [Rd], availability of shopping opportunities [Sh], availability of health care [HC], availability of educational facilities [Sc], availability cultural amenities [Cu] (Boďa, Cole, Murray, Svidroňová, 2022).

According to the author, these two studies are close to the Bulgarian conditions, as they represent a set of many basic indicators (social, economic, demographic, financial, regulatory, etc.). Finally, the two models under consideration assess municipalities and their role in creating a local favorable environment for living, and business and attracting investments much more broadly. Therefore, the author adopts the developed models while adapting them and proposing their own evaluation index. These models are most relevant to the newly changed conditions where each municipality is not only part of the national economy but also part of the global economy. At the same time, the assessment should also establish the territorial sustainability of the municipality by assessing the territorial capital.

The main objective of the author is to assess the state of municipalities and their territorial potential for attracting investment and development through a regional investment index developed by the author and a sociological survey. In this regard, the author's research toolkit is based on the author's proposed regional investment index, which can be used to evaluate municipalities. The methodology is complemented by a sociological survey of the attitudes of

113

different stakeholder groups regarding the state and municipal performance, which reflects on a local business environment and investment attraction.

The present sociological survey is aimed at experts at all levels, representatives of businesses, municipalities, non-governmental organizations (NGOs), industry organizations, and citizens. The survey was conducted online, included 21 questions, and responses were received from 327 respondents. The survey was conducted between 8 and 22 January 2022. Based on the responses to the survey, the author approbates his observations, judgments, conclusions, and concrete proposals that are theoretically grounded.

Measuring the development of regions and municipalities can be done with various indices and indicators. In this case, a regional investment index will allow for establishing the effectiveness of the applied state and local policy, including the regulatory one. The results of the sociological survey and the developed model for assessing the local ecosystem express the quality of living and working conditions and, of course, the attractiveness of the region (territory).

Following the example of the monitoring and evaluation models developed in Russia and Slovakia, the paper proposes a similar model for measuring the investment attractiveness of Bulgarian municipalities. Thus, the proposed Regional Investment Index aims not only to assess the investment attractiveness but also the current state of the business environment based on groups of indicators.

The criteria groups are as follows:

1. demographic - population numbers, types of demographic structure, etc.;
2. urbanization - number of dwellings, density, urbanization coefficient, number of settlements, types of territories;
3. infrastructure - accessibility, number of dwellings, level of development, availability of transport modes, and adjacent infrastructure;
4. economic - investment in tangible fixed assets, foreign direct investment, European funds, sales revenue, output, number of firms, average wages;
5. socio-economic - kilometers of roads to population, kilometers of water supply and sanitation (WSS) to population, access to drinking water and sanitation, electrification, etc., budget revenue to population, time to connect to electricity, WSS and other networks, cost of electricity, water, land;
6. settlement-administrative structure, rank and role of the municipality - number of outsourced central government institutions, the rank of the municipality, state transfer,

local tax and fee revenues, building permit fees and issuance time, number of municipal employees per 1,000 inhabitants;

7. natural-resource and environmental - availability of resources, location of the capital and important economic and transport centers, geographical features.

Many of these indicators are directly related to the policies pursued by the state in the field of economy and regulation of socio-economic processes at the local level. They are reflected in the improvement of the business environment, regional competitiveness, and investment attractiveness of the regions. The aggregate result of these and effective state policy on regulatory impact (regulation) leads to regional economic growth and socio-economic development of the regions.

Such a study could be carried out using a short questionnaire aimed at government departments, companies, and industry organizations. The survey should include a ranking of groups of criteria covering the territorial, social, economic, and socio-economic ones, as well as other groups of criteria concerning the location, infrastructure provision, size, and functions of the municipal center within the territorial-administrative structure of the country. On this basis, representatives of businesses, municipalities, branch organizations, and others should rank them in order of importance. In this way, different groups of criteria will acquire different weights in the complex regional investment index of municipalities that will be formed.

3. Results and discussion

The last census showed serious demographic and territorial disparities in Bulgaria. Many of the municipalities are experiencing serious difficulties in providing a favorable environment for living, working, and doing business. It is therefore important to analyze the state and potential of Bulgarian municipalities to attract investment and population, which is a prerequisite for socio-economic development.

In this regard, the author proposes a simplified model for calculating the index for the municipalities of Balchik and Pomorie. This model is based on five groups of indicators - economy, urbanization, infrastructure and resources, socio-economy, and demography. Each group is characterized by an equal weight in the evaluation of the index, and within the groups of indicators, each of them weights the evaluation of this group respectively. Some of the indicators are grouped and rated on a scale of 1 to 5, and qualitative indicators are also rated on a scale. The extended model will also include an assessment of the regulatory environment, as well as a survey of the local community. The main idea is to calculate the regional investment

index for two municipalities that are of different sizes. In this case, the author compares two cities according to the calculated regional investment index.

Table 1 Demographic group indicators.

Demographic group indicators	Weighting in the assessment	Scale, if applicable 1 to 5	Final evaluation
Population	0.20	19 256 - scale score – 2	2x0.20= 0,40
Age dependency ratio	0.20		55.4 x 0.20 = 11.08
Demographic replacement rate	0.20		1.408 x 0.20 = 0.2816
Demographic arrival rate	0.20		1.73 x 0.20 = 0.346
Natural increase	0.20		0.033 x 0.20 = 0.0066
			12.1142

Source: Author's research.

Grouping of municipalities by population - up to 10 000 people - 1, 10 000 - 30 000 people - 2, 30 000 - 60 000 people - 3, 60 000 - 100 000 people - 4, over 100 000 people – 5.

Table 2 Urbanization group indicators.

Urbanization	Weighting in the assessment	Scale	Final evaluation
Number of newly built dwellings	0.25		23 x 0.25 = 5.75
Population density	0.25		36.73 x 0.25 = 9.18
Number of inhabited places	0.25		22 x 0.25 = 5.5
Number of dwellings to population	0.25		1.42 x 0.25 = 0.355
			20.785

Source: Author's research.

Table 3 Infrastructure and resource group indicators.

Infrastructure and resources	Weighting in the assessment	Scale 1 to 5	Final evaluation
Proximity to a major administrative center and the capital	0.20	2 - arithmetic mean of the estimates of the two distances	2 x 0.20 = 0.40
Types of transport	0.20	3	3 x 0.20 = 0.60
The density of the road network per 1000 km2 to the population	0.20		0.009 x 0.20 = 0.0018
The density of the water system network per 1000 km2 to the population	0.20		0.33 x 0.20 = 0.066
Availability of resources	0.20	3	3 x 0.20 = 0.60
			1.6678

Source: Author's research.

Proximity to an administrative center of higher rank - up to 10 km - 5, up to 20 km - 4, up to 40 km - 3, up to 60 km - 2, and over 60 km – 1.

Modes of transport - depending on the availability of different modes of transport, the rating on the scale ranges from 1 to 5.

Table 4 Economic group indicators.

Economics	Weighting in the assessment	Scale from 1 to 5	Final evaluation
Output to population - 17 455	0.20	3	3x 0.20 = 0.60
Net revenue from sales to population 22 959	0.20	4	4x 0.20 = 0.80
FDI per person 3 921,43	0.20	1	1 x 0.20 = 0.20
Budget revenue to population 778	0.20	2	2 x 0.20 = 0.40
Budget expenditure on population 1 326	0.20	3	3 x 0.20 = 0.60
			2.6

Source: Author's research.

Up to 5 000 BGN/person - 1, from 5000 to 10000 BGN/person - 2, from 10 000 to 20 000 BGN/person - 3, from 20 000 to 30 000 BGN/person - 4, over 30 000 BGN/person - 5

Budget revenue and expenditure per capita - up to 500 BGN/person - 1, 500 - 1000 - 2, 1000 - 1500 - 3, 1500 - 2000 - 4, over 2000 – 5

Table 5 Socio-economic indicators.

Socio-economic indicators	Weighting in the assessment	Scale	Final evaluation
Unemployment	0.16		3.8 x 0.16 = 0.608
Municipal waste	0.16		3.24 x 0.16 = 0.5184
Price current	0.16		0.1009 x 0.16 = 0.0161
Price water	0.16		1.925 x 0.16 = 0.308
Price land	0.16	5 (117 BGN)	5 x 0.16 = 0.8
Average wage per hour	0.20	5 (50.70 BGN)	5 x 0.20 = 1.00
			3.2505

Source: Author's research.

The indicators of land price and average hourly wage can also be assigned on a scale from 1 to 5. For the land price indicator, we can define the following scale 1 - price up to 10 - 30 BGN per m2, 2 - up to 30 - 50 BGN per m2, 3 - up to 50 - 100 BGN per m2, 4 - 100 - 200 BGN per m2, 5 - over 200 BGN per m2. The average wage per day can also be scaled as 1 - up to 10 BGN, 2 - 10 - 20 BGN, 3 - 20 - 30 BGN, 4 - 30 - 50 BGN, and 5 - over 50 BGN.

The final regional investment index score of Balchik Municipality is formed as follows:

− Demographic indicators weight in the estimate 0.30 - 12.1142 x 0.30 = 3.6343

− Urbanization weight in the estimation - 0.20 - 20.785 x 0.20 = 4.157

− Infrastructure and resources - 0.20 – 1.6678 x 0.20 = 0.333

− Economic indicators - 0.20 - 2.6 x 0.20 = 0.52

− Socio-economic – 0.10 – 0.10 x 3.2505 = 0.32505

The aggregate index score for Balchik Municipality is 8.9694.

The final score is a complex estimation of the indicator group scores that has a different weight in the final score. The weight of every group is formed according to the author's opinion of the importance of every indicator group.

Calculation of the Regional Investment Index of Pomorie Municipality:

Table 6 Demographic group indicators.

Demographic group indicators	Weighting in the assessment	Scale, if applicable 1 to 5	Final evaluation
Population	0.20	27 791 - scale score – 2	2x0.20= 0.40
Age dependency ratio	0.20		54.9 x 0.20 = 10.98
Demographic replacement rate	0.20		1.46 x 0.20 = 0.292
Demographic arrival rate	0.20		0.244 x 0.20 = 0.0488
Natural increase	0.20		0.528 x 0.20 = 0.1056
			11.8264

Source: Author's research.

Grouping of municipalities by population - up to 10 000 people - 1, 10 000 - 30 000 people - 2, 30 000 - 60 000 people - 3, 60 000 - 100 000 people - 4, over 100 000 people - 5.

Table 7 Urbanization group indicators.

Urbanization	Weighting in the assessment	Scale	Final evaluation
Number of newly built dwellings	0.25		75 x 0.25 = 18.75
Population density	0.25		67.26 x 0.25 = 16.815
Number of inhabited places	0.25		17 x 0.25 = 4.25
Number of dwellings to population	0.25		1.42 x 0.25 = 0.355
			40.17

Source: Author's research.

Table 8 Infrastructure and resource group indicators

Infrastructure and resources	Weighting in the assessment	Scale 1 to 5	Final evaluation
Proximity to a major administrative center and the capital	0.20	2.5 arithmetic mean of the estimates of the two distances	2.5 x 0.20 = 0.50
Types of transport	0.20	4	4 x 0.20 = 0.8
The density of the road network per 1000 km2 to the population	0.20		0.185 x 0.20 = 0.037
The density of the water system network	0.20		0.184 x 0.20 = 0.066

Infrastructure and resources	Weighting in the assessment	Scale 1 to 5	Final evaluation
per 1000 km2 to the population			
Availability of resources	0.20	4	3 x 0.20 = 0.80
			2.203

Source: Author's research.

Proximity to an administrative center of higher rank - up to 10 km - 5, up to 20 km - 4, up to 40 km - 3, up to 60 km - 2, and over 60 km – 1.

Modes of transport - depending on the availability of different modes of transport, the rating on the scale ranges from 1 to 5.

Table 9 Economic group indicators.

Economics	Weighting in the assessment	Scale from 1 to 5	Final evaluation
Output to population – 6 919.90	0.20	2	2x 0.20 = 0.40
Net revenue from sales to population 9 093.95	0.20	2	2x 0.20 = 0.40
FDI per person – -338.62	0.20	0	1 x 0.20 = 0
Budget revenue to population 1 106.54	0.20	3	2 x 0.20 = 0.60
Budget expenditure on population 791.39	0.20	2	3 x 0.20 = 0.40
			1.8

Source: Author's research.

Up to 5 000 BGN/person - 1, from 5000 to 10000 BGN/person - 2, from 10 000 to 20 000 BGN/person - 3, from 20 000 to 30 000 BGN/person - 4, over 30 000 BGN/person – 5.

Budget revenue and expenditure per capita - up to 500 BGN/person - 1, 500 - 1000 - 2, 1000 - 1500 - 3, 1500 - 2000 - 4, over 2000 – 5.

Table 10 Socio-economic indicators.

Socio-economic indicators	Weighting in the assessment	Scale	Final evaluation
Unemployment	0.16		3.89 x 0.16 = 0,6224
Municipal waste	0.16		5 x 0.16 = 0,8
Energy price	0.16		0.1009 x 0.16 = 0,0161
Price water	0.16		8.321 x 0.16 = 1.331
Price land	0.16	5 (160 BGN)	4 x 0.16 = 0.64
Average wage per hour	0.20	4 (41.46 BGN)	4 x 0.20 = 0.80
			4.2095

Source: Author's research.

The indicators of land price and average hourly wage can also be assigned on a scale from 1 to 5. For the land price indicator, we can define the following scale 1 - price up to 10 - 30 BGN per m2, 2 - up to 30 - 50 BGN per m2, 3 - up to 50 - 100 BGN per m2, 4 - 100 - 200 BGN per m2, 5 - over 200 BGN per m2. The average wage per day can also be scaled as 1 - up to 10 BGN, 2 - 10 - 20 BGN, 3 - 20 - 30 BGN, 4 - 30 - 50 BGN, and 5 - over 50 BGN.

The final regional investment index score for Pomorie Municipality is formed as follows:

−	Demographic indicators weight in the estimate 0.30 – 11.8264 x 0.30 = 3.5479

−	Urbanization weight in the estimation - 0.20 – 40.17 x 0.20 = 8.034

−	Infrastructure and resources - 0.20 – 2.203 x 0.20 = 0.4406

−	Economic indicators - 0.20 – 1.8 x 0.20 = 0.36

−	Socio-economic – 0.10 – 0.10 x 4.2095 = 0.42095

The aggregate index score for Pomorie Municipality is 12.80345.

In this way, the regional investment index for each Bulgarian municipality can be calculated by comparing them with each other. In this way, investors can get a real assessment of each municipality's opportunities, the local government's efficiency, and where to direct their resources. As we can see in the calculated indexes, Pomorie Municipality is characterized by a bigger index score. In this sense, Pomorie has a bigger potential than Balchik Municipality.

For the completion of the present research, the author conducted a sociological survey. The survey is aimed at experts from all levels, representatives of businesses, municipalities, NGOs, industry organizations, and citizens. It was conducted online between 8 January and 10 February 2022 and 327 respondents participated. The questionnaire is directed to the evaluation of the citizens´ attitudes toward municipal services provision.

The respondents (Figure 1) were distributed as follows: 114 business owners, 50 experts, 16 municipal representatives, 21NGO representatives, 5 industry representatives, and 111 civil society representatives. Regarding their main activity, 57 of the respondents are engaged in trade (Figure 2). Of all respondents, 20 work in the construction sector, and for another 12 the main activity is tourism. Eight of the respondents work in the energy sector, 66 are in the education sector, 33 individuals work for the state and local governments. Nine respondents are engaged in agriculture and 28 work in manufacturing. There are 93 respondents working in the service sector and 48 respondents are engaged in other activities.
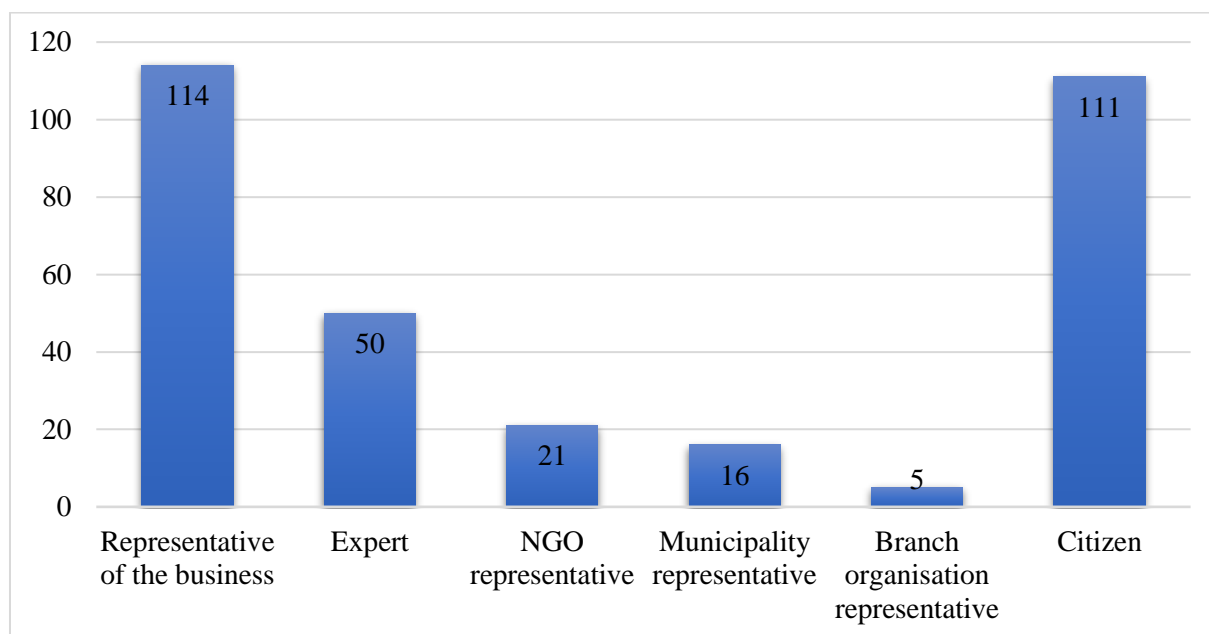
Figure 1 Distribution of respondents according to their job title and professional field
Source: Author's Research.

As Figure 2 shows, the distribution of respondents by main activity fully reflects the sectoral structure of the Bulgarian economy. In this sense, the sample expresses the economic picture in Bulgaria, covering the three sectors of the national economy.
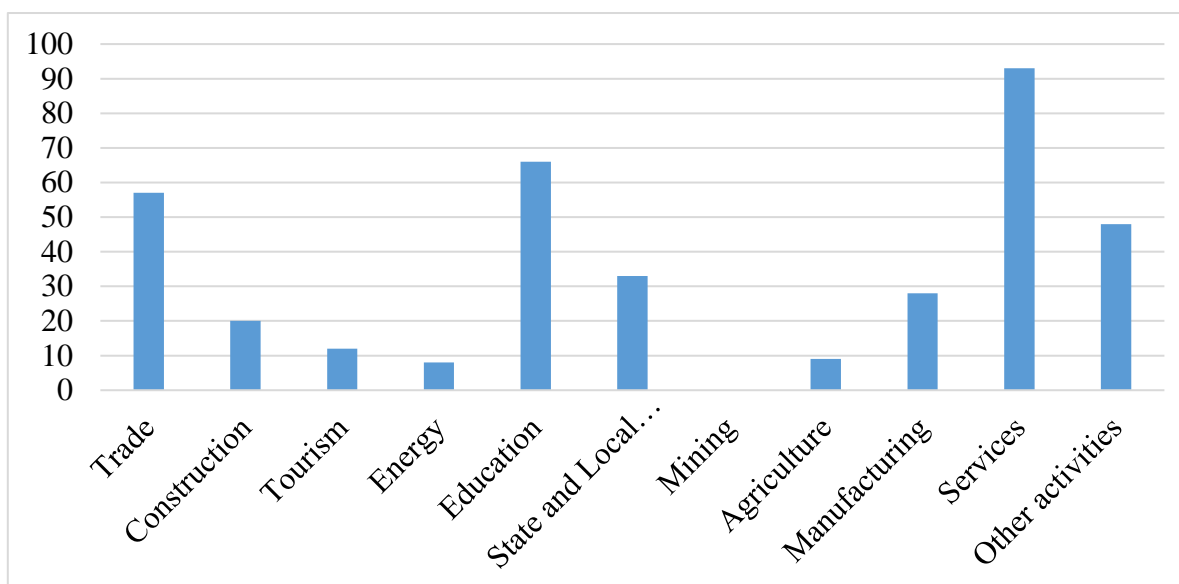
Figure 2 Distribution of respondents by main economic activity.
Source: Author's research.

The formation of a specific business environment within the borders of Bulgarian municipalities depends largely on several factors. First, the quality of governance by the local administration and the regulatory and other imposed policies influences the development of the territory. Second, the government policies pursued in the same territory also have an impact on the regional economy. Therefore, it is important to examine several administrative regimes and services at the national and local levels that shape the local ecosystem. We can find confirmation of these assumptions in Schragger's book (Schragger, 2016). According to the author, the creation of a specific environment and its regulation by city governments depends on the process and degree of decentralization in the state. In this sense, public administration at the regional and local levels can influence the socio-economic environment. In Bulgaria, financial decentralization has not been fully completed but, at the same time, the powers of local governments are large and the policies and regulations they implement directly influence the local economic climate. Consequently, the territorial potential, capital, and ability to attract investment and population to the municipality depend on it. At the same time, we should argue for the relationship between the functioning of the local public administration and the regional economy and environment (Zheng, Warner, 2010; Nguyen, Mickiewicz, Du, 2018).

In recent years, Bulgarian governments have devolved several powers to municipalities, but unfortunately, they are not financially guaranteed. Hassan Azis presents his views on these issues, making a comparative analysis of the local government system in Bulgaria, Greece, and Turkey (Azis, 2020). He argues that the strengthening of municipalities as autonomous social communities is limited and hindered by several difficulties. The sociological survey also shows

the lack of real financial decentralization (Figure 3). According to the answers of the respondents, 147 of them say that the main problem is insufficient financing of local budgets. As we know, every year the state makes transfers to municipalities to cover their capital expenditures and activities delegated to them by the government. However, the funds in the municipalities do not correspond with the activities that the state has transferred funding to the local governments.
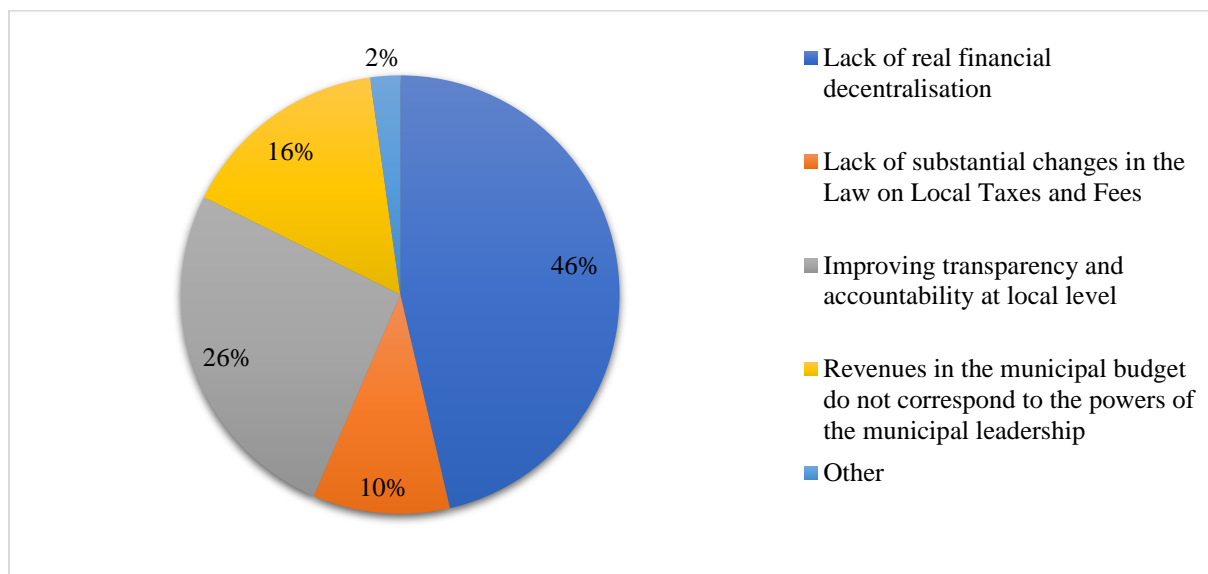

Figure 3 Problems facing decentralization in Bulgaria.
Source: Author's research.

Of the respondents, 32 pointed to the absence of significant amendments to the Local Taxes and Fees Act as a major problem. Another 82 respondents identified improving transparency and accountability at the local level as the main problem facing decentralization. According to 49 respondents, the problems of lack of real decentralization are due to the lack of functional coherence and correspondence of funds in the municipal budget with the powers of local authorities.

Regional and local deconcentration in Bulgaria has been successful. However, municipalities do not have sufficient resources to implement their policies. Regional deconcentration encompasses service delivery, which involves strengthening the administrative and technical capacity of local authorities. This capacity is also needed for the management of major infrastructure projects.

The assessment of the respondents regarding the administrative and other services provided is very telling of the local authorities´ performance and the population needs satisfaction. As Figure 4 shows, in terms of public works, respondents think that the provision of these services

by the municipalities is poor (32.2%) or average (43%), 17.4% think the service is good and only 5.7% see public works as very good.
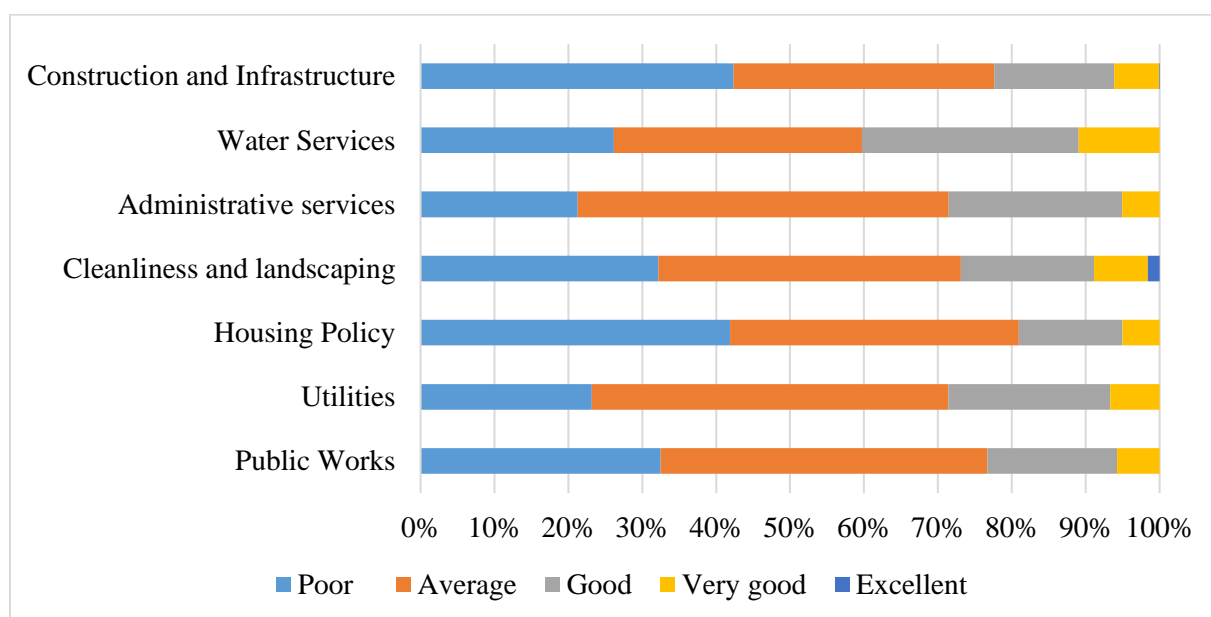

Figure 4 Assessment of the level of the main activities of the municipality.
Source: Author's Research.

For instance, water supply is a particularly important activity of municipalities. For 32.8% of the respondents, this activity is at an average level and 25.6% consider it to be poor. Other 28.7% and 10.7% rated water supply services at good and very good levels. In comparison, in a developed country like Brazil, we see almost equivalent efficiency and the average score in water supply in Brazilian municipalities is relatively low, around 45% (Tourinho, Santos, Pinto, Camanho, 2022). In this sense, we find several studies that have focused on the measurement of utilities and public works services of municipalities to be important when assessing the local environment that is formed, and hence the investment and territorial attractiveness. As we can see, the main activities that we need to evaluate are water supply, garbage collection (Rodrigues, Fernandes, 2018), administrative services provision and municipality functioning (Van Baalen, Schutte, Von Leipzig, 2015), health services, and others (Mapar, Jafari, Mansouri, 2020).

Within the framework of their powers in the context of local self-government, the municipality and specifically the municipal council have exclusive norm-setting functions. Through this activity, the municipal government can act as a regulator in the local business and social environment. The role and importance of municipalities are analyzed by a team of authors who examine public governance including local government and regional policy, municipal

self-government, and the municipal development planning process in detail (Tanev, Todor, Stefanova, Tomova, et al., 2017; Ammons, 2014).

Although municipalities are supposed to be the drivers of socioeconomic processes within their administrative territory, they fail to exercise their powers effectively and fully. This conclusion is reached when analyzing the results of the responses on the main problems in municipalities (Figure 5).
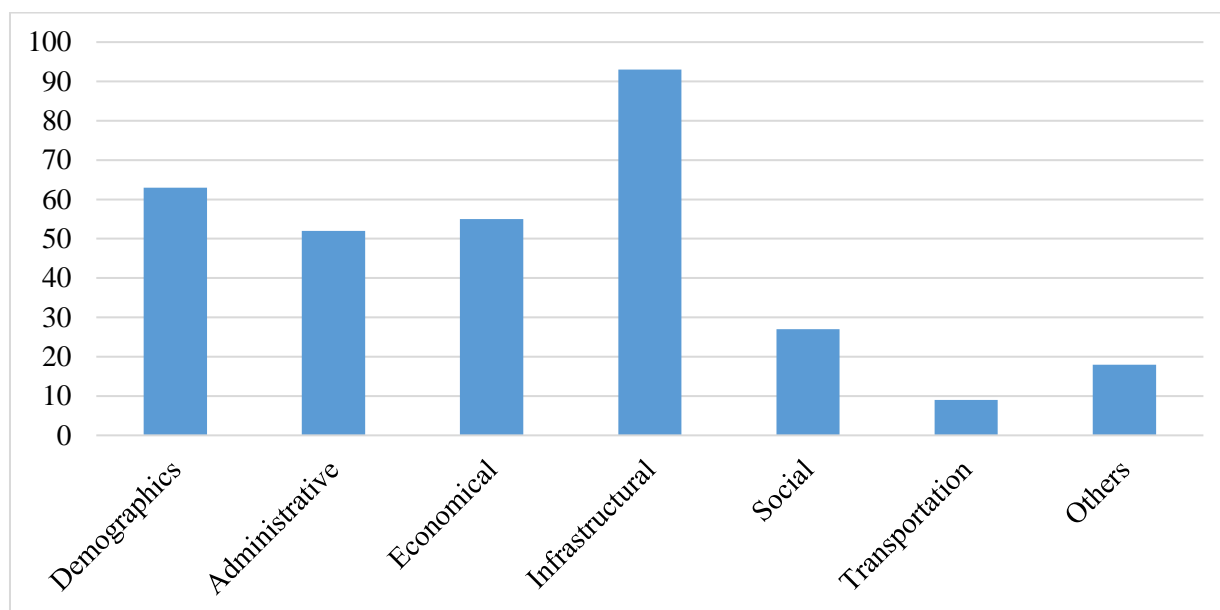

Figure 5 Main problems in municipalities.
Source: Author's Research.

The largest number of respondents (93) considered infrastructure to be a major problem for municipal development. Respondents who identified demographic, administrative, and economic problems as the main ones in municipalities were almost equally distributed (63, 55, and 52, respectively). Here we find a striking similarity between the problems identified in this study of Bulgarian municipalities and the analysis of municipalities in Slovakia (Boďa, Cole, 2022). We see that the problems between the municipalities in the two countries are similar.

We see interesting results of the question that the respondents were also asked, namely, to ascertain their attitudes toward the policy being pursued at the national and local levels. Of these, 162 thought that the state should support businesses and citizens by creating favorable business conditions; 83 respondents expressed the view that the state should implement an active tax and investment policy. The opinion that the state should improve infrastructure was expressed by 41 persons; for 17 respondents the role of the state should be related to the

construction of commercial and industrial centers and only 14 of all respondents did not think that state intervention was necessary (Fig. 6).
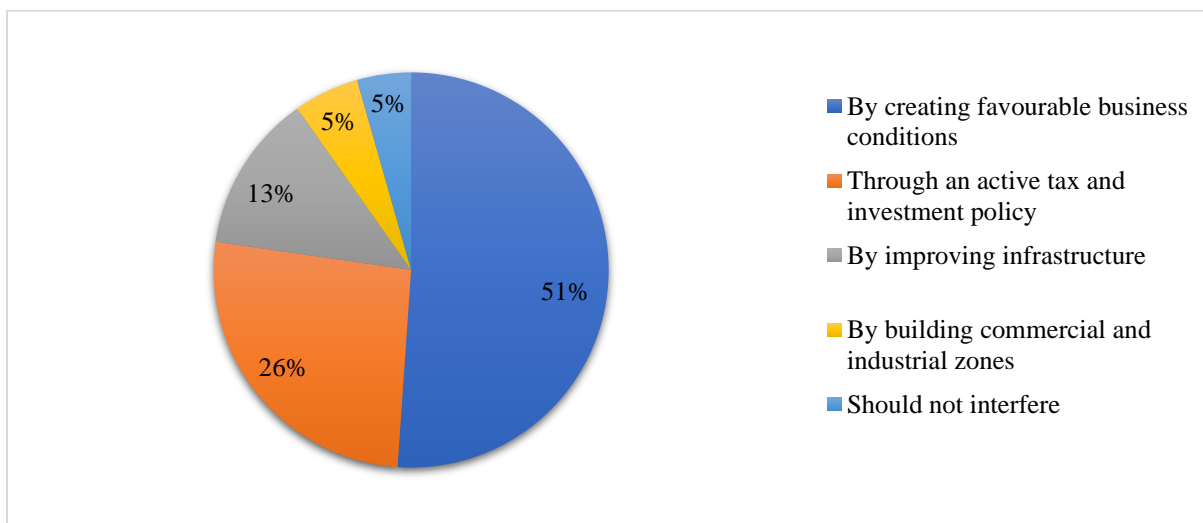

Figure 6 How do you think the state and municipalities should support businesses and citizens? Source: Author's Research.

To achieve high efficiency in the functioning of local authorities, we could consider improving the service, administration, and regulations that are applied. In this sense, we could discuss the idea of optimizing local regulations, which could even lead to an improvement in the business environment.
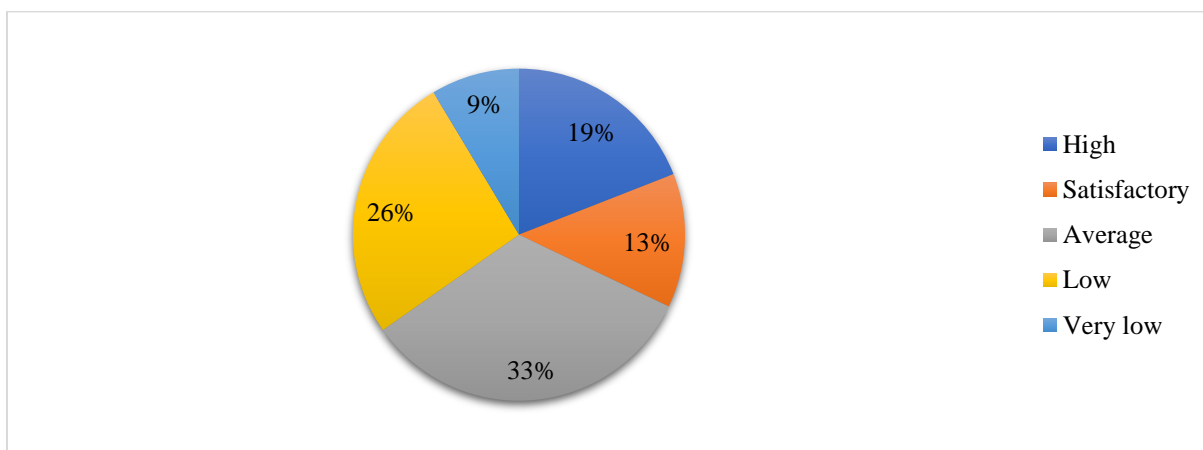

Figure 7 In your opinion, what is the quality of administrative services in municipalities? Source: Author's Research.

Our results show how effective local governments have been. The quality of administrative services has a direct impact on creating concrete conditions for working and living, doing business, and attracting and retaining the local population. The quality of administrative

services is a testament to how processes are managed within the administration itself and in its territory.

The business environment in municipalities is directly linked to the effectiveness of local government. The better the municipal administration is organized, the better the quality of service and administrative services provided should be. On the other hand, improving the local business environment increases the attractiveness of the municipality and the level of foreign direct investment, employment, and quality of life. Attractiveness can be measured through a regional investment index.

Conclusion

The condition and functioning of municipalities, including the provision of basic services to the population and businesses, are essential for the formation of a favorable environment and for increasing their investment attractiveness. In this sense, it is very important to have an adequate inventory to assess the territorial potential and investment attractiveness of municipalities. This study proposes an original model for the assessment of municipalities in terms of the conditions they form. The model consists of a regional investment index developed by the author for the evaluation of municipalities, which is complemented by a sociological survey conducted on the attitude of the population towards the functioning of Bulgarian municipalities, the provision of basic services, and the formation of an attractive business environment. Through this model, Bulgarian municipalities can be compared. In the study, the author attempts to calculate the regional investment index for two Bulgarian municipalities located in the Black Sea region - Balchik and Pomorie. According to the calculations, Pomorie municipality has a higher index score, which means that it has a higher investment capacity.

The comparison of the two Black Sea municipalities is complemented by a measurement of public attitudes toward Bulgarian municipalities. The results identify a lack of fiscal decentralization, demography, economy, public works and utilities, and administrative capacity as the main problems. The problems correspond to the results related to the population's dissatisfaction with the basic municipal services provided to them. These results, which correspond to the statistical information from the last census in 2022, prove the negative processes in Bulgaria, the depopulation of large territories, regional disproportions, and the inability of most of the Bulgarian municipalities to provide the necessary conditions for the population and business.

References

[1] Agarwal, P. (2020). Sway: Unravelling Unconscious Bias. London, UK: Bloomsbury Publishing.

[2] Baron, J., & Jost, J. T. (2019). False Equivalence: Are Liberals and Conservatives in the United States Equally Biased?. *Perspectives on Psychological Science*, 14(2), 292–303. https://doi.org/10.1177/1745691618788876

[3] Bartels, L. M. (2002). Beyond the running tally: Partisan bias in political perceptions. *Political Behavior, 24*(2), 117–150. https://doi.org/10.1023/A:1021226224601

[4] Blankenship, K. L., Wegener, D. T., Petty, R. E., Detweiler-Bedell, B., & Macy, C. L. (2008). Elaboration and consequences of anchored estimates: An attitudinal perspective on numerical anchoring. *Journal of Experimental Social Psychology*, 44(6), 1465–1476. https://doi.org/10.1016/j.jesp.2008.07.005

[5] Bullock, J. G., Gerber, A. S., Hill, S. J., & Huber, G. A. (2015). Partisan Bias in Factual Beliefs about Politics. *Quarterly Journal of Political Science*, 10(4), 519–578. https://doi.org/10.1561/100.00014074

[6] Bullock, J. G., & Lenz, G. (2019). Partisan Bias in Surveys. *Annual Review of Political Science*, 22(1), 325–342. https://doi.org/10.1146/annurev-polisci-051117-050904

[7] Carlson, E. (2016). Finding Partisanship Where We Least Expect it: Evidence of Partisan Bias in a New African Democracy. *Political Behavior*, 38(1), 129–154. https://doi.org/10.1007/s11109-015-9309-5

[8] Casado-Aranda, L. A., Venkatraman, V., Sánchez-Fernández, J., & Luque-Martínez, T. (2020). Does Partisan Bias Modulate Neural Processing of Political Information? An Analysis of the Neural Correlates of Corruption and Positive Messages. *Political Psychology*, 41(1), 145–164. https://doi.org/10.1111/pops.12581

[9] Critcher, C. R., & Gilovich, T. (2008). Incidental environmental anchors. *Journal of Behavioral Decision Making*, 21(3), 241–251. https://doi.org/10.1002/bdm.586

[10] Ditto, P. H., Liu, B. S., Clark, C. J., Wojcik, S. P., Chen, E. E., Grady, R. H., Celniker, J. B., & Zinger, J. F. (2019). At Least Bias Is Bipartisan: A Meta-Analytic Comparison of Partisan Bias in Liberals and Conservatives. *Perspectives on Psychological Science*, 14(2), 273–291. https://doi.org/10.1177/1745691617746796

[11] Epley, N., & Gilovich, T. (2005). When effortful thinking influences judgmental anchoring: Differential effects of forewarning and incentives on self-generated and

externally provided anchors. *Journal of Behavioral Decision Making*, 18(3), 199–212. https://doi.org/10.1002/bdm.495

[12] Furnham, A., & Boo, H. C. (2011). A literature review of the anchoring effect. *The Journal of Socio-Economics,* 40(1), 35–42. https://doi.org/10.1016/j.socec.2010.10.008

[13] Gawronski, B. (2021). Partisan bias in the identification of fake news. *Trends in Cognitive Sciences*, 25(9), 723–724. https://doi.org/10.1016/j.tics.2021.05.001

[14] Gerber, A., & Green, D. (1999). Misperceptions About Perceptual Bias. *Annual Review of Political Science*, 2, 189–210. http://dx.doi.org/10.1146/annurev.polisci.2.1.189

[15] Goren, P. (2002). Character Weakness, Partisan Bias, and Presidential Evaluation. *American Journal of Political Science*, 46(3), 627–641. https://doi.org/doi.org/10.2307/3088404

[16] Goren, P. (2007). Character Weakness, Partisan Bias, and Presidential Evaluation: Modifications and Extensions. *Political Behavior*, 29(3), 305–325. https://doi.org/10.1007/s11109-006-9019-0

[17] Graves, L., & Cherubini, F. (2016). The rise of fact-checking sites in Europe. *The Reuters Institute for the Study of Journalism*. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/research/files/The%2520Rise%2520of%2520Fact-Checking%2520Sites%2520in%2520Europe.pdf

[18] Guilbeault, D., Becker, J., & Centola, D. (2018). Social learning and partisan bias in the interpretation of climate trends. *Proceedings of the National Academy of Sciences*, 115(39), 9714–9719. https://doi.org/10.1073/pnas.1722664115

[19] Hollander, B. A. (2010). Persistence in the Perception of Barack Obama as a Muslim in the 2008 Presidential Campaign. *Journal of Media and Religion*, 9(2), 55–66. https://doi.org/10.1080/15348421003738769

[20] Kahneman, D. (2013). Thinking, Fast and Slow. New York, USA: Farrar, Straus and Giroux.

[21] MacKuen, M. B., Erikson, R. S., & Stimson, J. A. (1989). Macropartisanship. American *Political Science Review*, 83(4), 1125–1142. https://doi.org/10.2307/1961661

[22] Merkley, E. (2021). Ideological and Partisan Bias in the Canadian Public. *Canadian Journal of Political Science/Revue Canadienne De Science Politique,* 54(2), 267-291. doi:10.1017/S0008423921000147

[23] Mussweiler, T., & Strack, F. (1999). Comparing Is Believing: A Selective Accessibility Model of Judgmental Anchoring. *European Review of Social Psychology*, 10(1), 135–167. https://doi.org/10.1080/14792779943000044

[24] Peterson, E., & Iyengar, S. (2021). Partisan Gaps in Political Information and Information-Seeking Behavior: Motivated Reasoning or Cheerleading?. *American Journal of Political Science*, 65(1), 133–147. https://doi.org/10.1111/ajps.12535

[25] Rozin, P., & Royzman, E. B. (2001). Negativity Bias, Negativity Dominance, and Contagion. *Personality and Social Psychology Review*, 5(4), 296–320. https://doi.org/10.1207/S15327957PSPR0504_2

[26] Schwarz, N. (1998). Warmer and More Social: Recent Developments in Cognitive Social Psychology. *Annual Review of Sociology*, 24(1), 239–264. https://doi.org/10.1146/annurev.soc.24.1.239

[27] Sunstein, C. R. (2019). How Change Happens. Cambridge, USA: The MIT Press.

[28] Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124–1131. https://doi.org/10.1126/science.185.4157.1124

[29] Van Bavel, J. J., & Packer, D. J. (2021). The Power of Us: Harnessing Our Shared Identities to Improve Performance, Increase Cooperation, and Promote Social Harmony. Little, Brown Spark. New York, USA: Little, Brown Spark.

[30] Vezzoni, C., & Ladini, R. (2017). Thou shalt not cheat: How to reduce internet use in web surveys on political knowledge. *Italian Political Science Review / Rivista Italiana Di Scienza Politica*, 47(3), 251–265. https://doi.org/10.1017/ipo.2016.25

[31] Walter, A. S., & van der Eijk, C. (2019). Measures of Campaign Negativity: Comparing Approaches and Eliminating Partisan Bias. *The International Journal of Press/Politics*, 24(3), 363–382. https://doi.org/10.1177/1940161219843404

[32] Weeks, B. E. (2015). Emotions, Partisanship, and Misperceptions: How Anger and Anxiety Moderate the Effect of Partisan Bias on Susceptibility to Political Misinformation. *Journal of Communication*, 65(4), 699–719. https://doi.org/10.1111/jcom.12164

[33] Aleksandrova-Zlatanska, S. (2020). "Fiscal Discipline Assessment Model for Bulgarian Municipalities. *Economic Studies journal*, issue 2, pp. 45-73. https://ideas.repec.org/a/bas/econst/y2020i2p45-73.html

[34] Ammons, D. (2014). Municipal benchmarks: assessing local performance and establishing community standards. Abingdon, United Kingdom: Routledge.

[35] Angelova, M. (2020). Bulgarian municipalities: key players in the process of the implementation of EU funds at the national level. *Intelektinė ekonomika,* 14(1), 144-160. https://doi.org/10.13165/IE-20-14-1-09

[36] Azis, H. (2020) Decentralization as a factor for the development of local self-government. Sofia, Bulgaria: Publishing House of UNWE.

[37] Boďa, M., Cole, D., Murray Svidroňová, M., & Gubalová, J. (2022). Prevailing narratives versus reality of a small and medium town decline in a CEE country. *Operational Research*, 22(3), 3113-3145. https://link.springer.com/10.1007/s12351-021-00651-4

[38] Capello, R. (2009). Regional Growth and Local Development Theories: Conceptual Evolution over Fifty Years of Regional Science. *Géographie, économie, société*, 11(1), 9-21. https://www.cairn.info/revue--2009-1-page-9.htm.

[39] Di Giulio, M., & Vecchi, G. (2023). Implementing digitalization in the public sector. Technologies, agency, and governance. *Public Policy and Administration*, 38(2), 133-158. https://doi.org/10.1177/09520767211023283

[40] Kalcheva, D. (2015). Assessment Of The Investment Capacity Of Municipalities In Bulgaria. *Economics and Management*, 11(2), 97-104. https://ideas.repec.org/a/neo/journl/v11y2015i2p97-104.html

[41] Koulov, B., Ivanova, E., Borisova, B., Assenov, A., & Ravnachka, A. (2017). GIS-based valuation of ecosystem services in mountain regions: A case study of the Karlovo municipality in Bulgaria. *One Ecosystem*, *2*, e14062. DOI: 10.14207/ejsd

[42] Kusumastuti, S. Y., & Alhempi, R. R. (2020). Regional Investment Performance Index and Regional Investment Potential Index as Regional Competitiveness Index in Indonesia. *International Journal of Management Sciences and Business Research*, 9(1), 34-42. https://zenodo.org/record/3702063#.XvxCCCgzZPY.

[43] Mapar, M., Jafari, M. J., Mansouri, N., Arjmandi, R., Azizinezhad, R., & Ramos, T. B. (2020). A composite index for sustainability assessment of health, safety and environmental performance in municipalities of megacities. *Sustainable Cities and Society*, 60, 102-164. https://doi.org/10.1016/j.scs.2020.102164

[44] Nedkov S, Borisova B, Koulov B, Zhiyanski M, Bratanova-Doncheva S, Nikolova M, Kroumova J (2018). Towards integrated mapping and assessment of ecosystems and their services in Bulgaria: The Central Balkan case study. *One Ecosystem*, 3, e25428. https://doi.org/10.3897/oneeco.3.e25428

[45] Nguyen, B., Mickiewicz, T., Du, J. (2018). Local governance and business performance in Vietnam: The transaction costs' perspective. *Regional Studies*, 52(4), 542-557. https://doi.org/10.1080/00343404.2017.1341625

[46] Nikitin, A., Chupsheva, S., Kustarin, I., Boutenko, V., Polunin, K., & Stepanenko, A. (2018). Helping regions grow faster and grow better. https://www.bcg.com/industries/public-sector/helping-regions-grow-faster-grow-better.aspx.

[47] OECD, (2021). Synthesis Assessment I. For Polish municipalities located in a functional urban areas.

[48] Preshlenova, R. et al. (2021). Cities in the Balkans – spaces, faces, memories. Sofia, Bulgaria: Bulgarian Academy of Sciences.

[49] Rodrigues, A. P., Fernandes, M. L., Rodrigues, M. F. F., Bortoluzzi, S. C., da Costa, S. G., & de Lima, E. P. (2018). Developing criteria for performance assessment in municipal solid waste management. *Journal of Cleaner Production*, 186, 748-757. https://doi.org/10.1016/j.jclepro.2018.03.067

[50] Rodríguez Bolívar, M. P. (2017). User centric services under the Web 2.0 era. Coproduction, execution and efficiency of public services. In *User centric e-government: Challenges and opportunities* (pp. 137-158). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-59442-2_8

[51] Schragger, R. C. (2016). City power: Urban governance in a global age. Oxford, UK: Oxford University Press.

[52] Tanev, Todor, M. Stefanova, T. Tomova, et al. (2017). Contributions to the Theory and Practice of Public Administration. - In. Public Administration at the University of St. Petersburg. Public Administration, Sofia University, Sofia, Bulgaria.

[53] Tourinho, M., Santos, P. R., Pinto, F. T., & Camanho, A. S. (2022). Performance assessment of water services in Brazilian municipalities: An integrated view of efficiency and access. *Socio-Economic Planning Sciences*, 79, 101139. https://doi.org/10.1016/j.seps.2021.101139

[54] Tsonkov, N. (2019). Communication networks and regional entities. Sofia, Bulgaria: Publishing house of UNWE.

[55] Van Baalen, S. M., Schutte, C. S. L., & Von Leipzig, K. (2015). Capacity self-assessment as a catalyst for improved municipal service delivery. *Journal of the South African Institution of Civil Engineering*, 57(1), 2-15. http://dx.doi.org/10.17159/2309-8775/2015/v57n1a1

[56] Velinov, E. (2022). Unequal development of municipalities: socio-economic paradox in Bulgaria. *International Journal of Economic Policy in Emerging Economies*, 16(2-4), 368-380. https://doi.org/10.1504/IJEPEE.2022.126611

[57] Vershinina, A. A. , Zhdanova, O. A. , Maksimova, T. P. & Perepelitsa, D. G. (2015). The Formation of Indicator Framework for Effective Assessment of Investment Attractiveness of the Region. *International Journal of Economics and Financial Issues*, 5 (3), 136-141 . Retrieved from https://dergipark.org.tr/en/pub/ijefi/issue/31975/352367

[58] Zhao, Q. (2010). E-Government evaluation of delivering public services to citizens among cities in the Yangtze River Delta. *The International Information & Library Review*, 42(3), 208-211. https://doi.org/10.1080/10572317.2010.10762865

[59] Zheng, L., Warner, M. (2010). Business incentive use among US local governments: A story of accountability and policy learning. *Economic Development Quarterly*, 24(4), 325-336. https://doi.org/10.1177/0891242410376237