

COMMERCIAL FACILITIES AND URBAN REGENERATION

Ana-Lucia Ristea^{1*}, Valeriu Ioan-Franc², Ion Stegăroiu³
and Gabriel Croitoru⁴

^{1), 3) 4)} University „Valahia”, Targoviste, Romania

²⁾ National Institute of Economic Research, Romanian Academy, Bucharest,
Romania

Abstract

The paper deals with a model for assessing disparities in the development of commercial facilities. The term “commercial facilities” helps one perceive distribution not only as an economic activity in itself but also as an urban infrastructure and as a component of an urban area that forms a town, area which should be designed in accordance with the new concepts promoted by the European Union: integrated town planning, and urban regeneration.

The paper consists of three parts: the first part briefly presents the importance of town development from the perspective of the theory of urban area modelling; the second part deals with the functional integration of commercial facilities into urban regeneration projects; the third part suggests a model for assessing regional disparities in the development of commercial facilities, which – using the “point method” – can be applied so that it meets the requirement of quantifying the equipment levels reached and make space comparisons. This model is based on ten indicators relevant to the studied field, as taken from Statistical Yearbook of Romania.

For Romania, it is all the more necessary to define programmes for the territorial development of commercial facilities as, at present, major disparities have been caused by the disequilibrium resulted from the uncontrolled expansion of the great multinational distribution chains, which equally hindered the small independent trade and the network of shops specific to the main/historical centres of towns.

The outcome of our research confirms the need that local communities should think and act consistently with the new policy of sustainable development of towns, promoted within the European Union, aimed at observing the basic principles of the territory planning policy: restructuring and strengthening the structurally deficient areas.

Key words: integrated town planning, urban regeneration, commercial town planning, regional disparities, point method, sustainable development

JEL Classification: C31, O21, P41

* Corresponding author, **Ana-Lucia Ristea** – risteaanalucia46@yahoo.com

Introduction

The evolution of mankind shows that the town and town arrangements play an important role in changing the economic and cultural tools of various territories and favour their development, since towns have always been one of the essential components of the human civilisation and equally the place of many important economic, social and political events. At the same time, it is worth mentioning that the strong development of distribution, through all its trade forms, has had an important impact on the configuration and the modelling of territorial systems and, especially, urban areas (A. Villani, 1995, p. 20).

In the context of unprecedented growth of towns, one of the essential components – distribution, through all trade companies – has had a major impact on the configuration and urban modelling. Neglecting the factors essential for analysing the existing situation or neglecting forecasting the development of urban facilities, such as the commercial network, causes major problems with direct impact on living conditions and habitat that favour social cohesion. With this premise in view, the paper suggests a model for assessing regional disparities that come up in the development of distribution. Although we agree to use the term “distribution” instead of the classical term “trade” when dealing with economic activity in relation to market conditions, we choose to further employ the term “commercial facilities”, since, in our opinion, it suits the town planning paradigm, which from a system perspective, covers the territorial-functional structure of towns and develops relations between elements of the urban system (in which commercial facilities, as spatial built elements, hold a clearly defined position), while the cooperation between these elements have a synergetic effect perceived only as wholeness.

1. Modelling the urban area: A brief presentation

The modelling theory of urban area is over two and a half centuries old. All throughout this period, the theoretical approaches and the instruments used have helped us to acquire experience focused on a systemic view of the evolution of the planned area, and various authors – who have written the classics in the domain – have proposed various types of reasoning to explain the factors influencing the relation between the supply of and demand for urban territories. This long period of accumulation and formation of concepts specific to urban economics can be divided into two long periods:

- *The classical period*, when the forerunners of today’s systemic approach understood the need for integrated (holistic) analysis of phenomena occurring in urban territories; the holistic study of urban and territorial phenomena began with the development in time of theoretical explanations regarding the territory structuring by the nature of human activities on the mentioned territories.
- *The period of spatial (urban and territorial) modelling*, beginning in the sixth decade of the 20th century, as a result of the evolution of urban economics, as well as to the requirements of the general theory of systems.

The 1960ties brought along the construction of the first models that tried to promote the general theory of systems in town planning and territorial studies. The analysis of this period reveals the following types of models:

- models dealing, especially in the beginning, with the so-called generation of urban activities, generally known as *models of market potential*;

- *allocation models of urban activities;*
- *global urban models;*
- *integrated town planning.*

We further present some of the well-known models that differ in objectives, theoretical fundamentals and procedures. It is worth mentioning that these models can also be applied to dimensioning the commercial facilities as a distinct module of an urban system in a specific territory.

Models of market potential in urban territories

Using mainly gravitational analogy, these models focus on the assessment of the flows of people and vehicles that occur between the hubs of a network consisting of commercial facilities, inhabited areas, etc. These models can be used to dimension roads and commercial facilities, to analyse labour migration, to define territorial macro zones, in accordance with the potential developed around the attraction poles consisting of tourist objectives, commercial facilities, cultural endowments, etc.

Allocation models of urban activities

The models are used to locate a homogenous function (living, industry, etc.) on a ground within an urban locality or region. This category includes separate models: for living, for locating commercial centres, and for industrial areas. The allocation models of urban activities are considered partial ones, and this, although controversial, persisted because many partial models were included – later on – as component modules of global models of formation and growth of social spatial systems.

Global urban models

The global urban models (considered by some authors as holistic, general or comprehensive) focus on:

- a) the simultaneous description of interactions of various partial activities (functions), and
- b) the projection in time of the behaviour of urban and regional phenomena.

The model of metropolis worked out by Ira Lowry (1994) may be considered the prototype of several global urban models. An essential contribution was made by J.W. Forrester (1969). He had a systemic view of processes. These processes are generated by the growth, stagnation and “responses” of cities under the impact of a package of corrective measures and policies initiated by urban communities.

Integrated town planning

Since the late 1980's, the EU Sustainable Development Strategy has paid special attention to *sustainable development of the European towns* of any size, which represent economic, social and cultural assets of high value. According to the Leipzig Charter of the European Sustainable Cities (May 24-25, 2007), cities cannot fulfil on long term their function of engines of social progress and economic growth, in accordance with the Lisbon Strategy, which is focused on steady development of the information technology and innovation stimulation in order to close the gaps between the European countries and the USA.

The city development in the European Union is based on *the new concept (model) of integrated town planning*, which shifts the state's role from the control of city development to the stimulation of local enterprise. Thus, we promote *the integrated project of urban regeneration*, which, in accordance with the modern view on urban economics, is a new model of city management, based on a joint strategic view on development, aiming at creating (Ginavar Anca and team, 2007, pp. 8-9):

- several levels of intervention: punctual, in areas in need, and correlated with the logic of global development of the city;
- several intervention sectors: economic, social, environmental, territorial.

This project is drawn up and defined according to a *process logic* (focused on transformation) that puts together: (1) traditional urban actors – public administration, and (2) new actors representing the citizens, professional organizations, national and international investors.

2. The functional integration of commercial facilities into urban regeneration projects

The city can be defined from three perspectives: dimensional, qualitative and systemic.

The *dimensional definition* reveals three permanent characteristics of the city:

- a concentration of buildings able to ensure the minimum density required by the urban area¹: residential density, housing density, job density;
- sustainability ensured by the opportunities offered by the established geographical environment for people to live and work in;
- diversity and ranking of activities carried out within the city (a social environment including activities such as trade, industry and administration).

The qualitative definition received recognition because all quantifiable criteria did not suffice to define a city. The qualitative approach is based on the opinion that the city is a type of entity which an individual can easily perceive, without stating the formal characteristics.

In accordance with the *systemic approach*, some authors think that the city is “an organisation destined to maximize social interaction” or “an organisation mediating

¹ J. Bastié and B. Dézert, 1991, p. 31.

between economic agents and local groups, on one hand, and outer environment, ... there is no city unless there is a core able to unify, control and organize the suburbs"².

Urban regeneration promoted by the European Union implies a set of action principles for sustainable development of the cities³:

- a) Urban regeneration means the intervention of the public authorities in urban areas in distress.
- b) Urban regeneration requires an integrating approach to all sectors of intervention (including commercial facilities), so that those urban operations should aim at sustainable development.
- c) Urban regeneration requires good local governance.
- d) Urban regeneration requires that all local actors should be able to integrate European policies into town planning as local policies.

Considering the city *a spatial-constructural and social system*, we may outline two large sub-systems: town planning and social sub-system. While *the town-planning sub-system* includes all material elements of a city, including environmental factors that form the territorial structure, *the social sub-system* consists of the number of inhabitants as beneficiaries of the whole system.

The direct links between the commercial facilities – as components of the town-planning sub-system – and the social sub-system, materialized in purchases of goods, place distribution under the influence of social processes taking place in the city territory, especially under the influence of the demographic, socio-economic and territorial structure.

While town planning seems generally to be the city arrangement science, *commercial town planning* is a specific aspect, which essentially tries to satisfy the population's commercial needs by locating and creating a shop network. In other words, commercial town planning means all efforts and means used by architects, town-planners, and economists to adapt the trade to the new living conditions and the new population concentrations.

From this angle, the commercial facilities of an urban community should be integrated into urban regeneration projects. This integration actually meets the requirements of commercial town planning, which can be grouped as follows⁴:

- *The capability of the commercial network to develop*, resulting in larger selling area, in close relation to the demand for goods, in accordance with the main characteristics of the potential market and the opportunities for urban development.
- New problems caused by *the changing relation between the traditional trade centre and the trade centres in the new housing areas*.
- *The attractiveness of the urban trade network to people from other localities* and the location of these new customers; in fact, the size of the attracted population is

² J. Beaujeu-Garnier, 1989.

³ Ginavar Anca and team, 2007, p. 12.

⁴ D. Patriche, Ana Lucia Ristea, I. Patriche, 2002, p. 102.

a fundamental element for sizing and structuring the trade network on a territorial basis.

3. An assessing model of territorial disparities in the development of commercial facilities

Economic and social development is not equally distributed throughout the country. We notice economic and social disparities/inequalities between regions in all countries. Literature shows two types of disparities⁵:

- disparities in the spatial distribution of welfare or in the real income level;
- disparities in the spatial distribution of economic activities and of the population.

These disparities are always assessed, explicitly or implicitly, in relation to a reference case. They imply a deviation from an estimated rule. The use of the term “disparity” implicitly involves a regulatory judgement of what is acceptable or unacceptable⁶. The selection of the indicators considered for demonstrating the existence of territorial (regional) disparities depends on the context in which the research work is conducted. Box no. 1 presents a list of indicators of urban sustainable development.

In the European Union, the new approaches to the regional policies support a few innovative strategic views for territorial economic growth such as:

- A broader sense should be given to *the concept of regional disparities*, adding to classical disparities (regarding the production, income or unemployment level) new types of imbalances in environment quality, infrastructure, education opportunities, access to skills, capital availability, etc. The inclusion of these new disparities located upstream in regional economic policies is a means to stimulate competitiveness and capability of regions to develop by themselves⁷.
- There are disparities in economic development not only between regions but also within the same region. Therefore, *regional policy should often become sub-regional policy and should not be separated from urban policy*.
- Globalisation, the rapid progress of technology and the profound geopolitical changes are factors that determine the disappearance or the crisis of some activities, which are accompanied by the emergence of other ones. This problem needs urgent action especially in central and eastern European countries, where the magnitude of structural adjustments is higher, if compared to EU developed countries. In this context, *it is required to make structural adjustments, which should be stimulated locally and regionally as well as nationally*.
- In the new circumstances, *the objectives of the regional policy are difficult to attain without cooperation between national public authorities and local public authorities, enterprises or even other countries*.

⁵ M. Polèse, R. Schearmur, 2005, p. 132.

⁶ Ibidem, p. 131.

⁷ R. Prud'homme, cited in D. Jula, 2003, p. 26.

- *Increasingly more attention is paid to the role of the private mediation or cooperation organisations: chambers of commerce, local banks, information exchange centres, and risk capital providers.*

Box no. 1:

Indicators of sustainable city development

The implementation of a strategy in support of sustainable development requires, as a premise, a database that should allow us to create a system of (quantitative and qualitative indicators) necessary, on the one hand, for assessing the economic and social potential of a region/district in several aspects such as condition, structure, dynamics and behaviour of the actors in various markets, and, on the other hand, for ensuring a certain orientation of the decision-makers in the local communities on the development direction, in order to maintain the condition of efficiency and balance.

Specialists classify sustainable development indicators into five large sub-systems:

1. *The sub-system of factorial indicators, including demographic-economic resources, natural resources, means of production, progress of science, as well as management factors (factors contributing to the organisation of the structure of economic agents, areas and territory, of the decision-making system, which facilitate the effective use of resources).*
2. *The sub-system of resultative indicators, including the main indicators characterizing the material production and the production of consumer services, education, culture, arts, tourism, city management.*
3. *The sub-system of distribution and adjustment indicators, among which the indicators regarding the banks, the balance of payments, the incomes and the distribution of goods play an important role.*
4. *The sub-system of demographic and social indicators, including social indicators (habitat, social-professional mobility, cultural level, social homogeneity, delinquency, etc.).*
5. *The sub-system of national wealth indicators, including a set of categories of indicators: (a) indicators of natural resources; (b) environment value; (c) human capital indicators (active population, health stock, rate of public education by forms of schooling); (d) indicators of financial capital; (e) the value of the cultural patrimony; (f) consumer goods (housing, durables).*

Source: Teodorescu, F. & Bucur, C., 2005, pp.27-28.

Relating the issues concerning the regional disparities to commercial facilities, as a sub-system of the urban system, we present below a model for analysing these inequalities.

We consider a model of allocation of urban activities, namely the “point method”, which allows ranking of territories (in our case study, they are districts), starting with a set of indicators (factors influencing the equipment level) that, in an interconditioning relation, can define the size of a module of the urban system built within an urban setting for

developing a homogenous function (housing, industry, trade, culture), using for analysis a sequential module of the urban structure, namely commercial facilities.

We exemplify this method by a function exercised by commercial facilities in district capitals, as central places that polarize the population to be potentially served in an area outside cities. Thus the point method could enable us to forecast locations for the trade network in districts, in relation to an indicator of "saturation" established in accordance with 10 factors, also called diagnosis characteristics (C1-10). For building a mathematical model, we considered the following factors having a direct impact on the development level of the commercial equipment on a territorial basis:

F1 – monthly net average nominal wage earnings (RON);

F2 – turnover from wholesale and retail trade, repair and maintenance of motor vehicles and motorcycles and personal and home appliances per capita (thou. RON); it is an indicator aggregated per economic activity (NACE, rev.1);

F3 – population density per sq. km (people);

F4 – weight of urban population (percent);

F5 – rural population per 100 hectares of agricultural area (persons);

F6 – employees in non-agricultural branches per 1000 people;

F7 – employees in industry per 1000 people;

F8 – number of accommodated tourists per 1000 people;

F9 – density of public roads per 1000 sq. km of the administrative territory of the district;

F10 – number of settlements (towns or villages).

This system of factors, expressed in indicators calculated in different measure units needs to be transformed into units that can be added (totalled). Such an operation can be made by means of points (what explains the name of the mathematical model). Concretely, the following steps are taken:

Step 1: We choose from among the counties the ones with the maximum value reached for each of the 10 indicators (Table no. 1); this maximum value corresponds to the maximum grade of 100 de points. For our application, with statistical data for the year 2006, we have:

- the Bucharest-Ilfov Area registers the maximum values (considered equal to 100 points), for: F1, F2, F3, F4, F5 and F9;
- Dâmbovița District reaches the maximum value for F5;
- Arad District holds the maximum value for F7;
- Constanța District has the maximum value for F8.

Table no. 1: Impact factors for dimensioning the trade network in the territorial profile (in Romania)

DISTRICT	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
ROMÂNIA	866	12,0	90,5	55,2	40,6	210,2	75,6	288,0	33,5	13271
1.Bacău	845	7,0	109	46,0	121,6	163,7	66,5	163,8	37,1	499
2.Botoșani	715	3,3	91,6	41,7	67,7	112,6	38,0	57,4	42,5	340
3.Iași	792	7,9	150,5	47,9	108,9	179,0	52,2	185,4	43,0	423
4.Neamț	710	5,0	96,3	38,4	123,2	147,6	52,7	247,9	31,2	349
5.Suceava	726	5,9	82,5	43,3	114,6	129,7	40,9	299,0	29,0	395
6.Vaslui	717	3,2	85,9	41,3	66,8	116,2	46,5	64,2	41,0	454
7.Brăilă	730	7,2	77,1	65,2	33,0	188,5	81,8	161,0	24,9	144
8.Buzău	724	6,5	80,4	41,5	71,5	160,0	66,9	126,9	43,4	480
9.Constanța	914	13,2	101,3	70,7	37,2	241,3	60,1	1126,0	32,9	200
10.Galați	834	8,6	138,4	56,8	74,5	192,2	71,9	99,5	32,8	184
11.Tulcea	763	4,8	29,6	49,2	35,1	174,4	69,8	219,4	15,5	138
12.Vrancea	768	5,4	80,9	37,9	95,5	134,9	55,2	90,6	36,7	336
13.Argeș	882	11,5	94,4	48,1	97,0	206,7	98,6	163,4	44,4	583
14.Călărași	681	4,0	62,2	38,5	45,6	124,0	47,5	44,6	24,9	165
15.Dâmbovița	860	4,7	132	31,2	147,7	148,6	63,6	113,8	43,4	360
16.Giurgiu	763	9,8	80,7	31,2	70,5	104,3	28,5	68,9	32,2	170
17.Ialomița	735	6,7	65,4	45,7	42,2	130,9	40,1	142,9	25,7	134
18.Prahova	889	9,2	174,6	50,7	147,6	205,1	92,9	450,8	46,4	419
19.Teleorman	760	4,0	72,1	33,7	55,4	118,6	45,8	35,0	26,3	236
20.Dolj	855	8,5	96,6	53,6	56,7	169,5	58,2	62,0	29,6	385
21.Gorj	965	5,4	68,5	47,0	83,7	199,3	89,7	134,3	39,3	420
22.Mehedinți	876	4,2	61,1	48,7	52,6	153,5	59,6	152,9	37,6	349
23.Olt	804	3,8	87,2	40,6	65,2	138,3	59,1	41,5	37,4	385
24.Vâlcea	768	6,2	71,7	45,3	92,0	193,4	71,1	505,2	37,6	567
25.Arad	790	10,9	59,1	55,5	39,9	251,5	119,4	374,1	28,9	280
26.Caraș-Severin	732	4,0	38,8	56,6	36,1	173,0	69,8	326,8	22,8	295
27.Hunedoara	813	7,3	67,6	76,9	39,3	252,0	114,8	183,5	45,5	471
28.Timiș	858	13,0	76	62,8	35,1	291,8	115,1	373,2	33,4	323
29.Bihor	692	11,5	78,9	50,4	59,4	250,9	107,1	356,6	39,4	439
30.Bistrița-Năsăud	727	5,8	59,3	36,6	68,1	177,3	75,8	224,1	28,2	239
31.Cluj	905	14,9	103,3	66,9	53,8	252,2	88,5	462,3	39,4	426
32.Maramureș	702	6,3	81,7	58,8	68,2	177,1	71,9	188,0	25,0	227

33.Satu Mare	778	7,5	83,2	45,9	62,6	191,0	85,3	171,6	36,4	226
34.Sălaj	781	5,6	63,4	40,9	60,2	170,9	72,5	75,1	41,2	285
35.Alba	756	6,8	60,7	58,2	48,2	221,3	100,3	133,6	42,3	667
36.Braşov	815	15,7	111,1	74,6	53,6	258,8	101,8	812,4	28,0	159
37.Covasna	656	7,7	60,3	50,3	59,7	206,9	94,5	229,7	22,6	127
38.Harghita	704	7,3	49,2	44,2	46,1	185,4	83,8	267,2	24,8	244
39.Mureş	784	7,7	86,9	52,6	66,6	209,5	89,1	408,3	29,6	475
40.Sibiu	834	12,0	77,9	67,5	45,0	254,3	108,6	597,2	29,4	173
41.Bucureşti-Ilfov	1129	46,5	1218,8	92,5	91,9	395,4	83,3	405,7	48,9	100

Source: based on the statistical data referring to the year 2006, from “Repere economice și sociale regionale. Statistica Teritorială”, INS, Bucharest, 2008.

Step 2: The calculus of the points $C_i(J_i)$ for each characteristic at the level of each district was made with the formula:

$$C_i(J_i) = \frac{F_i(J_i)}{P_i} \cdot 100 \tag{1}$$

where:

$F_i(J_i)$ - the factors (characteristics) variable, of the factors multitude ($i = 1, \dots, 10$) retained at each district economy level;

P_i – the biggest values (maximum) of the factors (characteristics) in the districts multitude ($i = 1, \dots, 10$).

Step 3: The values of each district, for each indicator, will be reported to the maximum figure reached by the respective indicator, obtaining a number of points equal or less than 100 (the value corresponding to the maximum reached) (Table no. 2).

Table no. 2: The positioning of each district according to the points registered compared to the maximum values of the 10 indicators (factors)

DISTRICT	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
ROMÂNIA	76,7	25,8	7,4	59,7	44,2	53,2	63,3	25,6	68,5	100,0
1.Bacău	74,8	15,1	8,9	49,7	82,3	41,4	55,7	14,6	75,9	3,8
2.Botoşani	63,3	7,1	7,5	45,1	45,8	28,5	31,8	5,1	86,9	2,6
3.Iaşi	70,2	17,0	12,3	51,8	73,7	45,3	43,7	16,5	87,9	3,2
4.Neamţ	62,9	10,8	7,9	41,5	83,4	37,3	44,2	22,0	63,8	2,6
5.Suceava	64,3	12,8	6,8	46,8	77,6	32,8	34,2	26,6	59,3	3,0
6.Vaslui	63,5	7,0	7,0	44,7	45,2	29,4	39,0	5,7	83,8	3,4
7.Brăilă	64,7	15,5	6,3	70,5	22,3	47,7	68,5	14,3	50,9	1,1
8.Buzău	64,1	14,0	6,6	44,9	48,4	40,5	56,0	11,3	88,8	3,6
9.Constanţa	81,0	28,3	8,3	76,5	25,2	61,0	50,3	100,0	67,3	1,5
10.Galaţi	73,9	18,5	11,4	61,4	50,4	48,6	60,2	8,8	67,1	1,4

11.Tulcea	67,6	10,4	2,4	53,2	23,8	44,1	58,4	19,5	31,7	1,0
12.Vrancea	68,0	11,6	6,6	40,9	64,7	34,1	46,2	8,0	75,1	2,5
13.Argeş	78,1	24,6	7,7	52,0	65,7	52,3	82,6	14,5	90,8	4,4
14.Călăraşi	60,3	8,5	5,1	41,6	30,9	31,4	39,7	4,0	50,9	1,2
15.Dâmboviţa	76,2	10,0	10,8	33,8	100,0	37,6	53,3	10,1	88,8	2,7
16.Giurgiu	67,6	21,1	6,6	33,7	47,7	26,4	23,9	6,1	65,8	1,3
17.Ialomiţa	65,1	14,4	5,4	49,5	28,6	33,1	33,6	12,7	52,6	1,0
18.Prahova	78,7	19,7	14,3	54,8	99,9	51,9	77,8	40,0	94,9	3,2
19.Teleorman	67,3	8,6	5,9	36,5	37,5	30,0	38,4	3,1	53,8	1,8
20.Dolj	75,7	18,4	7,9	58,0	38,4	42,9	48,7	5,5	60,5	2,9
21.Gorj	85,5	11,6	5,6	50,8	56,7	50,4	75,1	11,9	80,4	3,2
22.Mehedinţi	77,6	9,0	5,0	52,7	35,6	38,8	49,9	13,6	76,9	2,6
23.Olt	71,2	8,1	7,2	43,9	44,1	35,0	49,5	3,7	76,5	2,9
24.Vâlcea	68,0	13,3	5,9	49,0	62,3	48,9	59,5	44,9	76,9	4,3
25.Arad	70,0	23,5	4,8	60,0	27,0	63,6	100,0	33,2	59,1	2,1
26.Caraş- Severin	64,8	8,5	3,2	61,2	24,4	43,8	58,4	29,0	46,6	2,2
27.Hunedoara	72,0	15,8	5,5	83,2	26,6	63,7	96,1	16,3	93,0	3,5
28.Timiş	76,0	28,0	6,2	68,0	23,7	73,8	96,4	33,1	68,3	2,4
29.Bihor	61,3	24,6	6,5	54,5	40,2	63,5	89,7	31,7	80,6	3,3
30.Bistriţa- Năsăud	64,4	12,5	4,9	39,6	46,1	44,9	63,5	19,9	57,7	1,8
31.Cluj	80,2	32,1	8,5	72,4	36,4	63,8	74,1	41,1	80,6	3,2
32.Maramureş	62,2	13,6	6,7	63,6	46,2	44,8	60,2	16,7	51,1	1,7
33.Satu Mare	68,9	16,1	6,8	49,7	42,4	48,3	71,4	15,2	74,4	1,7
34.Sălaj	69,2	12,0	5,2	44,2	40,7	43,2	60,7	6,7	84,3	2,1
35.Alba	67,0	14,6	5,0	62,9	32,6	56,0	83,9	11,9	86,5	5,0
36.Braşov	72,2	33,8	9,1	80,7	36,2	65,5	85,2	72,1	57,3	1,2
37.Covasna	58,1	16,5	4,9	54,4	40,4	52,3	79,1	20,4	46,2	1,0
38.Harghita	62,4	15,7	4,0	47,8	31,2	46,9	70,1	23,7	50,7	1,8
39.Mureş	69,4	16,6	7,1	56,9	45,1	53,0	74,6	36,3	60,5	3,6
40.Sibiu	73,9	25,8	6,4	73,0	30,5	64,3	90,9	53,0	60,1	1,3
41.Bucureşti- Ilfov	100,0	100,0	100,0	100,0	62,2	100,0	69,8	36,0	100,0	0,8

Source: based on the data presented in Table 1.

For instance: for *Bacău* District, the number of points for the factor (characteristic) F_2 – “the turnover of the whole trade and retail trade, repair and maintenance of the vehicle, and motorbikes and personal and house assets per one inhabitant (thousand RON); is the aggregated indicator at the economy activities level (sections NACE rev.1)”, was calculated as follows:

$$C_2 = \frac{F_2}{P_{41}} \cdot 100 = \frac{7,0}{46,5} \cdot 100 = 15,1 \quad (2)$$

P_{41} corresponds to Bucharest – Ilfov.

Step 4: Considering the fact that the respective factor degree of influence is quite different for each of them, they were given a grade of importance from 1 la 10, that is: F1=10, F2=9, F3=8, F4=6, F5=4, F6=7, F7=5, F8=2, F9=3, F10=1.

By the coefficient of each factor with these importance grades we got the comparing values of the 10 factors (Table no. 3).

Table no. 3: Calculus of the points relative to each impact factor, per districts

DISTRICT	Points realized by the factor									
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
ROMÂNIA	767	232,2	59,2	358,2	176,8	372,4	316,5	51,2	205,5	100,0
1.Bacău	748	135,9	71,2	298,2	329,2	289,9	278,5	29,2	227,6	3,8
2.Botoșani	633	63,9	60,0	270,6	183,2	199,4	159,0	10,2	260,7	2,6
3.Iași	702	153,0	98,4	310,8	294,8	317,0	218,5	33,0	263,7	3,2
4.Neamț	629	97,2	63,2	249,0	333,6	261,1	221,0	44,0	191,4	2,6
5.Suceava	643	115,2	54,4	280,8	310,4	229,6	171,0	53,2	177,9	3,0
6.Vaslui	635	63,0	56,0	268,2	180,8	205,7	195,0	11,4	251,4	3,4
7.Brăilă	647	139,5	50,4	423,0	89,2	333,8	342,5	28,6	152,7	1,1
8.Buzău	641	126,0	52,8	269,4	193,6	283,3	280,0	22,6	266,4	3,6
9.Constanța	810	254,7	66,4	459,0	100,8	427,0	261,5	200,0	201,9	1,5
10.Galați	739	166,5	91,2	368,4	201,6	340,3	301,0	17,6	201,3	1,4
11.Tulcea	676	93,6	19,2	319,2	95,2	308,8	292,0	39,0	95,1	1,0
12.Vrancea	680	104,4	52,8	245,4	258,6	238,9	231,0	16,0	255,3	2,5
13.Argeș	781	221,4	61,6	312,0	262,6	366,0	412,0	29,0	272,4	4,4
14.Călărași	603	76,5	40,8	249,6	123,6	219,6	198,5	8,0	152,7	1,2
15.Dâmbovița	762	90,0	86,4	202,2	400,0	263,0	266,5	20,2	266,4	2,7
16.Giurgiu	676	189,9	52,8	202,2	190,8	184,6	119,5	12,2	197,4	1,3
17.Ialomița	651	129,6	43,2	297,0	114,4	231,7	168,0	25,4	157,8	1,0
18.Prahova	787	177,3	114,4	328,8	399,6	363,2	389,0	80,0	284,7	3,2
19.Teleorman	673	77,4	47,2	219,0	150,0	209,9	192,0	6,2	161,4	1,8
20.Dolj	757	165,6	63,2	348,0	153,6	300,1	243,5	11,0	181,5	2,9
21.Gorj	855	104,4	44,8	304,8	226,8	352,8	375,5	23,8	241,2	3,2
22.Mehedinți	776	81,0	40,0	316,2	142,4	271,7	249,5	27,2	230,7	2,6
23.Olt	712	72,9	57,6	263,4	176,4	245,0	247,5	7,4	229,5	2,9
24.Vâlcea	680	119,7	47,2	294,0	249,2	342,4	297,5	89,8	230,7	4,3
25.Arad	700	211,5	38,4	360,0	108,0	445,2	500,0	66,4	177,3	2,1
26.Caraș-Severin	648	76,5	25,6	367,2	97,6	306,3	292,0	58,0	139,8	2,2
27.Hunedoara	720	142,2	44,0	499,2	106,4	446,2	480,5	32,6	279,0	3,5
28.Timiș	760	252,0	49,6	408,0	94,8	516,6	482,0	66,2	204,9	2,4
29.Bihor	613	221,0	52,0	327,0	160,8	444,3	448,5	63,3	241,7	3,3
30.Bistrița-Năsăud	644	112,5	39,2	237,6	184,8	314,0	317,5	39,8	173,1	1,8
31.Cluj	802	288,9	68,0	434,4	145,6	445,9	370,0	82,2	241,8	3,2
32.Maramureș	622	122,4	53,6	381,6	184,8	313,6	301,0	33,4	153,3	1,7
33.Satu Mare	689	144,9	54,4	298,2	169,6	338,1	357,0	30,4	223,2	1,7
34.Sălaj	692	108,0	41,6	265,2	162,8	302,6	303,5	13,4	252,9	2,1
35.Alba	670	131,4	40,0	377,4	130,4	392,0	419,5	23,7	259,5	5,0
36.Brașov	722	304,2	72,8	484,2	144,8	458,2	426,0	144,2	171,9	1,2
37.Covasna	581	148,5	39,2	326,4	161,6	366,3	395,5	40,8	138,6	1,0
38.Harghita	624	141,4	32,0	286,8	124,8	328,3	350,5	47,4	152,1	1,8

39.Mureş	694	149,2	56,8	341,4	180,4	371,0	373,0	72,6	181,5	3,6
40.Sibiu	739	232,2	51,2	438,0	122,4	450,2	454,5	106,0	180,3	1,3
41.Bucureşti-Ilfov	1000	900,0	800,0	600,0	248,8	700,0	349,0	72,0	300,0	0,8

Source: the data presented in Table 2.

Step 5: The points total sum for a given district – S(J_i) – is calculated based on the formula:

$$S(J_i) = C_1(J_1) + C_2(J_2) + \dots + C_{10}(J_{10}) = \sum_{i=1}^{10} C_i(J_i) \tag{3}$$

For instance, for Bacău District:

$$S = 748.0 + 135.9 + 7.2 + 298.2 + 329.2 + 289.8 + 278.5 + 29.2 + 227.7 + 3.8 = 2411.5$$

The application of the “points method”, as a model of allocating an urban activity, in our case of the trade activity, has as hypothesis/premises the principle according to which the total points sum for a district – S(J_i) – corresponds to a certain level of endowment with commercial spaces – D(J_i) –, expressed in the commercial surface (sqm) per 1000 inhabitants.

$$D(J_i) = \frac{D_T}{S_T} \cdot S(J_i) \tag{4}$$

where:

D(J_i) – accidental variable which indicates the size of the commercial premises/1000 inhabitants for a given district (J_i);

D_T – the non-accidental variable, representing the endowment with the commercial surface per 1000 inhabitants, as an overall country prognostic;

S_T – the overall sum of country points;

S(J_i) – the points sum for each district.

According to these marks, the district ranking is based on the total (cumulative) score of the influence of explanatory factors regarding the trade network concentration (Table no. 4).

Table no. 4: District ranking by total score

	District	Total of points		District	Total of points
	România	2572,2	21	Dolj	2226,6
1	Bucureşti-Ilfov	4970,6	22	Brăila	2207,9
2	Braşov	2933,8	23	Covasna	2198,7
3	Prahova	2927,3	24	Maramureş	2167,4
4	Cluj	2883,2	25	Sălaj	2143,9
5	Timiş	2836,4	26	Buzău	2138,9
6	Sibiu	2775,0	27	Mehedinţi	2137,2
7	Hunedoara	2753,3	28	Neamţ	2090,1

8	Argeş	2723,7	29	Harghita	2089,0
9	Constanţa	2722,8	30	Bistriţa-Năsăud	2064,6
10	Arad	2608,9	31	Vrancea	2054,9
11	Bihor	2575,6	32	Suceava	2038,5
12	Gorj	2532,3	33	Olt	2014,9
13	Alba	2449,8	34	Caraş-Severin	2013,5
14	Galaţi	2428,2	35	Tulcea	1939,0
15	Mureş	2423,7	36	Vaslui	1870,0
16	Bacău	2411,5	37	Botoşani	1842,7
17	Iaşi	2394,5	38	Giurgiu	1826,5
18	Dâmboviţa	2360,2	39	Ialomiţa	1819,1
19	Vâlcea	2354,7	40	Teleorman	1738,0
20	Satu Mare	2306,5	41	Călăraşi	1673,7

Source: based on the data presented in Table 3.

The cumulative impact of the influences of explanatory factors regarding the development potential of commercial facilities on a territorial basis reveals a polarisation phenomenon, a concept established in the theory of spatial economics, which shows a “centre-periphery” relationship. The form to be taken by this polarisation is conditional on the country’s history and geography. Specifically to Romania, the data in Table 5 reveal that territorial disparities in districts’ economic-social development have caused a polarisation of the profit of the districts that have first undergone urban development – districts with a cumulative score above country average, such as Bucharest-Ilfov, Braşov, Prahova, Cluj, Timiş, Sibiu, to the detriment of farther districts, located in the lowest extreme of the score – i.e. under 2000 points – such as Tulcea, Vaslui, Botoşani, Giurgiu, Ialomiţa, Teleorman, Călăraşi.

One must emphasize that for every district the points sum indicates the place that it holds in the district ranking from the perspective of the (sale) market potential, dimensioned by the aggregation of the 10 factors taken into consideration in the applied model. This district ranking according to the market potential size conditions the size of the quantitative indicator deviations of endowment with commercial spaces – sqm of commercial surface per 1000 inhabitants – compared to an average accepted level as a balance limit per total country.

To exemplify, we accept a hypothetical value of 600 sqm commercial surface per 1000 inhabitants considered as an average per total country (D_T), by using the formula 4.

We calculated the endowment that would be justified, for two districts situated at the hierarchy’s extremes:

- Bucharest – Ilfov:

$$D = \frac{600}{2572} \cdot 4970 = 1160 \text{ sqm/1000 inhabitants}$$

- Teleorman

$$D = \frac{600}{2572} \cdot 1738 = 405 \text{ sqm/1000 inhabitants}$$

This example shows the need to approach the development of commercial facilities in relation to the theory of central places and polarisation, respectively, which shows an oversizing of the trade network in districts with a cumulative score above country average in “peripheral” districts. While for top districts by the cumulative score, a higher endowment with trade network is justified, then for peripheral districts, the endowment is lower, considering that they are generally characterized by a limited local market, an asymmetrical location in relation to the national market, a more specialized economic structure, often based on natural resources, and a less trained and less diversified workforce.

Conclusions

The need to assess the disparities in the level of development of urban systems built at the country level is shown by the paradigm of the model of integrated town planning, which covers the realities of towns: 1) the built area (all elements of the urban system, including also urban facilities, among which commercial facilities hold a top position); 2) the socio-economic territory (valued by the functions of a town, among which the economic-productive function, the housing function, the communication function, the ecological and recreation function, the esthetical function, the strategic function); and 3) administrative entity (ensuring town governance, based on a common strategic vision concerning the development and the assignment of tasks among urban actors).

As mentioned above, any integrated project of urban regeneration implies a new way of town management – town governance. Good town governance consists in a mix of two large categories of economic policies, considering the disparities in regional development⁸:

- regional policies; they address regional disparities in income or employees (per capita); these policies often try to orientate spatial distribution of economic activities (income sources and jobs);
- regional development policies, they address support of specific regions for promoting development; that is, implementing economic development policies on a regional scale.

Very often, the question of promoting the development of pauperized regions is assimilated within a policy for eliminating regional disparities. Such integrated projects of town development should also include the dimensioning and the structuring of commercial utilities, which are going to create, (to involve themselves, along with utilities,) the urban comfort and achieve sustainable development of towns.

The “saturation” indicator, determined on the basis of the 10 diagnosis characteristics (influence factors on the market potential in territorial profile) as a sum of points, represents a major criterion concerning the development of the main urban endowments and it can be

⁸ M. Polèse, R. Shearmur, 2005, p. 162.

used for the purpose of diminishing the regional gaps and stopping some of the unbalances found in several sectors. Useful applications of this method can be found in other domains specific to the urban economy: real estate, socio-cultural and leisure activities endowments, etc. It is obvious that, according to the market type, the specific influence factors on the respective market will be established.

References

- Batty, M., 1972. *Urban Modelling*. Cambridge: Cambridge University Press.
- Beaujeu-Garnier, J., 1989. *Les espaces urbains dans le monde*. Paris: Ed. Nathan.
- Botez, M. & Celac, M., 1980. *Sistemele spațiului amenajat. Modelare-optimizare-previziune*. București: Ed. Științifică și Enciclopedică.
- Dumont, G.-Fr., 1993. *Économie urbaine. Villes et territoires en compétition*. Paris: Ed. Litec.
- Forrester, J.W., 1969. *Urban Dynamics*, MIT Press, Cambridge Mass.
- Ginavar, A., et al., 2007. *Ghid informativ privind regenerarea urbană – principii și practici europene*, Ministerul Dezvoltării Lucrărilor Publice și Locuințelor, București.
- Ioanid, V., 1988. *Urbanism și informatică*, București: Ed. Tehnică.
- Jula, D., 2003. *Strategii pe termen mediu și lung privind dezvoltarea regională în România, în perspectiva aderării la Uniunea Europeană*, Probleme economice vol. 51, Academia Română – Institutul National de Cercetări Economice, Bucuresti.
- Lowry, I., 1994. *A Model of Metropolis*, RAND, Santa Monica.
- Patriche, D., Ristea, A.L. & Patriche, I., 2002. *Urbanism comercial*, București: Editura Uranus.
- Piatier, A., 1979. *Radioscopie des communes de France*. Paris: Ed. Economica.
- Polèse, M. & Shearmur, R., 2005. *Économie urbaine et régionale. Introduction à la géographie économique*. Deuxième édition, Paris: Ed. Economica.
- Prud'homme, R., 1995. Un nouveau modèle de politique régionale. *Revue Problèmes économiques*, nr. 24404.
- Teodoroiu, F. & Bucur, C., 2005. *Economia agro-alimentară a României: multifuncționalitate, resurse, oportunități în perspectivă regională*, Colecția „Biblioteca economică”, Seria Studii și Cercetări Economice, vol. 25, Academia Română, Centrul de Informare și Documentare Economice, București.
- xxx, 2007. *Leipzig Charter on Sustainable European Cities*, Agreed on the occasion of the Informal Ministerial Meeting on Urban Development and Territorial Cohesion in Leipzig on 24/25 may.
- Villani, A., 1995. *Distribuția comercială în cadrul orașului și în teritoriu*. București: Editura Didactică și Pedagogică.