

EVALUATING THE EFFICIENCY OF LOCAL ECONOMIC DEVELOPMENT POLICIES

Săutiuș Lavinia Sidonia
University of Oradea

Sărac Ionuț Pavel
„1 Decembrie 1918” University Alba Iulia

This paper studies the way public authorities can fundament and evaluate the local economic development policies they want to promote, according to their efficiency. After presenting the relevant literature overview regarding the local economic development and its policies, we try to underline the importance of evaluating and prioritizing the local development policies and also to propose an efficiency-based model that we later use in building and evaluating local development policies scenarios. The research methodology is both descriptive, while presenting the theoretical framework, and empirical, while building scenarios and evaluating local policies. The obtained results show us that the local policy we tested is efficient, enabling new investments to bring bigger financial benefits than the cost needed to attract them.

Keywords: local development, policies, measuring, efficiency.

JEL classification codes: O21, O22

I. Introduction

One of the main challenges facing the European Union in the last years is the development disparities between Member States and also between its regions. EU's regional policy aims to reduce these differences by directing financial resources to less developed areas through the European Regional Development Fund, European Social Fund and Cohesion Fund.

However, to eliminate disparities in development between EU regions at all existing levels, a sustained effort is required by national and local public authorities to promote and support economic and social development.

Given limited resources, on one hand, and multiple and diverse development needs, on the other hand, and competition between public authorities in attracting investors, it is imperative for those public authorities to substantiate, monitor, evaluate and prioritize their local development policies. This paper proposes the use of theory in critical point in achieving the above. The objectives of the scientific research in this paper refers to the stage presentation of previous research related to local development and local development policies, emphasizing the importance of grounding and prioritizing local development policies, presenting a model for the assessment of these policies and, finally, to test this model and presentation of research results.

II. Literature overview regarding local economic development

The literature in the field contains many and various approaches and definitions of the concept of local economic development. In the view of most economists, development refers to stimulating local economic activity, boosting investment, helping to reduce unemployment and improving living standards (Matei and Anghelescu 2009: 14) in a certain area or a particular community.

According to the paper "Local Economic Development. Quick Reference" prepared by the Urban Development Unit of the World Bank in 2006, local economic development is the process in which public, private and non-governmental organizations work together to improve conditions for economic growth and employability of the workforce. Analysing the presentation of the same World Bank study and the historical evolution of local economic development, we see a move of the centre of gravity in the three analyzed periods (60s - 80s, 80s - mid 90s, late '90 - present)

from the exclusive action of the state, towards acts of state and public-private partners and diversification of these actions.

On the same note, Canzanelli and Dichter (2001: 12-13) observed a change in local economic development perspective in terms of participation (from trying to reach a consensus, to participatory decision making), goals (from the increase rate of employment to improving the quality of life), policies (from policies oriented to domestic firms and SMEs to development policies of the local economy), tools (from specialized services and specific help for SMEs, developing industrial parks, use of local human resources to more integrated and more complex actions, such as development projects), social inclusion (from the lack of its promotion to promoting it locally in view of existing needs) and sustainability (from financial and managerial dependence to public sector to sharing revenues, responsibility and power).

The purpose of local economic development, according to World Bank, is strengthening the economic capacity of the administrative-territorial units to improve the economic future and quality of life for all residents.

In terms of local economic development objectives, Parlagi (2000, in Matei, Angheliescu and Savulescu 2009: 12) believes that they are represented by economic prosperity and social welfare by creating a favorable business environment, with the integration of vulnerable groups in the community, the use of endogenous resources and private sector development.

A key role in local economic development is held by strategic planning with regard to the specific area (Matei and Angheliescu 2009: 28). This refers to establishing a local development strategy, of the connected development policies and the needed activities or instruments to implement these policies.

Based on existing scientific work up to that point, Neiman and Fernandez (1999: 322-327) group and prioritize local economic development policies, as follows: institutional reform policy (facilitating the establishment of companies, representing business environment, public-private partnership, business networking, providing a solid legal framework for development), classic development policies (increasing business through assigning larger territory for business, allocation of land for commercial businesses, developing public infrastructure to boost business), indirect subsidies (exemption from payment of development fees, subsidized infrastructure costs, allocated business grants, tax breaks) and direct subsidies (grants for staff training, discounts on utilities costs, lower taxes, creating industrial parks, loans for businesses).

In a less structured form, the World Bank lists among local economic development policies stimulating local business growth, collaboration between communities, human resource development, sustaining the increase of life quality, facilitating the formation of clusters, bringing local and regional development programs. We can observe the key role of the collaboration between the public sector private sector and civil society in ensuring local economic development, which makes us conclude that this cooperation is itself a main factor.

Formulation and implementation of local policies must take into account factors such as infrastructure (roads, public utilities, transportation, telecommunications, tourism infrastructure), buildings and land available (free land for the location of economic activities, available buildings, business centers), resources human resources (skilled labor, training), financial support (local, regional, national, European), support and dissemination of knowledge management (advisory services, dissemination of information), the living environment (quality of service natural environment, criminal status) and organizational capacity (organizational structures, economic cooperation, private sector involvement) (Roscovan 2003: 17). They provide the ability to develop a SWOT analysis on the relevant administrative-territorial unit on which to build strategies, policies and activities needed to ensure local economic development.

The criteria for evaluating local development policies may consider the relevance, effectiveness, efficiency and utility or durability (Matei, Angheliescu and Savulescu 2009: 33-36). The relevance shows the connection between the objectives and the needs, the effectiveness shows the quality and quantity of the achievement of objectives formulated through appropriate solutions,

the efficiency compares the costs associated with the proposed policies with results, and the usefulness shows in which extent the policies implemented meet the needs. Through the present paper we propose a model for evaluating the local public development policies which analyzes their efficiency, comparing the financial benefits brought by a new investment with the necessary funds for attracting it.

III. Measuring the efficiency of local development policies

To fundament, measure and evaluate the effectiveness of economic development policies supported by local government we resorted to constructing an index (I_e) which compares the revenue from a new investment with expenses needed to attract such an investment, meaning the facilities that are granted. For a local policy to be effective, the index must have a value over 1. Financial income to the local budget is composed of tax on buildings (I_{cl}), land tax (I_{teren}), income from selling or leasing land (V_{teren}) and shares deducted from the tax rates on income (CD_{IVG}) in percentage of 47%. Facilities granted by the local authority to new investors refer to economic incentives (F_{ec}) which consists of the opportunity cost of sale, the land concession, tax incentives ($F_{fiscale}$) which consists of tax reductions and exemptions from tax on building and land and also facilities regarding public utilities (F_{up}), the local authority committing in some cases to ensure the necessary utilities.

Therefore,

$$I_e = \frac{I_{cl} + I_{teren} + V_{teren} + CD_{IVG}}{F_{ec} + F_{fiscale} + F_{up}}, \text{ and}$$

$$I_{cl} = \sum_{i=1}^n \frac{(c_{im} + k_{Mj}(i-1)) \times B_i(V_i)}{(1+r_a)^i}, \text{ where } n=\text{duration of use, } c_{im}=\text{tax share, } k_{Mj}=\text{tax rate increase, } B_i(V_i)=\text{taxing base/investment value, } r_a=\text{discount rate}=5,5\%$$

$$I_{teren} = \sum_{i=1}^n \frac{S_t \times I_t [lei / ha / zonă] \times (1 + k_{Mj}(i-1))}{(1+r_a)^i}, \text{ where } s_t=\text{land size, } I_t=\text{set tax}$$

$$V_{teren} = S_t \times V_t, \text{ where } V_t=\text{trading value}$$

$$CD_{IVG} = \sum_{i=1}^n \frac{\overline{N_s} \times \overline{S_m} \times c_{IV} \times 47\% \times 12}{(1+r_a)^i}, \text{ where } \overline{N_s}=\text{average employees no., } \overline{S_m}=\text{average}$$

salarz, c_{IV} = income tax rate = 16%

$$F_{ec} = S_t \times (V_p - V_t), \text{ where } V_p = \text{market value}$$

$$F_{fiscale} = p_{red} (\%) \sum_{i=1}^5 I_{cl_i} + I_{teren_i}, \text{ where } p_{red} = \text{reduction percentage } (\%)$$

$$F_{up} = \sum_{i=1}^{n_{up}} Cu_{up} \times U.M._{up}, \text{ where } n_{up}=\text{no. of utilities, } Cu_{up}=\text{unit cost of public utilitz, } U.M._{up} =$$

measuring unit for public utilities (kml)

IV. The research methodology and findings

Starting from the theoretical basis set above which is the result of descriptive research methodology, we continue with the empirical research. This refers to the use of efficiency method to substantiate the various simulations and evaluation of local development policies. For these simulations to be as real as possible, we analyzed existing policies of Oradea municipality based on "Rules of granting tax incentives on taxes on corporate buildings and land, in order to attract investment and support sustainable economic development" attached to the Council's Decision no. 407/2010.

Under this regulation, traders who start a business in Oradea with an investment value of over € 500,000 benefit from reductions in tax on buildings for a period of five years, the limit of the equivalent in lei of 200,000 euro, 100,000 euro for transport profile companies, as well as exemption from land tax payment for the period of validity of the construction permit. The share of total tax reduction is calculated by adding the tax reductions according to the following criterias: the investment value, investment value for SMEs established by young entrepreneurs, medium number of employees, location and profile of investment or profile. To evaluate this local development policy, we used the theory of critical points in the analysis of two facilities which benefit from minimum and maximum reductions from taxes from Oradea municipality.

The first simulation refers to a trading business with a investment project (construction of a building) in value (V_i) of EUR 500,000, respectively 2,000,000 lei, situated in an area tax C (St) of 1.5 ha and will employ 80 people (N_s). The land required is owned by Oradea municipality who is willing to lease it (V_t) starting from a price of 1 euro/sqm/year, while the market value (V_p) is 3 Euro/sqm/year, or starting to sell it at a price of 10 euro/sqm, while the market value is 20 euro/sqm. Also, the municipality will ensure the provision of 0.1 kml water and wastewater utilities (500,000 euro/kml) road (one million euro/kml) and electricity (200,000 euro/kml).

The tax rate for buildings is 1.1% in Oradea and we assume that its annual growth and land tax will be 1% each year. We consider the normal use of the building for 10 years, and the discount rate of 5.5%. According to the Monthly Statistical Bulletin of Bihor, the average gross salary in January 2011 was 1,474 lei.

Given the characteristics of the investment, the trader will receive a share of the reduction on buildings tax of 30% (15% for investment amount, 5% for the number of employees, 5% for the fiscal area and 5% for the activity profile).

For this policy to be effective, the efficiency index at local level must be bigger than 1.

$$I_{cl} = \sum_{i=1}^{10} \frac{(1,1 + 0,01(i-1))\% \times 2.000.000}{(1 + 5,5\%)^i} = 171.948,93lei$$

$$I_{teren} = \sum_{i=1}^{10} \frac{1,5ha \times 3.832lei / ha / zonaC \times (1 + 0,01(i-1))}{(1 + 5,5\%)^i} = 45.085,50lei$$

$$V_{teren-concesiune} = 15.000mp \times 4lei / mp / an \times 10ani = 600.000lei$$

$$V_{teren-vanzare} = 15.000mp \times 40lei / mp = 600.000lei$$

$$CD_{IVG} = \sum_{i=1}^{10} \frac{80pers \times 1.474lei / luna \times 16\% \times 47\% \times 12luni}{(1 + 5,5\%)^i} = 802.086,30lei$$

$$F_{ec-concesiune} = 15.000lei / mp \times (12 - 4)lei / mp / an \times 10ani = 1.200.000lei$$

$$F_{ec-vanzare} = 15.000lei / mp \times (80 - 40)lei / mp = 600.000lei$$

$$F_{fiscale} = 30\% \sum_{i=1}^5 I_{cl_i} + I_{teren_i} = 30\% \times 95.563,03 + 5.448,34 = 28.668,91 + 5.448,34 = 34.117,25lei$$

$$F_{up} = (500.000 + 1.000.000 + 200.000)euro / kml \times 0,1kml = 170.000euro = 680.000lei$$

$$\Rightarrow I_{e-concesiune} = \frac{171.948,93 + 45.085,50 + 600.000 + 802.086,30}{1.200.000 + 34.117,25 + 680.000} = 0,85 < 1$$

$$\Rightarrow I_{e-vanzare} = \frac{171.948,93 + 45.085,50 + 600.000 + 802.086,30}{600.000 + 34.117,25 + 680.000} = 1,23 > 1$$

Given the resulted values of the efficiency index, it can be concluded that although the facilities considered are the minimum allowed, this policy is not effective if the land is leased at a rate so low. Sale of land, even if performed well below market price contributes to a useful development results. However, we propose a increase in land selling price, closer to the market price.

The second simulation refers to a production firm wishing to invest (construction of a building) in value (V_i) of 10.5 million euro, meaning 42,000,000 lei, located in tax area D and on a surface (St) of 1.5 ha and will employ 350 people (N_s). The remaining specifications remain the same as for the first simulation. Given the characteristics of the investment, the trader will receive a reduction share of the tax on buildings of 85% (40% for the investment amount, 20% for the number of employees, 10% for the tax area and 15% for the profile of activity).

$$I_{cl} = \sum_{i=1}^{10} \frac{(1,1 + 0,01(i-1))\% \times 42.000.000}{(1 + 5,5\%)^i} = 3.610.927,57lei$$

$$I_{teren} = \sum_{i=1}^{10} \frac{1,5ha \times 1.821lei / ha / zonaD \times (1 + 0,01(i-1))}{(1 + 5,5\%)^i} = 21.425,02lei$$

$$V_{teren-concesiune} = 15.000mp \times 4lei / mp / an \times 10ani = 600.000lei$$

$$V_{teren-vanzare} = 15.000mp \times 40lei / mp = 600.000lei$$

$$CD_{IVG} = \sum_{i=1}^{10} \frac{350pers \times 1.474lei / luna \times 16\% \times 47\% \times 12luni}{(1 + 5,5\%)^i} = 3.509.127,84lei$$

$$F_{ec-concesiune} = 15.000lei / mp \times (12 - 4)lei / mp / an \times 10ani = 1.200.000lei$$

$$F_{ec-vanzare} = 15.000lei / mp \times (80 - 40)lei / mp = 600.000lei$$

$$F_{fiscale} = 85\% \sum_{i=1}^5 I_{cl_i} + I_{teren_1} = 85\% \times 2.006.823,67 + 2.589,10 = 1.708.389,22lei$$

$$F_{up} = (500.000 + 1.000.000 + 200.000)euro / kml \times 0,1kml = 170.000euro = 680.000lei$$

$$\Rightarrow I_{e-concesiune} = \frac{3.610.927,57 + 21.425,02 + 600.000 + 3.509.127,84}{1.200.000 + 1.708.389,22 + 680.000} = 2,16 > 1$$

$$\Rightarrow I_{e-vanzare} = \frac{3.610.927,57 + 21.425,02 + 600.000 + 3.509.127,84}{600.000 + 1.708.389,22 + 680.000} = 2,59 > 1$$

The results of the second simulations indicate that the policy to stimulate local economic development by providing incentives for investment in Oradea is very effective in the long term. According to the calculated indicator of efficiency, the benefits of a high-value and durable new investment are at least two times higher than the cost of facilities provided, even when the municipality bears the cost of equipping the facilities of the location.

V. Conclusions

This paper proposes the evaluation approach of local development policies in terms of their effectiveness through an analysis of costs and benefits of the local public authority. This is a scientific and financially accessible method, with immediate application in substantiating certain local policies. It can be the starting point of more complex analysis on the effectiveness of local

development policies on economic and social level, and also on their relevance, effectiveness and utility.

The authors have proposed a model for assessment of local development policies that have proved effective through the policies of Oradea municipality of granting tax breaks, reasoned by attracting investment and supporting sustainable economic development.

Bibliography

1.Matei, Ani, Anghelescu, Stoica and Săvulescu, Carmen. *Modele teoretice și empirice ale dezvoltării locale*. București: Editura Economică, 2009.

2.Matei, Lucica and Anghelescu, Stoica. *Dezvoltarea locală. Concepte și mecanisme*. București: Editura Economică, 2009.

3.Canzanelii, Giancarlo and Dichter, Giordano. 2001. Local Economic Development, Human Development and Decent Work. Paper 2: Best Practices and Trends. *Universitas Working Paper*. Accessed March 23, 2011

. <http://www.ilo.org/public/english/universitas/download/publi/paper2s.pdf>

4.Neiman, Max and Fernandez, Kenneth. 1999. Measuring Local Economic Development Policy and the Influence of Economic Conditions. *International Journal of Economic Development*, 1(3)(1999): 311-339, Accessed April 12, 2011. <http://www.spaef.com/file.php?id=1019>

5.National Institute of Statistics, Monthly Statistical Buletin Bihor. Accessed April 12, 2011. <http://www.insse.ro/cms/rw/pages/buletinStatJud.ro.do>

6.World Bank. Urban Development Unit. 2006. *Local Economic Development. Quick Reference*. Accessed March 28, 2011

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTURBANDEVELOPMENT/EXTLED/0,,contentMDK:20273783~menuPK:402646~pagePK:148956~piPK:216618~theSitePK:341139,00.html>

7.Oradea's Local Council's Decision no. 406/2010 establishing local taxes for 2011. Accessed April 11, 2011 <http://oradea.ro/hotarari-ale-consiliului-local/nr-406-2010-privind-stabilirea-impozitelor-si-taxelor-locale-pentru-anul-2011>

8.Oradea's Local Council's Decision no. 407/2010 amending and supplementing the granting of tax incentives to pay taxes on corporate buildings and land, in order to attract investment and support sustainable economic development in Oradea (local scheme of minimis aid). Accessed April 11, 2011 <http://oradea.ro/hotarari-ale-consiliului-local/nr-407-2010-privind-modificarea-si-completarea-regulamentului-de-acordare-a-facilitatilor-fiscale-la-plata-impozitelor-pe-cladiri-si-terenuri-persoane-juridice-in-vederea-atragerii-de-investitii-si-sustinerii-dezvoltarii-economice-durabile-in-municipiul-o>

Note: Financial support for this paper has been provided through the project „Studii doctorale si doctoranzi pentru cercetarea competitivă în societatea bazată pe cunoaștere”, POSDRU/88/1.5/S/53501, implemented under the Sectoral Operational Program for Human Resources Development 2007-2013 and financed by the European Social Fund and Government of Romania.