

AN ANALYSIS OF SOCIAL INCLUSION IN EU

HARALAMBIE GEORGE ALIN

ASSOCIATE PROFESSOR, FACULTY OF ECONOMICS, PETROLEUM AND GAS UNIVERSITY,
PLOIESTI, ROMANIA,

e-mail:haralambiegeorgealin@yahoo.com

Abstract

Social inclusion, a dynamic process of stringent topicality, manifested in the community space, is constituted in a subject with multiple reverberations on contemporary society. From this perspective, the growing interest of the Member States in social inclusion is due to the widening of existing inequalities in terms of people's living standards due to the deterioration of economic well-being.

A growing number of studies on social cohesion at the level of the countries of the European Union tried to identify the similarities and disparities between Member States in the process of social inclusion. The paper evaluated and compared the existing disparities between the 28 EU countries, based on a set of social indicators that provide an insight into social inclusion.

The methodology used implied a cluster analysis based on the method of k-means, which allowed me to form a grouping of Member States based on indicators of social inclusion.

The results of the analysis reveal significant differences between the countries of the European Union regarding social inclusion due to factors of a political, economic and social nature. Understanding the mechanism of manifestation and correction of the level of social inclusion can provide, in this sense, explanations and solutions in capitalizing the economic potential by developing specific policies to the existing social imbalances.

Keywords: *social inclusion, social exclusion, material deprivation, poverty, low work intensity*

Clasificare JEL : *C38, E24, I31, I 32, P46*

1. Introduction

Polarization of society at national and european level has increased at the beginning of the third millennium, amid the outbreak of the economic crisis, which had the effect of deepening social inequalities, which led to increased interest of the states on social inclusion as a result of globalization, liberalization and democratization.

United Nations Conference on Sustainable Development held in Rio in 2012 illustrated the concern of governments on social inclusion and equitable distribution of wealth, poverty eradication and prosperity of the citizens, equal opportunities for all individuals, promoting a competitive and inclusive economy, to ensure jobs for all, and to create effective systems of social protection.

Sustainable Development Strategy at EU level focuses on equity and social cohesion by promoting economic growth, based on innovation, competitiveness, favorable to inclusion with employment opportunities for all citizens, ensuring the inclusion of socio-economic and political regardless of age, sex, disability, race, religion or economic status, promoting a safe and fair democratic society in terms of fundamental rights. Thus, the social dimension of european integration through social inclusion is aimed at reducing unemployment, protection of disadvantaged people and improve their standard of living and their active participation in the economic, social and cultural life.

In order to achieve these goals, European Commission proposes that by 2020, 75% of the population of the European Union, aged 20 to 64 years should have a job, dropout rate from school

to fall below 10% and at least 40% of the younger generation should have a tertiary degree, the number of people at risk of poverty to be reduced by 20 million.

Over time, the objectives related to social inclusion have changed now focusing on better coordination of economic and social policies to achieve the targets set by the Sustainable Development Strategy.

The importance of combating social exclusion is illustrated by the Treaty on the Functioning of the European Union, which in article 151 stipulates that the EU and Member States have as their objectives the promotion of employment, improved living and working conditions, allowing their alignment in conditions of progress, proper social protection, social dialogue, development of human resources to enable a high and sustainable level of employment and combating exclusion.

In the literature, numerous studies have focused on analyzing the social inclusion process in the European Union (Atkinson et al, 2007, European Commission, 2010, Murie and Musterd, 2004, Silver 2015).

The emphasis on social inclusion involves first understanding its significance.

Thus, some specialists believe that social inclusion is the mirror image of social exclusion (O'Brien and Sue, 2008; Silver 2007, Buckmaster and Thomas, 2009), the last one defining a complex process after which people are deprived of fundamental human rights, social, cultural, and active participation in decision making.

Social exclusion is the result of a mix of factors which are interrelated, such as unemployment, low education, low income, lack of housing, poor health, individuals lacking the opportunity to fully participate in social, economic and political life.

Social exclusion is a structural process of social isolation which implies an active relationship between those excluded and those who exclude them.

Sometimes there is a feeling that those excluded retire voluntarily, in fact is their response in the face of bad treatment received (Barnes, 2005).

Garcia Rocas identifies three dimensions of social exclusion: an economic dimension related to the lack of material resources associated with exclusion from the labor market, a social dimension, which implies a lack of integration in community and a personal dimension manifested by loss of confidence in himself.

Amartya Sen shows that social exclusion insists on the disadvantages arising from lack of common opportunities.

Unlike social exclusion that emphasizes the factors that gave rise to the exclusion of an individual by society, social inclusion intends to improve quality of life by increasing opportunities to participate in economic and social life of theirs by cohesion, integration and solidarity.

Social inclusion aims to encourage interaction between members of society with different relevant social attributes or impersonal institutional mechanism which creates the possibility of their participation in a activities of social life (Silver 2015).

Other authors referring to social inclusion considers that this implies solidarity, integration, cohesion and social capital (Alba and Nancy, 2014; Beauvais and Jenson, 2002; Berger-Schmitt 2000; Daly and Silver, 2008; Brunkhorst and Jeffrey, 2005; Kymlicka 2010; Stjerno 2005;).

The World Bank considers social inclusion as the process of improving the terms on which individuals and groups take part in society—improving the ability, opportunity, and dignity of those disadvantaged on the basis of their identity. Social integration does not exclude multiculturalism as a result of a democratic society.

As it is apparent from the above, social inclusion process is multidimensional, targeting social protection, unemployment, education, health, free movement of persons, security, justice and participation of all people in the community. Social protection of population should aim at improving the living conditions, as an incentive for inclusion in the labor market, achieved through education and retraining.

Inclusive sustainable development is a priority in the European Union, which aims to reduce economic and social disparities between member states, given that social inclusion indicators vary from region to region and from country to country.

The analysis of these indicators allows assessing the progress of member states of the European Union in order to increase social inclusion, so as to reduce the existing disparities and stimulate social convergence.

European Union instrument available to promote social inclusion is the European Social Fund (ESF), aimed at combating unemployment and social exclusion, but ultimately the

2. Cluster Analysis-Research Methodology

The term “cluster analysis”, was first used in 1939 by Tyron, represent a useful toll for grouping cases or variables, by identifying similar groups from a variety of data. This involves analysis of variance of the components in order to find similarities between them, in order to group them, checking whether the groups formed are statistically representative and if the recorded values of the variables differ significantly between groups.

Variables or cases are sorted into groups (clusters), so between members of the same cluster to exist similarities, and between members of different clusters to exist weak similarities (Babucea, 2007).

Establishing similarities and dissimilarities between items allow their segmentation, but does not guarantee that the groups formed are statistically significant.

Cluster analysis involves the following steps (Babucea, 2007, Ionescu, 2015, Mooi and Sarstedt, 2011):

- Identifying and recording the variables used in the data group;
- Establishing the distance between the items and determining the similarity matrix;
- Choosing cluster algorithm for generating groups.

The first stage involves setting the variables and collection of data, afterward we choose the grouping method. In practice two types of methods are used: hierarchical and non-hierarchical.

Hierarchical methods are:

- Agglomerative (simple aggregation, complete aggregation, medium aggregation and the centroid method, or Ward’s method);
- Divisive;

Agglomerative methods involves calculating the distances between items, choosing the pair of items who are closest to one other and grouping them into a group, recalculating the distances from the other groups until a single cluster is finally created..

The distances between elements can be determined by applying the following formulas:

Euclidean distance

$$d(X, Y) = \sqrt{\sum_i (X_i - Y_i)^2} \quad (1)$$

Distance City Block or Manhattan

$$d(X, Y) = \sum_i |X_i - Y_i| \quad (2)$$

With these we construct the dissimilarity matrix which is a symmetric matrix, choosing afterward the clustering algorithm.

Divisive method starts from a single group, and in the end to reach “n” groups depending on the number of cases.

Non-hierarchical methods are based on a number of groups chosen at random by the researcher. The best known method of this kind is k means (method of k-means) developed by McQueen in 1967, which partition a lot of elements in “k” established by the user.

In the next step is assigned to each group the elements who are nearest to it, then calculates the center of gravity, then we calculate the center of gravity, respectively arithmetic average of all items included in that group, the algorithm reiterating until the centers no longer changes.

3. The results

In order to determine the level of social inclusion of EU countries and perform their grouping according to the degree of social cohesion, we used a set of five indicators, data on their level is taken from the Eurostat website. These indicators are:

- people at risk of poverty- persons and share of persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income;

- People living in households with very low work intensity-indicator defined as the number of people living in a household, aged between 18 and 59 years who worked less than 20% of the total potential in the previous year;

- Early leavers from education and training- the percentage of the population aged 18-24 with at most lower secondary education and who were not in further education or training;

- Tertiary educational attainment - defined as the percentage of the population aged 30-34 who have successfully completed tertiary studies;

- Severely materially deprived people-those who experience at least 4 out of 9 following deprivations items: cannot afford I) to pay rent or utility bills, II) keep home adequately warm, III) face unexpected expenses, IV) eat meat, fish or a protein equivalent every second day, V) a week holiday away from home, VI) a car, VII) a washing machine, VII) a colour TV, or IX) a telephone.

Values on social inclusion indicators in the countries of the European Union in 2015 are presented in Table 1.

Table no.1 Indicators of social inclusion in countries of the European Union in 2015

EU countries	People at risk of poverty (after social transfer)	People living in households with very low work intensity	Early leavers from education and training	Tertiary educational attainment	Severely materially deprived people
	%	%	%	%	%
Austria	13,90	8,20	7,30	38,70	3,60
Belgium	14,90	14,90	10,10	42,70	5,80
Bulgaria	22,00	11,60	13,40	32,10	34,20
Croatia	20,00	14,40	2,70	30,80	13,70
Cyprus	16,20	14,40	5,20	54,50	15,40
Czech Republic	9,70	6,80	6,20	30,10	5,60
Denmark	12,20	11,60	7,80	47,60	3,70
Estonia	21,60	6,60	12,20	45,30	4,50
Finland	12,40	10,80	9,20	45,50	2,20
France	13,60	8,60	9,20	45,00	4,50
Germany	16,70	9,80	10,10	32,30	4,40
Greece	21,40	16,80	7,90	40,40	22,20
Hungary	14,90	9,40	11,60	34,30	19,40
Ireland	16,30	19,20	6,90	52,30	7,50
Italy	19,90	11,70	14,70	25,30	11,50
Latvia	22,50	7,80	9,90	41,30	16,40
Lithuania	22,20	9,20	5,50	57,60	13,90
Luxembourg	15,30	5,70	9,30	52,30	2,00
Malta	16,30	9,20	19,80	27,80	8,10
Netherlands	11,60	10,20	8,20	46,30	2,60
Poland	17,60	6,90	5,30	43,40	8,10
Portugal	19,50	10,90	13,70	31,90	9,60
Romania	25,40	7,90	19,10	25,60	22,70

Slovak Republic	12,30	7,10	6,90	28,40	9,00
Slovenia	14,30	7,40	5,00	40,90	5,80
Spain	22,10	15,40	19,00	40,90	6,40
Sweden	14,50	5,80	7,00	50,20	0,70
United Kingdom	16,70	11,90	10,80	47,90	6,10

Source: author own computation based on data provided by Eurostat-
<http://ec.europa.eu/eurostat/web/sdi/indicators/social-inclusion>

Based on the data presented in the Table 1, on social inclusion indicators in 2015, we realized groups of European Union countries using the k-means method. This method of analysis is useful when there is a large number of cases. The results are presented in Table 2

Table no. 2 Cluster membership and distance from the center of the cluster

Case number	EU countries	Group	Distance
1	Austria	1	9,718
2	Belgium	2	7,392
3	Bulgaria	3	11,631
4	Croatia	1	11,490
5	Cyprus	2	12,574
6	Czech Republic	1	9,757
7	Denmark	2	4,359
8	Estonia	2	8,674
9	Finland	2	5,691
10	France	2	4,384
11	Germany	1	3,820
12	Greece	3	9,484
13	Hungary	3	7,450
14	Ireland	2	10,167
15	Italy	1	8,890
16	Latvia	3	10,123
17	Lithuania	2	14,368
18	Luxembourg	2	7,517
19	Malta	1	9,608
20	Netherlands	2	5,512
21	Poland	2	6,898
22	Portugal	1	4,138
23	Romania	3	12,407
24	Slovak Republic	1	7,808
25	Slovenia	2	8,287
26	Spain	1	14,178
27	Sweden	2	7,357
28	United Kingdom	2	3,442

Source: made by the author using SPSS software

The results reveals significant differences between EU countries in terms of social inclusion, which is due to political, economic and social factors that have influenced social protection systems with implications on the living standards of citizens in each Member State.

This is illustrated by the level of social protection expenditure per capita in the countries of the European Union.

Table no.3 Expenditure on social protection in the European Union countries in 2014

EU countries	Total expenditure on social protection (euro per inhabitant)	Expenditure on social protection (% of GDP)
Austria	10591,04	30

Belgium	10126,85	30,3
Bulgaria	1036,99	18,5
Croatia	2158,83	21,6
Cyprus	4560,09	23
Czech Republic	3019,48	19,7
Denmark	14728,46	32,9
Estonia	1989,42	15,1
Finland	10825,01	31,9
France	10716,68	34,3
Germany	9877,10	29,1
Greece	4374,37	26
Hungary	2118,55	19,9
Ireland	8261,89	20,6
Italy	7561,14	29,9
Latvia	1524,91	14,5
Lithuania	1694,26	14,7
Luxembourg	18546,55	22,7
Malta	3382,11	18,2
Netherlands	11476,72	30,9
Poland	1976,26	19,1
Portugal	4339,32	26,9
Romania	1042,91	14,8
Slovak Republic	2384,09	18,5
Slovenia	4239,99	24,1
Spain	5403,2	25,4
Sweden	11822,30	29,6
United Kingdom	8344,05	27,4

Source: <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00099&plugin=1>

and <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00098&plugin=1>

Data from Eurostat regarding the social protection expenditure shows major differences between Member States. While the EU average is 7392,5 euro per capita, in Luxembourg is 18546,55 euro, in Denmark is 14728,46 euro, in Finland is 10825,01 euro. The last places are occupied by Latvia with 1524.91 euro, Romania with 1042.91 euro, and Bulgaria with 1036.99 euro, indicating a difference of approximately 18 times between Luxembourg and Bulgaria.

Belonging to one group or another can not be explained only on the basis of social protection expenditure in the European Union countries, but also by the system of social protection applied by each state.

Thus, the Nordic model adopted by Sweden, Finland, Denmark and the Netherlands emphasizes an active policy of integration into the labor market, a low level of poverty and a high

social inclusion, being similar to the Anglo-Saxon model met in the UK and Ireland, except that it is oriented towards active people and older people rather than older people.

In the case of the continental model applied in countries such as Austria, France, Germany, Belgium, Luxembourg, social assistance to citizen is strictly in line with their contribution to the insurance system as Popova Yelena and Kozhevnikova Marina claim.

Mediterranean model used in Italy, Spain, Greece, Cyprus and Portugal is similar to the continental model, but in this case the labor market is rigid and social assistance is much lower, with an emphasis on supporting the elderly by their family, which is explained by social factors.

Another model is the Eastern European specific to the communist bloc countries, characterized by the fact that social security funds are separate from the state budget, funds allocated for pensions are distinct from those for health. At the same time, emphasis is placed on greater involvement of local authorities in social assistance. At the same time, emphasis is placed on greater involvement of local public authorities in social assistance.

4. Conclusions

The growing importance of social inclusion at the European Union level implies a multidimensional analysis of this process that addresses social protection, unemployment, education and the health of individuals in order to improve their living conditions.

The analysis of this phenomenon shows that it manifests itself on several levels: institutional, relational, dynamic and distributive. Social inclusion refers to the membership of a person in society in terms of economic, social, interpersonal and civic integration.

Education, health, contextual factors such as the labor market, social policies and citizens' rights play an important role in achieving social inclusion.

In order to identify the degree of social cohesion at the level of the countries of the European Union, we used a cluster analysis based on the k-method. This method allowed me to group Member States on the basis of a set of information on social inclusion indicators in three groups.

The results highlight the fact that there are significant differences between the countries of the European Union regarding social inclusion, sometimes even within the same group, due to the different levels of economic development of states, applied social protection systems and cultural factors.

Existing disparities in social inclusion require Member States to be more involved in reducing poverty, unemployment and protection of disadvantaged people, in order to achieve the targets set by the European Union's Sustainable Development Strategy.

5. Bibliography

- [1] **Alba R., Nancy F.**, *Comparing Immigrant Integration in North America and Western Europe: How Much Do the Grand Narratives Tell Us?* International Migration Review 48, Issue Supplement s1, 2014, pp. 263-291
- [2] **Atkinson A. B., Marlier E., Cantillon B., Nolan B.**, *The EU and social inclusion: facing the challenges*, Policy Press, Bristol, 2007
- [3] **Babucea A.G.**, *Utilizarea analizei cluster în comparații teritoriale*, Analele Universității Constantin Brâncuși din Târgu Jiu, Nr.1, Tom II, 2007, pp.311-316
- [4] **Barnes M.**, *Social exclusion in Great Britain. An empirical investigation and comparison with EU*. Aldershot: Avenbury, 2005
- [5] **Beauvais C., Jenson J.**, *Social Cohesion: Updating the State of the Research*. Ottawa: Canadian Policy Research Networks Discussion Paper, 2002

- [6] **Berger-Schmitt R.**, *Social Cohesion as an Aspect of the Quality of Societies: Concept and Measurement*. EuReporting Working Paper No. 14. Mannheim: Centre for Survey Research and Methodology, 2000.
- [7] **Brunkhorst H., Jeffrey F.**, *Solidarity: From Civic Friendship to a Global Legal Community*. Cambridge: MIT Press, 2005
- [8] **Buckmaster L., Thomas M.**, *Social inclusion and social citizenship towards a truly inclusive society*, Research Paper no. 08, 2009
- [9] **Daly M., Silver H.**, *Social Exclusion and Social Capital*. Theory & Society 37, 6 (December), 2008, pp. 537-566.
- [10] **Ionescu Ș. A.**, *Clusterizarea ierarhică cu aplicații în analiza financiară*, Revista Română de Statistică - Supliment nr. 8, 2015, pp.3-14
- [11] **Kymlicka W.**, *The rise and fall of multiculturalism? New debates on inclusion and accommodation in diverse societies*. International Social Science Journal 61, 199, 2010, pp. 97–112.
- [12] **Marlier E., Cantillon B., Nolan B., Van den Bosch K., Van Rie T.**, *Developing and learning from measures of social inclusion in the European Union*, International Conference on Measuring Poverty, Income Inequality, and Social Exclusion - Lessons from Europe, 2009
- [13] **Mooi E., Sarstedt M.**, *A concise guide to market research. The process, data and methods using IBM SPSS Statistics*, Springer, 2011
- [14] **Murie A., Musterd S.**, *Social exclusion and opportunity structures in European cities and neighbourhoods*. Urban Studies, 41, 2004, pp. 1441-1459
- [15] **Obrien M., Sue P.**, *Social exclusion in Europe some conceptual issues*, International Journal of Social Welfare, 17, 2008, pp. 84-92
- [16] **Popova Y., Kozhevnikova M.**, *Interdependence of HDI and budget redistribution within the Scandinavian and Continental Social Models*. Economics and Management 18(3), 2013, pp. 562-575.
- [17] **Sen A.**, *Social Exclusion: Concept, Application, and Scrutiny*. Manila: Asian Development Bank, 2000.
- [18] **Silver H.**, *The process of social exclusion the dynamics of an evolving concept*. Chronic Poverty Research Center Working Paper 95, Providence, Rhode Island Brown University, 2007
- [19] **Silver H.**, *The Context of social inclusion*. DESA Working Paper No. 144, 2015
- [20] **Simuț R. M.**, *Real convergence in EU countries. A cluster analysis*, Management Intercultural, volumul XVII, nr.1 (33), 2015, pp.173-181
- [21] **Stjerno S.**, *Solidarity in Europe: The History of an Idea*, Cambridge University Press, 2005
- [22] ***<http://www.worldbank.org/en/topic/socialdevelopment/brief/social-inclusion>
- [23] ***http://ec.europa.eu/employment_social/2010- Combating poverty and social exclusion: A statistical portrait of the European Union 2010, European Commission, Brussels.
- [24] ***<http://ec.europa.eu/eurostat/web/sdi/indicators/social-inclusion>