Annals of "Dunarea de Jos" University of Galati
Fascicle I. Economics and Applied Informatics
Years XXIX – nº2/2023
ISSN-L 1584-0409 ISSN-Online 2344-441X
www.eia.feaa.ugal.ro

DOI https://doi.org/10.35219/eai15840409336

The Development of the Social Economy in Europe in the Context of the Global Economic Crisis

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ARTICLE INFO

Article history:
Accepted June 2023
Available online July 2023
JEL Classification
B55, Q01

Keywords:
social economy, sustainable development, social policies

ABSTRACT

The economic crisis triggered by the pandemic and continued by the economic recession resulting from the geopolitical conflict worsened in 2023, generating a series of economic bottlenecks and reduced growth rates in European economies amidst financial banking instability. Currently, the social economy is analysed in direct connection with rising unemployment and inflation. As a result, the analysis in the paper is focused on finding solutions in order to recover the social economy by increasing employment and social inclusion. The statistical information come from the EU official statistical database Eurostat. The results will be useful for the identification of social policies for the recovery of the European social economy and will highlight the main directions for its sustainable development.

1. Introduction

The Action Plan regarding social economy represents a strategical objective for European Commission (European Commission, 2021c). This official document deals with concrete measures able to improve potential of the social economy under the following target areas: creating the framework conditions for the social economy to become a thriving social economy at EU level, opportunities and support for social economy actors and strengthening their capacity, and increasing the recognition of the social economy at EU level through concrete funding measures. Thus, access to funding (European Commission, 2021a) for social economy organisations is guaranteed in the European Union, through funding programmes that include on the one hand concrete action measures against risks affecting the social economy at European level and on the other hand the promotion of opportunities for the development of the social economy with an impact on the inclusion and increased welfare of citizens. A pillar of the social economy is the development of a system able to pass to the sustainability in all economic and social activities (European Commission, 2021b).

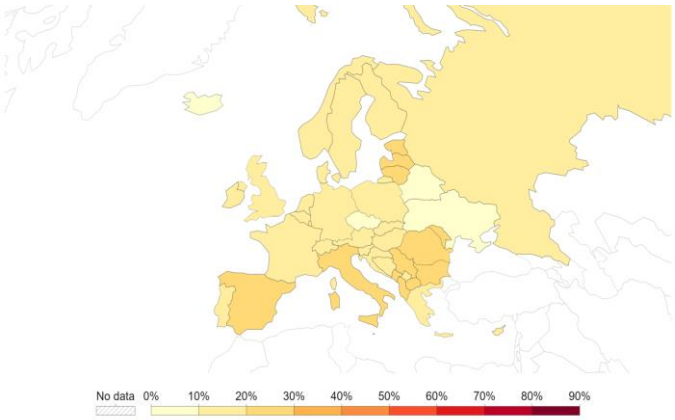

Figure no. 1 – Share of population living in proverty by national poverty lines, 2021
Source: https://sdg-tracker.org/no-poverty

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As for national poverty lines, they differ according to country, country circumstances, standard of living and cost of living. So improving overall health and education become poverty eradication targets. Under the 2030 Agenda poverty eradication means increasing the overall welfare of the population. According to a study (Ritchie, Roser, Mispy, 2021) the most affected areas in Europe in terms of the share of the population living in poverty are countries such as the Republic of Moldova (26.8% of the population), Bulgaria (23.8% of the population), Romania (23.4% of the population), Serbia (21.7% of the population), Albania (21.8% of the population), (see Figure no 1).

The objectives of the study are the following:

O1. literature review on social economy;
O2. literature-based dissemination of working hypotheses;
O3. conceptualising the social risk model as a result of each Member State's development level;
O4. dissemination of the model results.

The research continues with a literature study in which we conduct a bibliometric analysis of current publications on social economics, followed by the methodology in which we conceptualize the econometric model of social risk in relation to the level of development of European Union countries, followed by the results and discussion of the study and conclusions.

2. Literature review

In the literature, the social economy is a topic of real interest with a focus on employment and reducing the risk of poverty and social exclusion internationally.

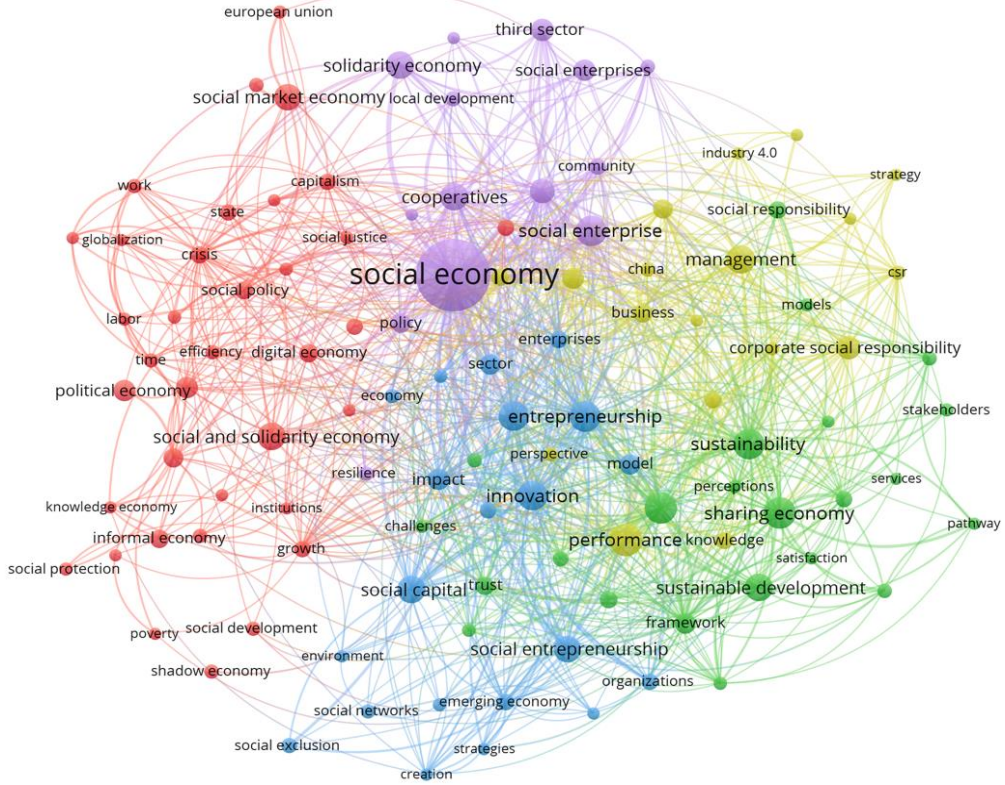

Figure no. 2 – Bibliometric analysis on the social economy

Source: Realised by authors using VOSviewer software

From the analysis of Web of Science publications we observed that out of the 4866 articles published in the period 2019-2023 there were 5.55 citations per paper under a Hirsch index of 55. This found demonstrates the interest in studying the impact of European policies to reduce the risk of poverty and social exclusion, the global effects of the pandemic induced by economic uncertainty, digital technologies ensure economic capacity building (see Figure no.2). Bibliometric analysis data were extracted from the Web of Science platform and then integrated and processed in VOSviewer.

Global challenges such as poverty, inequality and sustainable development are at the heart of the social economy (Cong Nguyen et al., 2019; Garza-Rodriguez, 2018; Raimi et al., 2015).

According to the 2030 Agenda, the Sustainable Development Goals aim to build inclusive, sustainable and equitable societies and provide a normative framework. Thus, the authors (Oliński & Mioduszewski, 2022) through their research capture various correlations between a social enterprise and the concept of sustainable development, respectively the possibilities of influencing certain goals by the social enterprise.

The literature study is by (Ivanová & Grmanová, 2021) on labour immigration from the European Union under the evolution of poverty, inequality and unemployment. In this regard, developed economies with high economic growth support the improving of population's welfare, which means high revenues from economic activities.

Other authors (Ayllón & Gábos, 2017) analyse through poverty and social exclusion indicators covered by the EU2020 poverty target aspects of economic hardship on the European analysed countries.
Another study (Benedetti et al., 2020) aimed to measure the uncertainty of poverty indicators at the regional level, i.e. on Mediterranean countries as they have been affected by the recession which has increased the intensity of poverty and socio-economic inequality.

The authors (Mansi et al., 2020) analyse factors influencing poverty by comparing results between European Union countries and post-communist countries that include Western Balkan countries such as Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia. They showed that income inequality has an impact on poverty progression for both the EU and the Western Balkan countries, while economic development, GDP has a more significant impact on the EU than in the Western Balkan countries where the most significant impact was per capita income.

Other authors (Mahembe & Odhiambo, 2019) point out the importance of foreign aid on poverty reduction. The authors demonstrate that such aids become important in the fight against poverty.

3. Methodology

In order to achieve the research objectives we used the Eurostat database from which we extracted the following indicators for the period 2014-2022:

- EARN - Annual net earnings (% of UE27 Annual net earnings) Single person without children earning 50% of the average earning (Eurostat, 2022a)
- UNE - Long-term unemployment rate (% of UE27 Long-term unemployment) From 15 to 74 years (Eurostat, 2022d)
- GDPCAP - Real GDP per capita (% of UE27 Real GDP per capita) (Eurostat, 2022g)
- HICP - Inflation rate (%)(Eurostat, 2022c)
- RPOVER - People at risk of poverty or social exclusion (Eurostat, 2022e)
- POP Population at the beginning of the year (Eurostat, 2022f)
- RATEPOVER - At-risk-of-poverty rate (Eurostat, 2022b)

We have defined the following working hypotheses:

- H1- the population revenues contribute to the eradication of poverty and social exclusion, if economic growth is stable and supports an inclusive social climate;
- H2- the influence of unemployment on population at risk of poverty and social exclusion increases during the crisis;
- H3- in times of economic crisis inflation tends to accentuate social poverty, showing a direct correlation with it;
- H4- regressive population dynamics have an impact on reducing the rate of social poverty;
- H5- the risk of social exclusion increased if the population poverty rate is higher.

Based on the linear regression model, we determined the correlation between the risk of poverty and exclusion with the other variables discussed above. The linear equations of the annual models are presented below as follows:

$$RPOVER2014 = 0.014 * EARN - 0.11 * UNE - 0.122 * GDPCAP - 0.051 * HICP - 0.415 * POP + 1.196 + RATEPOVER + 11.17 \quad (1.)$$

$$RPOVER2015 = -0.004 * EARN - 0.032 * UNE - 0.053 * GDPCAP - 0.008 * HICP - 0.162 * POP + 1.043 + RATEPOVER + 6.335 \quad (2.)$$

$$RPOVER2016 = 0.077 * EARN - 0.018 * UNE - 0.1 * GDPCAP - 0.021 * HICP - 0.376 * POP + 1.082 + RATEPOVER + 0.93 \quad (3.)$$

$$RPOVER2017 = -0.126 * EARN - 0.012 * UNE + 0.005 * GDPCAP - 0.148 * HICP - 0.233 * POP + 1.124 + RATEPOVER + 17.256 \quad (4.)$$

$$RPOVER2018 = -0.009 * EARN + 0.106 * UNE + 0.022 * GDPCAP + 0.101 * HICP + 0.028 * POP + 0.936 + RATEPOVER - 17.236 \quad (5.)$$

$$RPOVER2019 = 0.069 * EARN + 0.096 * UNE - 0.026 * GDPCAP + 0.03 * HICP - 0.427 * POP + 0.987 + RATEPOVER - 11.808 \quad (6.)$$

$$RPOVER2020 = 0.022 * EARN + 0.073 * UNE + 0.006 * GDPCAP + 0.024 * HICP + 0.075 * POP + 1.006 + RATEPOVER - 14.201 \quad (7.)$$

$$RPOVER2021 = -0.085 * EARN + 0.051 * UNE + 0.058 * GDPCAP + 0.007 * HICP + 0.388 * POP + 0.866 + RATEPOVER + 6.376 \quad (8.)$$

$$RPOVER2022 = -0.014 * EARN + 0.066 * UNE + 0.027 * GDPCAP - 0.031 * HICP + 0.228 * POP + 0.948 + RATEPOVER - 0.852 \quad (9.)$$

The regression equations show that in 2014 the level of net earnings of the population varied in direct proportion to the risk of poverty. 2014 saw the highest correlation between the risk of poverty and the level of social exclusion, which means that for this period the functional mechanisms established by the European Union through social policies worked to the maximum possible extent in favour of reducing social exclusion, based on the eradication of poverty. For 2015, the change in indicators underwent changes in trend from the previous year in terms of net earnings of the population and there were reductions in the inversely proportional changes in the unemployment rate and GDP per capita in correlation with the analysed poverty risk. 2016, brought a change in population net revenues in relation to the dependent variable, which means that there is a direct influence of economic stability on poverty risk reduction, with the European Union marking 2016 as a year of economic stability. The unemployment index and GDP per capita have marked the regression maximum of the indirect correlation with poverty. The correlation between social policy and social exclusion and the risk of poverty was slowed down through the variations expressed by the proposed model. For 2017, the model has an optimal configuration in terms of the influence of macroeconomic factors on poverty risk, with the only vulnerable element being GDP per capita, which marked a trend reversal in a direction unfavourable to poverty growth in the sense that the correlation of the indicator with the poverty rate approached zero and was positive. In 2018, the European economy recorded directly proportional correlation rates of all indicators, with the exception of population gains in terms of correlation with the risk of poverty, which means that certain pressures are building up due to economic disparities, to the detriment of eradicating this risk at EU level. In 2019, the trend situation is changing, as a result of a negative trend in population structure and growth. This trend supported efforts to reduce this risk, and the gap between social policies and poverty tends to decrease.

In 2020, against the backdrop of the onset of the pandemic, negative influences on the risk of poverty are observed from all model variables, and this situation continues in 2021. For the last year of the analysis, 2022, there is a slight recovery of economic policies and the European economy, which starts to recover from negative trends in population earnings and inflation, but people exposed to unemployment and people not living in a country with favourable GDP per capita remain vulnerable to poverty.

Table no. 1 – Model Summary

Model	R[a,b]	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
2014	0.870	0.757	0.685	19.24094	0.757	10.411	6	20	0.000	2.426
2015	0.857	0.734	0.655	18.83969	0.734	9.220	6	20	0.000	2.084
2016	0.886	0.785	0.721	17.10292	0.785	12.189	6	20	0.000	1.982
2017	0.900	0.809	0.752	15.66328	0.809	14.135	6	20	0.000	2.245
2018	0.921	0.849	0.803	12.54081	0.849	18.694	6	20	0.000	2.354
2019	0.916	0.840	0.792	12.29683	0.840	17.493	6	20	0.000	2.307
2020	0.924	0.854	0.810	11.37055	0.854	19.524	6	20	0.000	1.869
2021	0.902	0.814	0.759	12.50839	0.814	14.627	6	20	0.000	1.993
2022	0.921	0.848	0.802	11.62144	0.848	18.570	6	20	0.000	1.623

a. Predictors: (Constant), RATEPOVERyear, POPyear, GDPCAPyear, UNEyear, HICPyear, EARNyear

b. Dependent Variable: RPOVERyear

Source: Realised by authors using SPSS v25 software

According to Table 1, regarding the summary of the model, it can be observed that the Pearson coefficients of variation of the model are between 0.85 and 0.92 points, being dynamic during the period analyzed, the periods of vulnerability of the model being in the early years, so we can say that hypothesis 5 of the model is validated, i.e. the higher the degree of poverty of the population, the higher the risk of social exclusion. The R-squared coefficient, which represents the coefficient of variation, generated values that demonstrate the high statistical significance of the model, the values of the standard errors of the estimators are quite large, which means a significant disparity at the level of the European Union in terms of policy to eradicate the risk of poverty and exclusion of the population. The Durbin-Watson coefficients are predominantly greater than 2 which means that there is a rightward distribution of the skewness of the regression functions, with the exception of the years from 2020 onwards and 2016. As far as the model is concerned we can thus state that it is a valid homogeneous model, statistically determined and significant for the phenomenon proposed to be studied.

Table no. 2 – ANOVA

Model[a,b]		Sum of Squares	df	Mean Square	F	Sig.
2014	Regression	23125.852	6	3854.309	10.411	0.000
	Residual	7404.277	20	370.214		
	Total	30530.129	26			
2015	Regression	19635.841	6	3272.640	9.220	0.000
	Residual	7098.681	20	354.934		
	Total	26734.522	26			
2016	Regression	21392.627	6	3565.438	12.189	0.000
	Residual	5850.196	20	292.510		
	Total	27242.824	26			
2017	Regression	20806.876	6	3467.813	14.135	0.000
	Residual	4906.768	20	245.338		
	Total	25713.644	26			
2018	Regression	17640.559	6	2940.093	18.694	0.000
	Residual	3145.438	20	157.272		
	Total	20785.997	26			
2019	Regression	15871.126	6	2645.188	17.493	0.000
	Residual	3024.242	20	151.212		
	Total	18895.368	26			
2020	Regression	15145.598	6	2524.266	19.524	0.000
	Residual	2585.790	20	129.289		
	Total	17731.388	26			
2021	Regression	13731.164	6	2288.527	14.627	0.000
	Residual	3129.194	20	156.460		
	Total	16860.359	26			
2022	Regression	15048.386	6	2508.064	18.570	0.000
	Residual	2701.159	20	135.058		
	Total	17749.545	26			
a. Dependent Variable: RPOVERyear						
b. Predictors: (Constant), RATEPOVERyear, POPyear, GDPCAPyear, UNEyear, HICPyear, EARNyear						

Source: Realised by authors using SPSS v25 software

Through the ANOVA test (see Table no.2), we observe that during the analyzed period 2014-2022, the values of the regressors is higher than of the residuals, which means that the proposed annual models confirm the general trend of validation of the statistical observations from a correlational regression point of view, the number of degrees of freedom being constantly allocated to the regression at value of 6. F-function describes increasing values until the beginning of the pandemic. 2021 and 2022 support a decresed level of significance through the F-function of the model amid elements of economic risk in the economy. Sig coefficients close to 0, well below the limit of representation of the fixed errors allow the validation of the alternative hypothesis and the rejection of the null hypothesis for each year of the regression model which confirms the model a valid and representative character for the studied phenomenon.

4. Results of the study

We can state that the proposed model captures the evolution of European approaches to reducing the risk of poverty and exclusion at European level, with significant disparities in terms of regional orientation in relation to the general policy of the European Union. Thus, in 2014, the most significant disparities are in Portugal, Ireland, Bulgaria and Cyprus. In 2015, more countries such as Slovakia, Malta, Greece, but also developed countries such as Denmark and the Netherlands or Luxembourg are entering the margin of disparity, accentuating significant regional differences in economic disparity and poverty risk. In 2016, the largest differences between the European model and the regional models are found for the Czech Republic, Finland, France, Denmark and the rest of the countries with smaller deviations of the distributions from the trend curve. In 2017, the level of disparity is increasing, with countries such as Lithuania, Finland, the Netherlands, the Czech Republic and France being the most differentiated in terms of regional poverty risk policies compared to the EU average. The year 2018 marks the first significant change in trend, in the sense of accentuated variations from the right of distribution of European policy for countries such as Croatia, the Netherlands, the Czech Republic, Austria, Lithuania, Poland and Germany, while in 2019, the regional disparity curve remains accentuated for countries such as Malta, Germany, Belgium, Cyprus and Greece. In 2020, the year of the pandemic, there are bidirectional disparities for Poland, Sweden, Spain, the Netherlands, Slovenia, Finland and Portugal, while in 2021 we can say that several of the most developed countries, such as Spain, Austria, the Netherlands, Germany and Finland, show differences in the risk of poverty as the economic crisis deepens during the pandemic. The year 2022, the last year of the period analysed, marks a realignment of the distributions to the right of the trend, in the sense of an equalisation of the errors and very

few countries such as Austria, Latvia and the Netherlands remain with significant errors in comparance with the equation trend (see Figure no.3). These developments validate the folowing hypotheses: H1- the population revenues contribute to the eradication of poverty and social exclusion, if economic growth is stable and supports an inclusive social climate; H2- the influence of unemployment on population at risk of poverty and social exclusion increases during the crisis; H3- in times of economic crisis inflation tends to accentuate social poverty, showing a direct correlation with it; H4- regressive population dynamics have an impact on reducing the rate of social poverty; H5- the risk of social exclusion increased if the population poverty rate is higher.

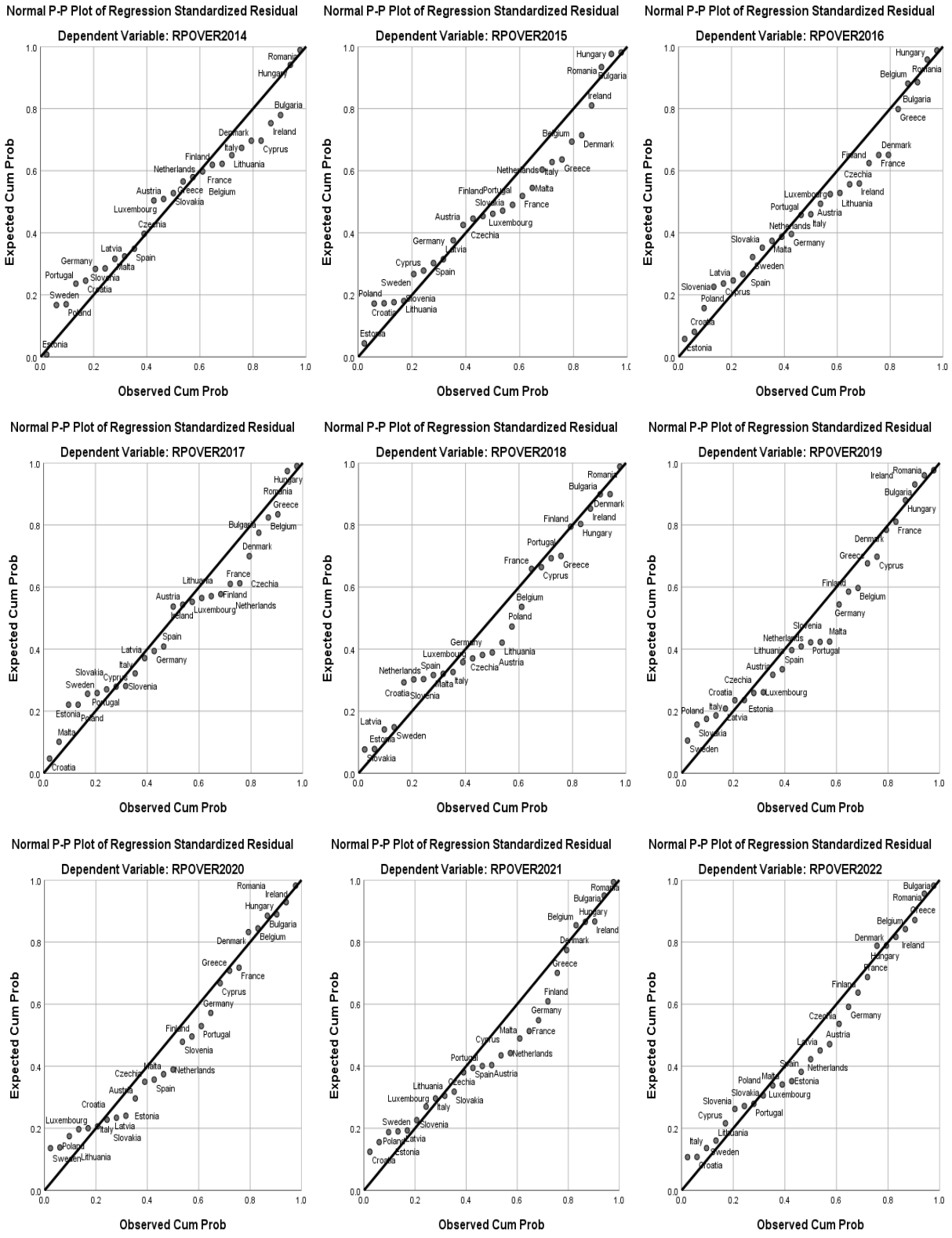

Figure no. 3 – Normal P-P-Plot distribution of the standardized regression of the dependent variable

Source: Realised by authors using SPSS v25 software

As a final result, we can say that the European policy to reduce the risk of poverty and social exclusion is in close correlation with the level of economic development and with the political steps to promote laws and regulations to protect citizens in the European area, which has proved to be consistent with the economic policy objectives proposed by the European Union. On the other hand, we can stipulate that Romania is in the same historical trend European Union trend, but it is constantly situated in the marginal zone of the right evolution, with exposure to a high risk of poverty both due to its low economic performance and to the significant differences in GDP compared to the European average.

5. Conclusions

The conclusions of the study under the research objectives, show that it has achieved these ones. The metanalysis supports the development of a valid model for quantifying social risk based on economic growth. The study highlighted the fact that at European level there are large regional disparities in terms of policy to eradicate the risk of poverty, the most vulnerable countries being those whose economic performance does not allow citizens to ensure a decent standard of living, as promoted by the European Union, an aspect correlated with multiple economic-administrative vulnerabilities and excessive taxation of these countries to cover economic deficits. The limitations of the study lie in the small number of indicators actually used, and the authors propose to develop this study in the future in order to capture the causality of the relational evolution of poverty with other relevant indicators at the European macroeconomic level.

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