

Anna Misztal

University of Lodz, Faculty of Economics and Sociology

e-mail: anna.misztal@uni.lodz.pl

ORCID: 0000-0002-7455-5290

Magdalena Kowalska

University of Lodz, Faculty of Economics and Sociology

e-mail: magdalena.kowalska@uni.lodz.pl

ORCID: 0000-0002-5821-0305

THE IMPACT OF GLOBALIZATION ON THE SUSTAINABLE DEVELOPMENT OF ENTERPRISES – THE CASE OF BULGARIA, CROATIA AND ROMANIA

WPLYW GLOBALIZACJI NA ZRÓWNOWAŻONY ROZWÓJ PRZEDSIĘBIORSTW – PRZYPADEK BUŁGARII, CHORWACJI I RUMUNII

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Summary: The main aim of this paper is to assess the impact of globalization on the sustainable development of enterprises in Bulgaria, Croatia, and Romania. Globalization and sustainable development are popular and commonly used terms. They relate to contemporary conditions of business development and their progress is inevitable. The sustainable development of enterprises can be defined as the development taking place in three spheres of economic, social and environmental protection. Globalization concerns the processes of the integration and interdependence of economies, enterprises and institutions. The first part of this paper shows selected theoretical issues related to the impact of globalization on sustainable business development. The second, main part, presents the results of the study, which show that globalization has a statistically significant, positive impact on the sustainable development of enterprises in Bulgaria, Croatia and Romania in the period from 2008 to 2019.

Keywords: globalization, sustainable development of enterprises.

Streszczenie: Podstawowym celem artykułu jest ocena wpływu globalizacji na zrównoważony rozwój przedsiębiorstw w Bułgarii, Chorwacji oraz Rumunii. Terminy globalizacja oraz zrównoważony rozwój są niezwykle popularne i powszechnie używane. Odnoszą się one do uwarunkowań rozwoju biznesu. Zrównoważony rozwój przedsiębiorstwa można zdefiniować jako rozwój ekonomiczny, społeczny i środowiskowy. Globalizacja oznacza proces integracji

i wzrostu zależności krajów, przedsiębiorstw i instytucji. Pierwsza część artykułu zawiera omówienie wybranych zagadnień teoretycznych związanych z wpływem globalizacji na zrównoważony rozwój przedsiębiorstw. W zasadniczej części opracowania przedstawiono wyniki badania, które wskazują, że globalizacja ma istotny statystycznie, dodatni wpływ na zrównoważony rozwój przedsiębiorstw w Bułgarii, Chorwacji oraz Rumunii w latach 2008-2019.

Słowa kluczowe: globalizacja, zrównoważony rozwój przedsiębiorstw.

1. Introduction

Globalization is a multi-threaded and dynamic process related to economic, social and political spheres. It has an impact on the functioning of economic entities. On the one hand, it enables entering new markets and acquiring new customers, while on the other hand, it increases the level of competitiveness. Today's conditions of doing business require several initiatives and changes in the approach to management. In the era of climate change and increasing customer awareness, the implementation of sustainable development in enterprises is crucial, which means economic, social and environmental development. Globalization processes often hurt the environment, however globalization contributes to the dissemination of knowledge and information, while increasing environmental awareness among consumers. In this sense, globalization and sustainable development can progress in the same direction.

The main aim of this paper is to assess the impact of globalization on the sustainable development of enterprises in Bulgaria, Croatia, and Romania. This paper is theoretical and empirical. The theoretical part describes selected problems of globalization and sustainable development. The empirical part of this paper contains the results of the conducted research.

The following research hypothesis is formulated as follows "Globalization has a statistically significant, and positive impact on the level of sustainable development of enterprises in Bulgaria, Croatia and Romania in the period from 2008 to 2019". The KOF Globalization Index was used to measure the level of globalization in the analyzed countries. A synthetic indicator was created to assess the level of sustainable development of enterprises. For the statistical evaluation, Pearson's linear correlation and the Ordinary Least Square Method were used.

2. Globalization and the sustainable development of enterprises – selected theoretical issues

Globalization is an opportunity and a challenge for the development of enterprises. It increases the flow of services, goods, and capital, including foreign investment, technology and information (Cyron, 2000; Gorynia, 2001). Globalization is crucial for the scope and scale of business operations, because enterprises have to meet

customer expectations and achieve competitive advantage in increasingly related markets. (Stonehouse, 2001, p. 6; Firlej, 2011, pp. 78-79; Miara, 2017, p. 96).

Socio-economic changes and the growing importance of environmental aspects cause the concept of sustainable development of enterprises to gain in importance. It should be emphasized that the term sustainable development is defined in various ways (Pearce and Turner, 1990; Radermacher, 1999; Burger, Allen, Brown, Burnside, Davidson, and Fristoe, 2012; Duran, Gogan, Artene, and Duran, 2015; Misztal, 2018, pp. 27-29). The most common and oft-cited definition comes from the report "Our Common Future" (The Brundtland Report, 1987), according to which sustainable development is "a development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

Sustainable development means the simultaneous implementation of the triad of economic, social and environmental goals. This is a multidimensional and complex category, which can be analyzed at a micro and macro scale (Pezzey and Toman, 2002, pp. 165-232).

At the enterprise level, sustainable development means an improvement in quantitative and qualitative conditions of running a business, the use of pro-ecological standards and solutions, and the support of employee development (Crowther and Aras, 2008, p. 10; Buczkowski, Dorożyński, Kuna-Marszałek, Serwach, and Wieloch, 2016, pp. 13-17; Kowalska and Misztal, 2019, pp. 17-24). Sustainable development can be defined as "meeting the needs of a firm's direct and indirect stakeholders (...) without compromising its ability to meet the needs of future stakeholders as well (Dyllick and Hockerts 2002)". The most important thing is to "take decisions considering the common value" (Porter and Kramer, 2006). This idea helps to gain competitive advantage and increase its market share (Ligang, 2000; Grabara, Bajdro, and Mihaescu, 2015) or "keep the business going" (Colbert and Kurucz, 2007).

The sustainable development of enterprises depends on many determinants, including globalization, which can be defined as "the trans-national increase in trade and capital transfers across national boundaries" (Duncan, p.1), or as "a growth in interdependence and integration of states, societies, economies and cultures, which results in the creation of 'one world' as a global society" (Kempny, 1998, p. 241). Economic globalization "refers to the increasing interdependence of world economies as a result of the growing scale of cross-border trade of commodities and services, flow of international capital and wide and rapid spread of technologies" (Shangquan, 2000, p. 1).

Globalization brings several benefits, including an increase in overall well-being, knowledge and technology transfer, political convergence, and greater access to goods and services. It also causes negative phenomena such as the negative impact on the economies of less developed countries, exacerbates economic inequalities, migrations, a greater spread of crises, and it can have hurt the environment, the level of unemployment and wages (Marciniak, 2007, pp. 540-543; Noga and Stawicka, 2008, pp. 35-91; Flejterski and Wahl, 2010, pp. 10-14).

The processes of globalization and sustainable development occur simultaneously. Globalization is inevitable, and the concept of sustainable development, due to

climate change, should be implemented at the level of countries, enterprises, and households. Both ideas have many common goals, including economic growth, the increase of social well-being, dissemination of knowledge, and the integration of the global market. The differences relate in particular to environmental issues. The protection of natural resources is the main goal of sustainable development, whereas globalization is characterized by the use of global economic resources on the principles of free trade; lack of care for the state of the natural environment for future generations (Kondratowicz-Pozorska, 2012, pp. 116-117).

The key issue is to determine the direction of the relationship between globalization and sustainable development. Globalization, “on the one hand contributes to the devastation of the world, but on the other, it seeks to improve the environment through developing new technologies that improve the process of controlling and monitoring the progressive phenomenon of degradation and exploitation of the Earth’s natural resources” (Buchcic, 2013, p. 45). Globalization accelerates economic growth, and thus increases demand for functions fulfilled by the environment in this process. Globalization is also rationalizing the management process, and thus reducing expenditure (also environmental) to achieve certain results. In this sense, globalization can be beneficial for the environment (Budnikowski, 2002, pp. 184-193).

The conducted research unequivocally indicates the direction of the relationship between sustainable development and globalization. It seems that globalization and its impact on business development is undeniable, and the directions of the impact of globalization on the sustainable development of enterprises are not yet explored, and require detailed analysis.

3. Research methodology

The main aim of the study is to assess the impact of globalization on the sustainable development of enterprises in Bulgaria, Croatia and Romania (the common features of these enterprises are: location i.e. Central and Eastern Europe; similar level of development; being the poorest countries in the EU, which are also willing to join the eurozone; their approved balanced budgets for 2020; the belief of their governments that deeper integration is a response to globalization and the current geopolitical situation). The data used in the analysis come from the KOF and Eurostat portals (data in the period from 2008 to 2019 are the result of a forecast carried out using the trend extrapolation method).

The following research hypothesis is formulated as follows: “Globalization has a statistically significant, positive impact on the level of sustainable development of enterprises in Bulgaria, Croatia and Romania in the period from 2008 to 2019”. The study was carried out in the following stages:

1) Statistical assessment of the KOF Globalization Index (IG_{KOF}) 2008-2019 (Table 1).

Table 1. Analytical indicators of the KOF Globalization Index

The KOF Globalisation Index (IG_{KOF})		
The integrated indicator of economic globalization (IG_{KOFeko})	Trade globalisation	
	De facto	De jure
	trade in goods, trade in services, trade partner diversity;	trade regulations, trade taxes, tariffs, trade agreements;
	Financial globalisation	
	De facto	De jure
	foreign direct investment, portfolio investment, international debt, international reserves, international income payments;	investment restrictions, capital account openness, international investment agreements;
The integrated indicator of social globalization (IG_{KOFsoc})	Interpersonal globalisation	
	De facto	De jure
	international voice traffic, transfers, international tourism, international students, migration;	telephone subscriptions, freedom to visit, international airports;
	Informational globalisation	
	De facto	De jure
	used internet bandwidth, international patents, high technology exports;	television access, internet access, press freedom;
	Cultural globalisation	
	De facto	De jure
	trade in cultural goods, trade in personal services, international trademarks, McDonald's restaurant, IKEA stores;	gender parity, human capital, civil liberties;
	The integrated indicator of political globalization (IG_{KOFpol})	De facto
embassies, UN peace-keeping missions, international NGOs.		international organisations, international treaties, treaty partner diversity.

Source: own study on the basis of: (Gygli, Haelg, Potrafke, and Sturm, 2019, pp. 543-574).

The KOF Globalization Index (IG_{KOF}) introduced by Dreher in 2006 (Dreher, 2006, pp. 1091-1110), has become the most widely used globalization index in the academic literature (Potrafke, 2015, pp. 509-552). The KOF Globalization Index is a composite indicator that measures globalization for every country in the world since 1970, in the economic, social and political dimensions:

$$IG_{KOF} = IG_{KOFeko} + IG_{KOFsoc} + IG_{KOFpol}$$

where: IG_{KOFeko} is the integrated indicator of economic globalization, IG_{KOFsoc} is the integrated indicator of social globalization, IG_{KOFpol} is the integrated indicator of political globalization.

Table 1 presents the components of the KOF Globalization Index.

In the study, the authors used the overall KOF Globalization Index, calculated on the basis of the average of each level of aggregation.

2) Creation and statistical evaluation of the synthetic indicator of sustainable development of enterprises in Bulgaria, Croatia, and Romania in the period from 2008 to 2019.

The synthetic indicator of sustainable development of enterprises is created on the basis of the sum of synthetic indicators related to the components of the sustainable development of the enterprise:

$$SI_{sd} = SI_{eco} + SI_{soc} + SI_{env},$$

where: SI_{eco} is the synthetic indicator of economic development, SI_{soc} is the synthetic indicator of social development, SI_{env} is the synthetic indicator of environmental development.

Synthetic indicators are composed of analytical indicators (divided into stimulants and destimulants). Analytical indicators are selected on the basis of availability and comparability regarding the research period. The normalization of analytical indicators was made based on the formulas (Dziekański, 2014, pp. 61-70):

- for the stimulants:

$$z_{ij} = \frac{x_{ij} - \min_i \{x_{ij}\}}{\max_i \{x_{ij}\} - \min_i \{x_{ij}\}}, z_{ij} \in [0;1];$$

- for the destimulants:

$$z_{ij} = \frac{\max_i \{x_{ij}\} - x_{ij}}{\max_i \{x_{ij}\} - \min_i \{x_{ij}\}}, z_{ij} \in [0;1].$$

where: z_{ij} stands for the normalized value of the j -th variable in the i -th year; x_{ij} is the value of the j -th variable in the i -th year; $\min_i \{x_{ij}\}$ is the lowest value of the j -th variable in the i -th year; $\max_i \{x_{ij}\}$ is the highest value of the j -th variable in the i -th year.

To calculate the synthetic indicator of sustainable development of enterprises (SI_{sd}), as well as its sub-indices (SI_{eco} , SI_{soc} and SI_{env}), the same impact of different indices on the aggregate measure should be assumed. The synthetic indicators are created based on the formula (Nowak, 1995, p. 119):

$$SI_i = \frac{1}{n} \sum_{j=1}^n z_{ij}, (i = 1, 2, \dots, n),$$

where: SI_i stands for the synthetic indicator in the i -year; n is the number of metrics; others as above.

The components of the synthetic indicator of the sustainable development of enterprises are presented in Table 2.

Table 2. Analytical indicators of the indicator of sustainable development of enterprises

Synthetic indicator	Diagnostic variable	Description of the variable	Stimulants	Destimulants
The synthetic indicator of economic development	x_1	Total number of companies in a country	x	
	x_2	Turnover or gross premiums [million euro]	x	
	x_3	Production value [million euro]	x	
	x_4	Value added at factor cost [million euro]	x	
	x_5	Gross operating surplus [million euro]	x	
	x_6	Total purchases of goods and services [million euro]	x	
	x_7	Gross investment in tangible goods [million euro]	x	
	x_8	Investment rate (investment/value added at factors cost) [%]	x	
	x_9	Share of personnel costs in production [%]		x
	x_{10}	Average personnel costs [thousand euro]		x
The synthetic indicator of social development	x_{11}	Wages and Salaries [million euro]	x	
	x_{12}	Social security costs [million euro]	x	
	x_{13}	Total number of employees in a country	x	
	x_{14}	Turnover per person employed [thousand euro]	x	
	x_{15}	Apparent labour productivity [thousand euro]	x	
	x_{16}	Gross value added per employee [thousand euro]	x	
	x_{17}	Growth rate of employment [%]	x	
	x_{18}	Number of persons employed per enterprise	x	
	x_{19}	Investment per person employed [thousands euro]	x	
	x_{20}	Personnel costs [million euro]		x
The synthetic indicator of environmental development	x_{21}	Carbon dioxide emission [tons]		x
	x_{22}	Methane emission [tons]		x
	x_{23}	Nitrous oxide emission [tons]		x
	x_{24}	Sulphur oxides emission [tons]		x
	x_{25}	Ammonia emission [tons]		x
	x_{26}	Carbon monoxide emission [tons]		x
	x_{27}	Nitrogen oxides emission [tons]		x
	x_{28}	Generation of total waste [tons]		x

Source: own study on the basis of Eurostat.

3) Analysis of the impact of the time variable (t) on the KOF Globalization Index 2008-2019 and the synthetic indicator of the sustainable development of Bulgarian, Croatian and Romanian enterprises 2008-2019 (use of the Classic Least Squares Method).

4) Examination of the relationship between the KOF Globalization Index 2008-2019 and the synthetic indicator of sustainable development of Bulgarian, Croatian and Romanian enterprises 2008-2019, using Pearson's correlation coefficient and an estimation by the Ordinary Least Squares Method.

4. The results of the study

Figure 1 presents the number of enterprises operating in Bulgaria, Croatia and Romania in the period from 2008 to 2019. During the research period, the highest average number of registered business entities was observed in Romania at around 0.45 million, in Bulgaria 0.3 million, and the lowest in Croatia at 0.15 million.

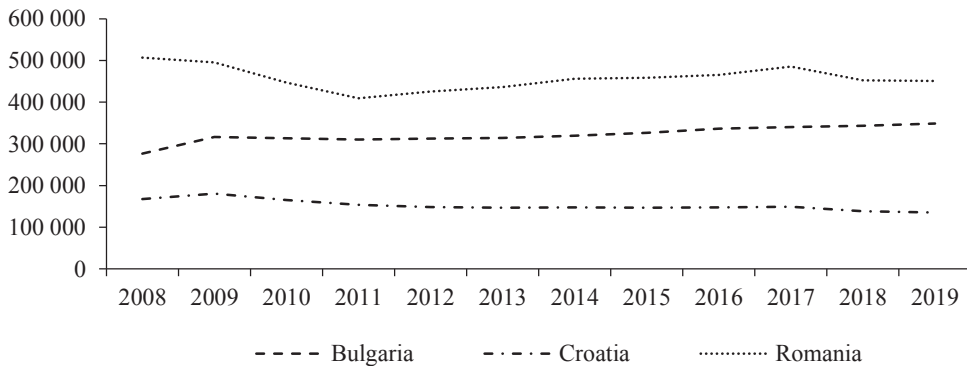


Fig. 1. Research sample – number of enterprises in the period from 2008 to 2019

Source: own study on the basis of Eurostat.

Table 3 presents the KOF Globalization Index in the period from 2008 to 2019 with basic descriptive statistics. The KOF Globalization Index consists of three integrated indicators – economic globalization, social globalization and political globalization. In the countries on the basis of which the survey was prepared, the highest share of political globalization and the lowest of economic globalization can be observed. The average highest value of KOF Globalization Index in the period from 2008 to 2019 is recorded in Bulgaria 79.49 (median 79.92), its similar value occurred in Croatia 79.34 (median 79.25), while the lowest value was in Romania 78.48 (median 78.53). It should be noted that the KOF Globalization Index level is similar in all the analysed countries.

Table 4 presents the parameters for equating the trend line for the KOF Globalization Index in the period from 2008 to 2019. The highest development tendency of the KOF Globalization Index was recorded in Romania (the coefficient before variable t is 0.434, $R^2 = 0.93$), and the lowest in Bulgaria (the coefficient before the variable t is 0.383 $R^2 = 0.80$). In all the analysed countries, the parameter

Table 3. KOF Globalisation Index in the period from 2008 to 2019

Country	Indicator	Year											Descriptive statistics				
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Max	Min	Mean	Median
Bulgaria	IG_{KOFeco}	75.44	72.45	72.52	71.90	72.42	74.54	76.92	76.98	77.38	77.24	77.78	78.33	78.33	71.90	75.33	76.18
	IG_{KOFsoc}	72.88	73.64	73.91	74.70	77.20	77.46	77.89	77.15	77.04	78.92	79.55	80.18	80.18	72.88	76.71	77.18
	IG_{KOFpol}	88.42	86.38	85.01	85.57	86.45	86.66	86.19	86.70	86.89	86.33	86.30	86.27	88.42	85.01	86.43	86.36
	IG_{KOF}	78.91	77.49	77.15	77.39	78.69	79.55	80.33	80.28	80.44	80.83	81.21	81.60	81.60	77.15	79.49	79.92
Croatia	IG_{KOFeco}	69.91	67.75	67.17	67.14	68.65	69.35	73.12	73.05	75.01	74.33	75.17	76.01	76.01	67.14	71.39	71.48
	IG_{KOFsoc}	79.99	79.37	78.82	79.07	79.42	79.86	82.32	82.57	83.23	83.05	83.55	84.06	84.06	78.82	81.28	81.16
	IG_{KOFpol}	85.29	85.77	85.78	85.57	85.90	85.21	84.84	85.31	85.30	85.14	85.08	85.02	85.90	84.84	85.35	85.30
	IG_{KOF}	78.40	77.63	77.26	77.26	77.99	78.14	80.10	80.31	81.18	80.84	81.27	81.70	81.70	77.26	79.34	79.25
Romania	IG_{KOFeco}	66.40	65.21	65.36	64.97	66.24	67.79	70.44	70.74	70.42	71.31	72.07	72.83	72.83	64.97	68.65	69.11
	IG_{KOFsoc}	72.90	73.12	74.05	75.00	75.30	75.37	76.28	76.81	76.96	77.77	78.30	78.84	78.84	72.90	75.89	75.83
	IG_{KOFpol}	91.42	90.59	90.60	90.48	90.50	90.52	90.55	91.23	91.24	90.89	90.91	90.93	91.42	90.48	90.82	90.74
	IG_{KOF}	76.97	76.35	76.71	76.85	77.38	77.93	79.13	79.63	79.58	79.99	80.43	80.87	80.87	76.35	78.48	78.53

Source: own study on the basis of KOF.

before the variable t is positive, which means that the upward trend of the KOF Globalization Index in the period from 2008 to 2019 occurred in all the analyzed countries.

Table 4. Parameters for equating the trend line for the KOF Globalisation Index in the period from 2008 to 2019: $y = \alpha_0 + \alpha_1 t$

Dependent variable (IG_{KOF})	OLS	Coefficient	SD	P-value	R ²
Bulgaria	Constant	76.998	0.45	1.09E-18***	0.80
	Time	0.383	0.06	0.000089***	
Croatia	Constant	76.554	0.47	1.94E-18***	0.82
	Time	0.429	0.06	0.0000546***	
Romania	Constant	75.664	0.27	7.92E-21***	0.93
	Time	0.434	0.04	0.000000323***	

Source: own study on the basis of KOF.

Table 5 presents a synthetic indicator of the sustainable development of enterprises in the period from 2008 to 2019 with basic descriptive statistics. The average highest value of synthetic indicator of sustainable development of enterprises in the period from 2008 to 2019 was recorded in Romania 0.63 (median 0.65), while in Croatia and Bulgaria the average value of the indicator was at a similar level 0.48, 0.52 (median 0.52, 0.51). The highest maximum value of the synthetic indicator of sustainable development of enterprises in the period from 2008 to 2019 was 0.79 in Romania (2019), while the lowest at 0.27 in Bulgaria (2010).

Table 6 presents the parameters for equating the trend line for the synthetic indicator of sustainable development of enterprises in the period from 2008 to 2019. The highest development tendency of the synthetic indicator of the sustainable development of enterprises was recorded in Bulgaria (the coefficient before the variable t is 0.04, $R^2 = 0.81$), while the lowest in Croatia (the coefficient before the variable t is 0.01 $R^2 = 0.26$). In all the analysed countries, the parameter before the variable t is positive, which means that the upward trend of the sustainable development of enterprises in the period from 2008 to 2019 occurred in all the analysed countries.

The relationship between the KOF Globalization Index in the period from 2008 to 2019 and the synthetic indicator of the sustainable development of Bulgarian, Croatian and Romanian enterprises 2008-2019 was examined using Pearson's correlation coefficient and an estimation by the Ordinary Least Squares Method.

Figure 2 presents Pearson's linear correlation coefficient between the explained variable – a synthetic indicator of the sustainable development of Bulgarian, Croatian and Romanian enterprises 2008-2019, and the explanatory variable – the KOF

Table 5. The synthetic indicator of the sustainable development of enterprises in the period from 2008 to 2019

Country	Synthetic Indicator	Year											Descriptive statistics				
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Max	Min	Mean	Median
Bulgaria	SI_{eco}	0.66	0.40	0.27	0.36	0.39	0.36	0.40	0.59	0.59	0.49	0.50	0.51	0.66	0.27	0.46	0.45
	SI_{soc}	0.60	0.39	0.21	0.33	0.36	0.36	0.42	0.52	0.53	0.46	0.47	0.48	0.60	0.21	0.43	0.44
	SI_{env}	0.05	0.43	0.38	0.26	0.48	0.77	0.77	0.76	0.87	1.00	1.09	1.18	1.18	0.05	0.67	0.77
Croatia	SI_{sd}	0.44	0.41	0.29	0.32	0.41	0.49	0.53	0.63	0.66	0.65	0.69	0.72	0.72	0.29	0.52	0.51
	SI_{eco}	0.89	0.55	0.33	0.27	0.11	0.25	0.29	0.36	0.30	0.12	0.07	0.02	0.89	0.02	0.30	0.28
	SI_{soc}	0.83	0.35	0.30	0.36	0.28	0.39	0.42	0.53	0.61	0.45	0.44	0.44	0.83	0.28	0.45	0.43
	SI_{env}	0.15	0.27	0.44	0.49	0.62	0.84	0.92	0.69	0.73	0.98	1.06	1.15	1.15	0.15	0.70	0.71
	SI_{sd}	0.62	0.39	0.36	0.37	0.34	0.50	0.54	0.53	0.55	0.52	0.53	0.54	0.62	0.34	0.48	0.52
Romania	SI_{eco}	0.91	0.29	0.39	0.55	0.50	0.56	0.57	0.50	0.48	0.46	0.45	0.44	0.91	0.29	0.51	0.49
	SI_{soc}	0.70	0.19	0.34	0.61	0.53	0.56	0.55	0.54	0.58	0.59	0.60	0.62	0.70	0.19	0.53	0.57
	SI_{env}	0.10	0.56	0.70	0.60	0.69	0.83	0.96	0.93	0.96	1.14	1.23	1.32	1.32	0.10	0.84	0.88
	SI_{sd}	0.57	0.35	0.48	0.59	0.57	0.65	0.69	0.65	0.67	0.73	0.76	0.79	0.79	0.35	0.63	0.65

Source: own study on the basis of Eurostat.

Table 6. Parameters for equating the trend line for the synthetic indicator of sustainable development of enterprises in the period from 2008 to 2019: $y = \alpha_0 + \alpha_1 t$

Dependent variable (SI_{sd})	OLS	Coefficient	SD	P-value	R ²
Bulgaria	constant	0.28	0.04	0.0000704***	0.81
	time	0.04	0.01	0.0000753***	
Croatia	constant	0.42	0.05	0.0000177***	0.26
	time	0.01	0.01	0.2053*	
Romania	constant	0.43	0.04	0.000000781	0.75
	time	0.03	0.01	0.0002***	

We adopt statistical significance at 0.05.

Source: own study on the basis of Eurostat.

Globalization Index 2008-2019. Pearson’s linear correlation coefficient between the examined variables in all the analysed countries was statistically significant, at the level of $p < 0.05$. The highest level of correlation coefficient was recorded in Bulgaria 0.96 and the lowest in Croatia 0.67.

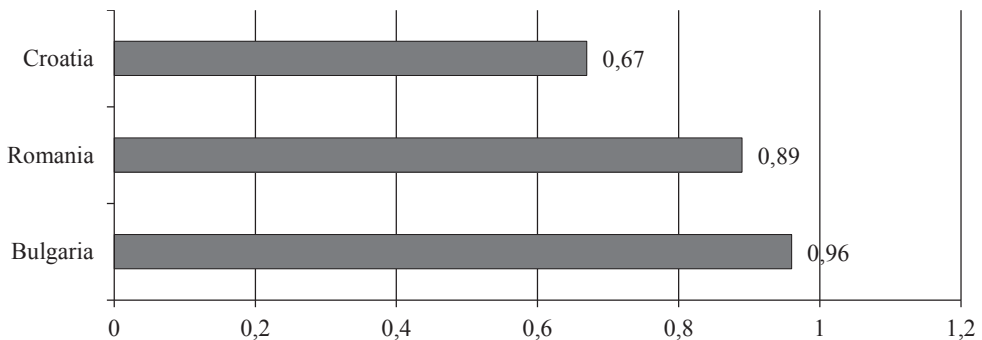


Fig. 2. Pearson's correlation coefficient (correlations between SI_{sd} and IG_{KOF} , $p < .05$)

Source: own study on the basis of KOF and Eurostat.

Table 7 presents the results of the analysis of the relationship between the KOF Globalization Index 2008-2019 and the synthetic indicator of the sustainable development of Bulgarian, Croatian and Romanian enterprises in 2008-2019, using the Ordinary Least Squares Method. During the period under consideration, in all countries there is a statistically significant, positive impact of the KOF Globalization Index on the sustainable development of enterprises. The coefficients before the variable x are positive, which means that the increase in the level of the KOF Globalization Index will increase the synthetic indicator of the sustainable

development of Bulgarian, Croatian and Romanian enterprises. The highest level of impact of the KOF Globalization Index on sustainable development of enterprises was recorded in Bulgaria (when the KOF Globalization Index increases by 1, the synthetic indicator of the sustainable development of enterprises increases by 0.09, $R^2 = 0.93$) where the variability of the explained variable was explained in 93%. The lowest level of impact of the KOF Globalization Index on the sustainable development of enterprises was recorded in Croatia (when the KOF Globalization Index increases by 1, the synthetic indicator of the sustainable development of enterprises increases by 0.04, $R^2 = 0.45$), and the variability of the explained variable was explained in 45%.

Table 7. Results of OLS regressions in the period from 2008 to 2019: $SI_{sd} = \alpha_0 + \alpha_1 IG_{KOF} + \varepsilon_i$

Dependent variable (SI_{sd})	OLS	Coefficient	SD	P-value	R^2
Bulgaria	constant	-6.91	0.65	0.000000842	0.93
	IG_{KOF}	0.09	0.01	0.000000428	
Croatia	constant	-2.39	1.00	0.0374**	0.45
	IG_{KOF}	0.04	0.01	0.0163**	
Romania	constant	-4.76	0.86	0.0003***	0.80
	IG_{KOF}	0.07	0.01	0.0000965***	

We adopt statistical significance at 0.05.

Source: own study on the basis of KOF and Eurostat.

The results of the study allow the acceptance of the research hypothesis. This means that globalization has a statistically significant, positive impact on the level of the sustainable development of Bulgarian, Croatian and Romanian enterprises in the period from 2008 to 2019.

The results of the study indicate that globalization processes are one of the factors influencing the sustainable development of enterprises in the analyzed countries. These countries are characterized by a relatively low level of economic development and industrialization. The causative factor in decisions supporting the sustainable development of enterprises may be external conditions. Hence, globalization processes contribute to economic, social and environmental development.

Further research should focus on analysing the impact of globalization on the sustainable development of enterprises in other countries. In addition, the impact of internal determinants on sustainable development should be assessed. This will allow creating models covering external and internal determinants of the sustainable development of enterprises.

5. Conclusion

Globalization is a set of processes occurring in the socio-economic reality consisting in the deepening of global connections in all aspects of modern life, economic, social and political. Globalization is an opportunity and a challenge for the development of enterprises, which should be based on the concept of sustainable development – bearing in mind the synchronization of the economic, social and environmental planes. The results of the study indicate that in all the analysed countries, in the period from 2008 to 2019 an increase in the indicator of the sustainable development of enterprises as well as the KOF Globalization Index can be observed. Pearson's linear correlation coefficients and the results of the Ordinary Least Squares Method indicate that in all the analysed countries there is a significant, positive statistical relationship between the examined variables. Therefore, the following research hypothesis should be adopted: "Globalization has a statistically significant, positive impact on the level of the sustainable development of Bulgarian, Croatian and Romanian enterprises in the period from 2008 to 2019".

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