

Testing the Polish society security

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Abstract. The aim of the article is to analyze the level of security within Polish society using data on crime rates collected from the Local Data Bank of the Polish Central Statistical Office. The data were collected for the 2017 year for individual provinces of Poland. In the second part of the article the model of progressive stepwise regression was constructed for the overall crime rate, where the independent variables were: the criminal crime rate per 1000 residents, the rate of economic crimes per 1000 residents, the road crimes' rate per 1000 residents, the crime rate against life and health per 1000 residents, the property crime rate per 1000 residents and the rate of crimes against freedom, freedom of conscience and religion, sexual freedom and morals per 1000 residents, the rate of crimes against family and care per 1000 residents. Further analysis has been carried out to determine the relationship between the crime rates and the selected economic measures, i.e., unemployment rates, GDP per capita and investment expenditures per capita. The results were obtained using the Statistica 12 program. It was concluded that the indicators affecting the overall crime rates were: the criminal crime rate per 1000 residents and the rate of economic crimes per 1000 residents. Correlation obtained for the variables under investigation shows that a statistically significant relationship was obtained only in the case of two variables - the overall crime rate and the capital expenditures per capita.

Keywords: security, crime rates, economic measures, progressive stepwise regression, Poland.

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1. INTRODUCTION

After the terrorist attacks on the World Trade Center and the ISIS attacks in Europe, ensuring citizens' security has become one of the basic aspects of the state functioning. On the example of Turkey which has experienced many terrorist attacks, it can be seen that after the attack countries lose their stable political and economic situation, they are weakened economically. Thus, it becomes important that authorities of a country do everything in their power to prevent such threats.

There are numerous interpretations of what is security. In general, security is a concept derived from the Latin word *sine cura* (*securitas*), which already in Roman times meant political stability, and in the most literal sense it means certainly no threat or protection against it (Jurgilewicz, 2017; Moumen et al. 2019; Akhmadeev et al., 2019; Sitdikova et al., 2019; Ključnikov et al., 2019; Lialina 2019; Prause et al., 2019; Chehabeddine & Tvaronavičienė, 2020; Saseanu et al., 2019).

Identifying common elements in various concepts of security is useful in at least three ways. Firstly, it facilitates asking the most basic question of any social science: Of what is this instance? Secondly, it promotes rational policy analysis by facilitating a comparison of one type of security policy with another. And finally, it facilitates scholarly communication by establishing common grounds between those with disparate views (Goldmann, 1995).

The OECD report "Military Expenditure in Developing Countries: Security and Development" is accurate in claiming that, firstly, "security is necessary for development" and, secondly, that "the root causes of insecurity are often developmental" (*State-of-the-Art*, 1997). It is difficult to promote development under conditions of violence and insecurity. Today private capital flows into developing countries are five times greater than ODA and they have thus become crucial for the development process. But private capital tends to shy away from the regions of instability. At the same time, development itself can undermine traditional conflict management mechanisms and create new forms of insecurity.

2. LITERATURE REVIEW

Modern definitions of security are closely tied to a state's defense of sovereign interests by military means. At its most fundamental level, the term security has meant the effort to protect a population and territory against organized force while advancing state interests through competitive behavior. The state has been the prevailing entity for guaranteeing security, and state-centered theories have dominated discussions of international relations, especially since World War II (Dabelko & Dabelko, 1993).

Security is an ambiguous concept that is one of the basic human needs. It is usually understood as the lack of threats felt not only by individuals but also by larger social groups, states or nations. It also constitutes one of the basic rights (right to safety) consisting of eliminating situations that threaten man and his well-being as a result of his improper relations with the environment (Jurgilewicz, 2017).

Security is not an independent concept. It is always related to individual or societal value systems (Brauch, 2003). Once the perception of security has changed, and the fear of one another is overcome, security is achieved (Ulusoy, 2003). Especially noteworthy in this context is the distinction between security in an 'objective sense' (absence of threats) and in a 'subjective sense' (absence of fear) (Wolfers, 1962). Security is achieved once both components exist.

First, security is an important concept, which has been used to justify suspending civil liberties, making war, and massively reallocating resources during the last fifty years. Despite the flurry of recent works, it seems fair to describe security as a concept that received far less scholarly attention than it

deserved during that period. And second, most recent works on security would not qualify as conceptual analysis in the sense described in the previous section. Security has not received the serious attention accorded to the concepts of justice, freedom, equality, obligation, representation, and power (Digeser, 1984).

Ensuring security is one of the basic functions of each entity of organized activities, including each state (Dawidczyk et al., 2007). The Constitution of the Republic of Poland states that "the Republic of Poland is a democratic state of law". Its laws, therefore, should shape the imaginations, political attitudes and behavior of citizens. One of the important rights is the right to own security (Sławik, 1999). You can also derive it from the Convention for the Protection of Human Rights and Fundamental Freedoms (Dz.U. Nr 61 z 1993r., poz. 284).

Commonly, security is identified intuitively as a state which we are dealing with in a given place and time, where nothing threatens us or where we do not feel threatened. Whereas legislation often uses the term security, danger, public safety, security of people and property - but it does not contain a definition of these concepts (Tokarski, 2007; Wittebrood, Junger, 2002).

E. Ura, under the term of public security in the material sense, understands a state in which all citizens are not in any danger, no matter what the source is. Therefore, it may refer to dangers arising as a result of a natural disaster, catastrophe, epidemic or other life-threatening phenomena, health, property of citizens or public property (Ura, 2003).

On the other hand, according to J. Służewski, public security should be understood as matters connected with the protection of the state and its interests, as well as with the protection of life and health of citizens and property against unlawful attacks violating these goods. Every human being, business entity or institution is looking for such places for their existence that will best meet their needs (including the need for public safety) (Obrębalski, 2004; Iacobuta et al, 2004; Xiong et al., 2019).

National security is not only about protecting and defending the existence of the state, but also about the successful existence or development and protection of the values of close members of the community, which even without the existence of the state is of great importance. The term national security refers only to one state and cannot be equated with the notion of many states. It can, therefore, be assumed that national security is:

- a superior value among other goals of states and determines the success in their implementation,
- applies to goals including such values as life - decisive for the sustainability of the state, national prosperity and development, as well as for a sense of security, important - these are values that have the direct impact on the fate of the state and the nation as a whole, the implementation of which affects safe existence national and state development and other (secondary) - these are values, which from the point of view of national existence and development of the state, do not have a major impact on them,
- defines the level of freedom in achieving those objectives,
- is to ensure the security of the state as a political institution,
- is the protection of society against threats that affect significantly the functioning of the nation,
- it also concerns the conditions for achieving national goals in a world in which one can face fierce competition and rivalry, inter alia on the political, economic, cultural and military grounds (Lorek et al., 2013).

National security and human security are interlinked. For example, outwardly aggressive and inwardly repressive regimes can be a major source of human insecurity (Lodgaard, 2004). Underdevelopment in particular has been identified as a link between human and national security (Mack, 2004). Over the years a convergence of national and human security perspectives can be observed. The main reason stated for promoting a human security perspective is that of an "enlightened self-interest" (Barcelona Report, 2004).

The concept of national security has traditionally included political independence and territorial integrity as values to be protected; but other values are sometimes added. The former American Secretary of Defense Harold Brown, for example, includes the maintenance of 'economic relations with the rest of the world on reasonable terms' in his conception of national security (Brown, 1983).

The notion of security itself is quite a complicated one, and it is possible to be defined as an objective state of the matters consisting in the absence of a danger, felt subjectively by individuals or by groups; as the subject of research, it is multi-dimensional in character, and is something more than the sum of dangers (Taylor&Toohey, 2005).

B. Buzan presents plausible arguments for the empirical proposition that security at the individual level is related to security at the level of the state and the international system. His insistence that 'security cannot be isolated for treatment at any single level', however, gives the impression that this is conceptually impossible rather than simply an unwise research strategy. His justification for mixing conceptual and empirical analysis is that 'the search for a referent object of security goes hand-in-hand with that for its necessary conditions' (Buzan, 1984). This approach, however, risks conflating conceptual analysis with empirical observation. Understanding the concept of security is a fundamentally different kind of intellectual exercise from specifying the conditions under which security may be attained. Indeed, conceptual clarification logically precedes the search for the necessary conditions of security, because the identification of such conditions presupposes a concept of security (Lasswell, Kaplan, 1950).

Another aspect related to ensuring security is the issue of ensuring it during mass events. It is needed to provide the appropriate quantity and location of medical assistance at the event venue that will provide a possibility of undertaking a rapid intervention at the very moment of threat to the life and health of participants (Chudy-Laskowska, Woźniak, Zimon, 2019). The research conducted by Zomer and collaborators (Zomer et al., 2015) gives rise to the conclusion that the quality of work, and also the professional attitude of information services, and the protection ones, are of a significant importance for the feeling of security and comfort of participants during an event. Taking under consideration the issues mentioned hereinabove, it is possible to ascertain that numerous factors exert influence upon the feeling of the security of the mass event analyzed (Getz, 2010).

In Maslov's pyramid of needs, security is treated as a particularly important group of needs. It results from the essence of a man and their social functions. The history of humanity has repeatedly proved that the safety of citizens has always been treated as a good of special value (Adamczuk, 2004).

Individuals and nation-states are sometimes insecure about their identities, and they sometimes adopt policies to cope with this insecurity. Individuals, for example, may consult a psychiatrist; and nation-states may revise their immigration laws (Baldwin, 1997).

Nowadays, maintaining energy security is an important aspect for all the states. Security and competitiveness are two very important aspects of the economic and political development of every country. In the 21st century, energy is one of the key drivers of most economies in countries throughout the world. Various countries adopt different measures so as to ensure their security and competitiveness through the effective energy policies that make traditional and renewable resources adequately available hence eliminating the possibilities of shortages (Bilan et al., 2017). In essence, energy security consists of countless political, legal, economic, technical, technological or environmental factors. Not only the deposits of energy resources located on the territory of a given country are important, but also the policy of diversifying their sources of supply. Renewable energy plays an increasingly important role, which is developing dynamically on a global scale, and its climate policy is becoming a catalyst (Ruszel, Podmiotko, 2019).

Limited energy resources and regulation by the European Commission over the years have led to increased efforts in the search for renewable energy sources, especially in European countries. Also,

important here is the fact that renewable energy is significantly less harmful for the natural environment than non-renewable energy, which has triggered efforts to obtain energy from more environmentally friendly sources (Bowden & Payne, 2009).

3. THE CHARACTERISTICS OF THE DATA ANALYZED

The data, which were used to analyze the security level of residents of Polish provinces, were downloaded from the Local Data Bank of the Central Statistical Office for 2017. All variables used in the article were named by the Police Headquarters of Poland. The category the crime rate against freedom, freedom of conscience and religion, sexual freedom and morals includes crimes of a very diverse nature, ranging from deprivation of man liberty, through human trafficking, sexual abuse to crimes directly against freedom of conscience and religion, i.e. related to art. 194 of the Penal Code on denominational discrimination, art. 195 on interfering with the performance of a public religious act and art. 196 regarding offending religious feelings.

Figures 1-8 present individual crime rates per 1000 inhabitants for Polish provinces. The map colouring rules are as follows: the minimum is light grey, the maximum is dark grey, the other values change continuously from light gray to dark gray (according to the RGB system). Since the chart gives values for individual provinces, it makes no sense to create ranges, only you can give colours in a continuous way.

The most dangerous province of Poland (Figure 2) is the Lower Silesian Province, and the least is the Podkarpackie Province. A similar situation can be observed when analyzing the criminal crime rate (Figure 3).

In the case of the economic crime rate (Figure 4), the most dangerous province turned out to be the Silesian Province, and the least - the Podkarpackie Province.

Taking into account the rate of road crime, the most dangerous province of Poland is the Lubuskie Province, just behind it the Warmian-Masurian Province, whereas the least dangerous is the Lesser Poland Province.



Figure 1.
The overall crime rate
Source: Authors' calculations

Figure 2.
The criminal crime rate
Source: Authors' calculations



Figure 3.
The rate of economic crime
Source: Authors' calculations



Figure 4.
The road crimes' rate
Source: Authors' calculations



Figure 5.
The crime rate against life and health
Source: Authors' calculations



Figure 6.
The crime rate against property
Source: Authors' calculations



Figure 7.
The crime rate against freedom, freedom of conscience and religion
Authors' calculations



Figure 8.
The crime rate against family and care sexual freedom and morals
Authors' calculations

Figure 6 presents the crime rate against life and health. In this case, the most dangerous province of Poland turned out to be the Warmian-Masurian Province, after it the Lubuskie and the Silesian Provinces, and the least dangerous is the Lesser Poland Province.

When analyzing the crime rate against property the most dangerous province of Poland (Figure 7) is the Lower Silesian Province, and the least is the Podkarpackie Province.

The results for the crime rate against liberty, freedom of conscience and religion, sexual freedom and morality are presented in Figure 8. When analyzing the results for this indicator, it was received that the most dangerous province of Poland is the West Pomeranian Province, and the least the Podkarpackie Province.

The last crime rate against family and care is shown in Figure 9. The most dangerous province for this indicator is the Warmian-Masurian Voivodeship, and the least dangerous are the Podkarpackie and the West Pomeranian Provinces.

4. RESEARCH METHODOLOGY

The first table presents descriptive statistics of the variables analyzed – the mean, the minimum, the maximum, the standard deviation and the coefficient of variation.

Table 1

Descriptive statistics of crime rates for Polish provinces

Variable	Descriptive statistics				
	Mean	Minimum	Maximum	Standard deviation	Coefficient of variation
Overall crime rate	18.87	11.02	25.73	3.74	19.84
Criminal crime rate	12.35	6.84	19.01	2.99	24.17
Rate of economic crime	3.66	1.88	6.09	1.07	29.35
Road crimes' rate	1.95	1.59	2.26	0.19	9.65
Crime rate against life and health	0.48	0.34	0.64	0.10	19.99
Crime rate against property	9.70	5.24	15.40	2.59	26.71
Crime rate against freedom, freedom of conscience and religion, sexual freedom and morals	0.84	0.50	1.74	0.30	35.62
Crime rate against family and care	0.64	0.45	0.92	0.14	22.34

Source: Authors' calculations

The highest average values for Polish voivodships (with the exception of the total crime rate - 18.87%) were obtained for the criminal crime rate (11.35%) and the crime rate against property (9.7%). The smallest values were obtained for the crime rate against life and health (0.48%), as well as for the crime rate against family and care (0.64%). The smallest diversification for Polish provinces occurs in the road crimes' rate (coefficient of variation is equal to 9.65%), while the largest features crime rate against freedom, freedom of conscience and religion, sexual freedom and morals (coefficient of variation is equal to 35.62%). The highest value is characteristic to the rate of criminal crime and it is equal to 19.01. The lowest value is characteristic to the crime rate against life and health and it is equal to 0.34.

The implementation of the objective required the use of descriptive-statistical methods, in particular linear regression method. This paper uses progressive stepwise regression. There are one dependent variable and seven independent variables in the following model.

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \alpha_5 X_5 + \alpha_6 X_6 + \alpha_7 X_7 + \varepsilon$$

Where:

- Y - the overall crime rate,
- X₁ - the criminal crime rate per 1000 residents,
- X₂ - the rate of economic crime per 1000 residents,
- X₃ - the road crimes' rate per 1000 residents,
- X₄ - the crime rate against life and health per 1000 residents,
- X₅ - the crime rate against property per 1000 residents,
- X₆ - the crime rate against freedom, freedom of conscience and religion, sexual freedom and morals per 1000 residents,
- X₇ - the crime rate against family and care per 1000 residents.

Progressive stepwise regression assumes another inclusion in the list of explanatory variables included in the model of those variables that have the most significant impact on the dependent variable. Regression test measures the degree/strength of relationship between one dependent variable and more than one independent variable. The degree/strength between the dependent variable and independent variables depends to the value of R-square (R^2). (R^2) or the determining coefficient is the ratio of change (variation) of the dependent variable, the overall crime rate (Y), which is explained together by the independent variables, the criminal crime rate per 1000 residents (X₁), the rate of economic crime per 1000 residents (X₂), the road crimes' rate per 1000 residents (X₃), the crime rate against life and health per 1000 residents (X₄), the crime rate against property per 1000 residents (X₅), the crime rate against freedom, freedom of conscience and religion, sexual freedom and morals per 1000 residents (X₆) and the crime rate against family and care per 1000 residents (X₇) (Berawi, 2014).

The next method which will be used is the Pearson correlation coefficient. According to (Berawi, 2014) correlation measures the degree/strength between two or more variables. The correlation analysis does not take into account the variable that influences it. The strength of correlation is based on the value of r. The higher correlation coefficient, r shows a strong positive correlation as the value approaches positive 1. Correlation coefficient value is shown in Table 2.

Table 2

Interpretation of the correlation coefficient

Coefficient value range	Strength of the correlation
1.0	Perfect
0.80-0.99	Very strong
0.60-0.79	Strong
0.40-0.59	Average
0.20-0.39	Weak
0.01-0.19	Very weak
0.0	No relationship

Source: author's own study on the basis of (Hussin et al., 2014).

5. ANALYSIS/STUDY

The data collected from the Local Data Bank allowed the creation of a model in which the dependent variable will be the overall crime rate, while the independent variables are the following variables:

- the criminal crime rate per 1000 residents,
- the rate of economic crime per 1000 residents,
- the road crimes' rate per 1000 residents,

- the crime rate against life and health per 1000 residents,
- the crime rate against property per 1000 residents,
- the crime rate against freedom, freedom of conscience and religion, sexual freedom and morals per 1000 residents,
- the crime rate against family and care per 1000 residents.

Table no. 3 presents the results of progressive regression, obtained using the Statistica 12 program. As a result of the research conducted, it was obtained that the indicators affecting the overall crime rate are: the criminal crime rate per 1000 inhabitants and the rate of economic crime per 1000 inhabitants (indicated by the highest values of the estimated parameter b^* - due to the statistically insignificant intercept, the first variant of the model without the intercept was chosen). It has been verified that the residuals of the model have a normal distribution.

Table 3

The results of progressive stepwise regression

Variables	Summary of dependent variable regression R= 0.99987073 R ² = 0.99974148 Improved R ² = 0.99951527					
	b*	Std. Err. b*	b	Std. Err. b	t(8)	p
Intercept			-0.18	0.38	-0.46	0.65
Crime rate of a criminal nature	0.78	0.03	0.98	0.04	24.83	0.00
Rate of economic crime	0.30	0.009	1.05	0.03	30.80	0.00
Road crimes' rate	0.07	0.01	1.36	0.26	5.25	0.00
Crime rate against life and health	-0.02	0.009	-0.89	0.35	-2.53	0.04
Crime rate against property	0.01	0.03	0.02	0.04	0.54	0.61
Crime rate against freedom, freedom of conscience and religion, sexual freedom and morals	0.04	0.009	0.58	0.11	5.15	0.00
Crime rate against family and care	0.005	0.009	0.13	0.24	0.55	0.59

Source: Authors' calculations

Table 3 shows the value of R square (R²) 0.99, where 99.99% changes in the dependent variable Y can be explained together with the independent variables (X₁-X₇).

The model of regression functions (presented in table 3) provides estimates of marginal effects for each of the independent variables as well as the model fit statistics. The marginal effects reveal the expected magnitudes of change in the overall crime rate associated with one unit increases in the value of each X variable. The model fit statistics allows assessing which of the independent variables have the greatest individual ability to predict the overall crime rate. It can be observed that the criminal crime rate ($b = 0.78$) has the greatest impact on the overall crime rate. The estimated marginal effects reveal that a one unit increase in measurement of the determinant is expected to increase in the overall crime rate by 0.78 if the determinant is the criminal crime rate, 0.3 if the determinant is the rate of economic crime, 0.07 for the road crimes' rate, -0.02 for the crime rate against life and health and 0.04 for the crime rate against freedom, freedom of conscience and religion, sexual freedom and morals.

The next part of the article presents the study of the relationship between the overall crime rate and the selected economic measures such as: unemployment rate, GDP per capita, investment expenditures per capita. The correlation matrix (table 4) obtained for distinguished variables shows that a statistically significant relationship was obtained only in the case of the variable overall crime rate and capital

expenditures per capita ($r = 0.53$). As a result of research, it was found that rich provinces were most exposed to forensic attacks. Therefore, they should allocate funds to counteract such situations.

Table 4

The correlation matrix obtained for the crime rate and the distinguished economic measures

Variables	Correlation coefficients are statistically significant $p < 0.05000$ (marked with asterisk)					
	Mean	Standard deviation	Overall crime rate	Unemployment rate	Investment expenditures per capita	GDP per capita
Overall crime rate	18.87	3.74	1.00	-0.49	0.53*	0.49
Unemployment rate	9.09	2.48	-0.49	1.00	-0.60*	-0.66*
Investment expenditures per capita	5812.88	1876.29	0.53*	-0.60*	1.00	0.85*
GDP per capita	42337.56	10793.86	0.49	-0.66*	0.85*	1.00

Source: Authors' calculations

It should be noted that a statistically significant relationship was not obtained either between the total crime rate and the unemployment rate, or the total crime rate and the value of GDP per 1 inhabitant.

6. CONCLUSIONS

The aim of the article was to analyze the security level of the Polish society using rates of crime taken from the Local Data Bank of the Central Statistical Office. As a result of the analysis, it was obtained that the most dangerous were provinces in the western part of the country, while the least dangerous were in the eastern part, except for the rates of road crime, where the most safe were provinces in the south of the country.

The stepwise progressive regression model, which was created for the total crime rate, allowed stating that the rate of crime in total was mainly influenced by the criminal crime rate and the rate of economic crime. Therefore, it seems essential that the largest funds should be transferred to fight with these types of crime. The results of the study indicate the relationship that the richer the region is, the greater the threat to its residents' security.

In turn, the analysis of the dependence between the overall crime rate and selected economic measures made it possible to state that neither the unemployment rate nor the GDP per capita statistically significantly influence the overall crime rate in Polish provinces. From the results obtained, a statistically significant moderate relationship occurred only between investment expenditure per capita and the total crime rate.

REFERENCES

- Adamczuk, F. (2004). *Perspektywy współpracy instytucjonalnej w dziedzinie bezpieczeństwa publicznego – aspekty wewnętrzne i transgraniczne*, materiały Międzynarodowej Konferencji Służb Mundurowych „Bezpieczna wizyta”, Wyd. Straż Miejska, Jelenia Góra
- Akhmadeev, R., Redkin, A., Glubokova, N., Bykanova, O., Malakhova, L., & Rogov, A. (2019). Agro-industrial cluster: supporting the food security of the developing market economy. *Entrepreneurship and Sustainability Issues* 7(2), 1149-1170. [http://doi.org/10.9770/jesi.2019.7.1\(25\)](http://doi.org/10.9770/jesi.2019.7.1(25))
- Art. 2 Konstytucji Rzeczypospolitej Polskiej – tekst uchwalony przez Zgromadzenie Narodowe w dniu 7.IV.1997 r.
- Baldwin, D. A. (1997). The concept of security. *Review of International Studies*, 23, 5-26
- Berawi, F.M. (2014). *Ekonometrika Asas: Analisis regresi dan analisis korelasi*. Sintok: Universiti Utara Malaysia
- Brown, H. (1983). *Thinking About National Security: Defense and Foreign Policy in a Dangerous World*. Westview Press Boulder, CO
- Bilan, Y., Strielkowski, W., Karbach, R., & Mentel, G. (2017). Secure development of country and competitiveness issues: Case of Germany's energy security, *Journal of Security and Sustainability Issues* s6(3), 329-342, [https://doi.org/10.9770/jssi.2017.6.3\(1\)](https://doi.org/10.9770/jssi.2017.6.3(1))
- Bowden, N., & Payne, J. (2009). The casual relationship between U.S. energy consumption and real output: a disaggregated analysis. *Journal of Policy Modeling*, 2(31), 180-188
- Brauch, H. G. (2003). Security and Environment Linkages on the Mediterranean Space: Three Phases of Research on Human and Environmental Security and Peace, [in] Brauch, Hans Günter; Liotta, P.H.; Marquina, Antonio; Rogers, Paul; Selim, Mohammed El-Sayed (Eds.): *Security and Environment in the Mediterranean. Conceptualizing Security and Environmental Conflicts* (Berlin – Heidelberg: Springer), 35-143
- Buzan, B. (1984). Peace, Power and Security: Contending Concepts in the Study of International Relations, *Journal of Peace Research*, 21(2), 109-125. <https://doi.org/10.1177/002234338402100203>
- Chehabeddine, M., & Tvaronavičienė, M. (2020). Securing regional development. *Insights into Regional Development*, 2(1), 430-442. [http://doi.org/10.9770/IRD.2020.2.1\(3\)](http://doi.org/10.9770/IRD.2020.2.1(3))
- Chudy-Laskowska K., Woźniak J., & Zimon D. (2019) Analysis of the influence of the selected aspects of organization of a mass event upon the security of participants in IT. *International Journal for Quality Research*, 95–114.
- Dawidczyk A., Gryz J., & Koziej S. (2006). *Zarządzanie strategiczne bezpieczeństwem. Teoria – praktyka – dydaktyka*. Wyd. Wyższa Szkoła Humanistyczno-Ekonomiczna w Łodzi, Łódź.
- Dabelko, G.D., & Dabelko, D.D. (n.d.). *Environmental security: issues of conflict and redefinition*. Retrieved from <https://www.wilsoncenter.org/sites/default/files/ECSP1.pdf> (accessed on 20.10.2019).
- Digester P. (1994). *The Concept of Security*, paper delivered at the 1994 Annual Meeting of the American Political Science Association, 14 September 1994.
- Dz.U. Nr 61 z 1993r., poz. 284 (Journal of Law, No. 61 of 1993, item 284).
- Informacja o realizacji zadań w zakresie bezpieczeństwa i porządku publicznego oraz ochrony granic w 2006 roku*, Ministerstwo Spraw Wewnętrznych i Administracji, Warszawa 2007.
- Getz, D. (2010). The nature and scope of festival studies. *International Journal of Event Management Research*, 5(1), 1-47.
- Goldmann, K. (1995). Im Westen Nichts Neues: Seven International Relations Journals in 1972 and 1992, *European Journal of International Relations*, 1(2), 245-258
- Gowlland-Debbas, V. (1994) Security Council Enforcement Action and Issues of State Responsibility. *International and Comparative Law Quarterly*, 43(1), 55-98. doi:10.1093/iclqaj/43.1.55
- Hussin, F., Ali, J., & Noor, M.S.Z. (2014). *Kaedab penyelidikan & analisis data SPSS*. Sintok: Universiti Utara Malaysia.
- Iacobuta, A. O., Mursa, G. C., Mihai, C., Cautisanu, C., & Cismas, L. M. (2019). Institutions and Sustainable Development: A Cross-Country Analysis. *Transformations in Business & Economics*, 18(2)B (47B), 628-646.
- Jurgilewicz, M. (2017). *Rola podmiotów uprawnionych do użycia lub wykorzystania środków przymusu bezpośredniego i broni palnej w ochronie bezpieczeństwa i porządku publicznego*, Pracownia Wydawnicza Wydziału Humanistycznego, Siedlce.
- Ključnikov, A., Mura, L., & Sklenár, D. (2019). Information security management in SMEs: factors of success. *Entrepreneurship and Sustainability*, 6(4), 2081-2094. [http://doi.org/10.9770/jesi.2019.6.4\(37\)](http://doi.org/10.9770/jesi.2019.6.4(37))
- Lialina, A. (2019). Labor market security in the light of external labor migration: new theoretical findings. *Entrepreneurship and Sustainability*, 6(3), 1105-1125. [http://doi.org/10.9770/jesi.2019.6.3\(11\)](http://doi.org/10.9770/jesi.2019.6.3(11))
- Lasswell, H.D., & Kaplan, A. (1950). *Power and Society: A Framework for Political Inquiry*, Yale University Press

- Lodgaard, S. (2004). *Human Security: Concept and Operationalization*. Retrieved from www.hsph.harvard.edu/hpcr/events/hsworkshop/lodgaard.pdf (accessed on 20.10.2019)
- Lorek, M., Pawlikowicz, L., & Surowiec, K. (2013). Bezpieczeństwo narodowe i wewnętrzne – teoria i praktyka na przykładzie wybranych zagadnień w Drugiej Rzeczypospolitej (1918–1939), *HSS*, vol. XVIII, 20 (3), Rzeszów, 87-102.
- Mack, A. (2004) *The Concept of Human Security*, [in] BICC (Ed.): Brief 30: Promoting Security: But How and for Whom? (Bonn: BICC) 11-18.
- Moumen, Z., El Idrissi, N.E.A., Tvaronavičienė, M., & Lahrach, A. (2019). Water security and sustainable development. *Insights into Regional Development*, 1(4), 301-317. [https://doi.org/10.9770/ird.2019.1.4\(2\)](https://doi.org/10.9770/ird.2019.1.4(2))
- Obrębalski, M. (2004). *Bezpieczeństwo i porządek publiczny jako czynnik rozwoju regionalnego i lokalnego*, materiały Międzynarodowej Konferencji Służb Mundurowych „Bezpieczna wizyta”, Wyd. Straż Miejska, Jelenia Góra.
- Oleksyn, T. (1997). *Praca i płaca w zarządzaniu*, Międzynarodowa Szkoła Menedżerów, Warszawa.
- Prause, G., Tuisk, T., Olaniyi. (2019). Between Sustainability, Social Cohesion and Security. *Regional Development in North-Eastern Estonia. Entrepreneurship and Sustainability Issues*, 6(3), 1135-1154. [http://doi.org/10.9770/jesi.2019.6.3\(13\)](http://doi.org/10.9770/jesi.2019.6.3(13))
- Ruszel, M., & Podmiotko, S. (Ed.) (2019). *Bezpieczeństwo energetyczne Polski i Europy. Uwarunkowania - Wyzwania – Innowacje*, Instytut Polityki Energetycznej im. I. Łukasiewicza, Rzeszów.
- Saseanu, A. S. Ghita, S. I., & Gogonea, R. M. (2019). Perspective of Feminine Leadership in the Socio-Political Field. Comparative Analysis of the European Countries. *Transformations in Business & Economics*, 18(3)(48), 137-154.
- Sitdikova, L.B., & Starodumova, S.J. (2019). Corporate agreement as a means of providing security in the course of entrepreneurship development. *Entrepreneurship and Sustainability Issues*, 7(1), 324-335. [http://doi.org/10.9770/jesi.2019.7.1\(24\)](http://doi.org/10.9770/jesi.2019.7.1(24))
- Ślawik, K. (1999). *Kilka uwag o bezpieczeństwie wewnętrznym i skuteczności działań organów państwowych*, Zeszyty Naukowe Wyższej Szkoły Handlu i Prawa, Warszawa, 54-82.
- State-of-the-Art Review on Environment, Security and Development Co-operation*. Retrieved from https://www.iisd.org/pdf/2002/envsec_oecd_review.pdf (accessed on 20.10.2019)
- Study Group on Europe's Security Capabilities. (2004). *A Human Security Doctrine for Europe: The Barcelona Report of the Study Group on Europe's Security Capabilities*. Retrieved from <http://www.lse.ac.uk/Depts/global/Publications/HumanSecurityDoctrine.pdf> (accessed on 20.10.2019)
- Taylor T., & Toohey K. (2005). Impacts of terrorism-related safety and security measures at a major sport event. *Event Management*, 9(4), 199-209.
- Tokarski, H. (2007). Możliwości samorządów w profilaktyce, [in] Rajchel K. (Ed.), *Przemiany i perspektywy straży miejskich i gminnych w ochronie bezpieczeństwa publicznego*, materiały konferencyjne, Warszawa 20-21.09.2007, 307-317.
- Ulusoy, H. (2003), *Revisiting Security Communities After the Cold War: The Constructivist Perspective*. *Perceptions*, No.8, (September–November). Retrieved from <http://www.sam.gov.tr/perceptions/Volume8/September–November2003/HasanUlusoy6Kasim2003.pdf> (accessed on 20.10.2019)
- Ura, E. (2003). *Bezpieczeństwo i porządek publiczny - historia, teoria, praktyka*, „Mitel”, Rzeszów.
- Wittebrood, K., & Junger, M. (2002). Trends in violent crime: a comparison between police statistics and victimization surveys [in] Michalos A.C. (Ed.), *Social Indicators Research*, Springer, 153-173.
- Wolfers, A. (1962) *National Security as an Ambiguous Symbol*, [in] Wolfers A. (Ed.): *Discord and Collaboration. Essays on International Politics* (Baltimore: John Hopkins University Press), 147-165.
- Xiong, Z., Ye, J., & Wang, P. (2019). Does the Institutional Environment Affect the Failed Technological Innovation in Firms? Evidence from Listed Companies in China's Pharmaceutical Manufacturing Industry. *Transformations in Business & Economics*, 18(1) (46), 60-80.
- Zdanowicz, M. (2007). *Bezpieczni w Europie*. Urząd Komitetu Integracji Europejskiej, Białystok.
- Zomer, L. B., Daamen, W., Meijer, S., & Hoogendoorn, S. P. (2015). Managing crowds: The possibilities and limitations of crowd information during urban mass events. *Planning Support Systems and Smart Cities*, 77-97.