Similarities and differences in the phenomenon of integrity in OECD countries

Filipiak, Beata Zofia Dylewski, Marek

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Abstract

The integrity of public authorities, an expression of their honesty and trustworthiness, underpins good governance in public administration. It involves the incorporation of values, rules and standards in the daily activities of the public sector. The aim of this article is to present the relatively new concept of integrity as presented in recent OECD research. As an additional aim, a cluster analysis provides insight into how the different member states apply the rule of integrity by arranging countries into groups where the similarities are the strongest. The analysis uses the k-means clustering algorithm to identify trends in the specific attributes (variables) of integrity and similarities between countries. The data used in the paper come from reports on integrity published by the OECD.

Keywords:

Integrity, Public administration, Integrity standards, Cluster analysis.

JEL classification:

H0, H39, H70.

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Filipiak, B.Z. 🗷 University of Szczecin, Dep. of Finance, 64 Mickiewicza St., 71-101 Szcze-cin, Poland. E-mail:bfilipiak@wneiz.pl Dylewski, M.WSB Universities, Dep. of Finance, 5 Powstańców Wielkopolskich St., 61-895 Poznań Poland. E-mail: marek.dylewski@wsb.poznan.pl

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Semejanzas y diferencias en el fenómeno de integridad en los países de la OCDE

Filipiak, Beata Zofia Dylewski, Marek

Resumen

La integridad de las autoridades públicas, expresión su honestidad y confianza en ellas, sustenta la correcta gobernanza en las Administraciones Públicas. El término "integridad" hace referencia al uso de valores, reglas y estándares en las actividades cotidianas del Sector Público. Este artículo se centra en el fenómeno, relativamente joven, de la integridad, a la luz de las investigaciones llevadas a cabo por la OCDE. Además, se lleva a cabo un análisis de conglomerados para tratar de dar respuesta a la pregunta relativa a cómo los Estados miembro aplican la regla de integridad; o, en otros términos, para determinar los grupos de países que, a efectos de integridad, muestran mayores similitudes. Para ello se utilizará un algoritmo de agrupación "k-medias", que identificará las tendencias de los atributos específicos que miden el fenómeno de la integridad, así como la similitud entre países a este respecto. Los datos utilizados en el artículo proceden de la información sobre integridad publicada por la OCDE.

Palabras clave:

Integridad, administraciones públicas, estándares de integridad, análisis de conglomerados.

1. Introduction

It is reported in the literature that modern public administration is becoming increasingly less open to citizens (Wojciechowski, 2014). The quality of management is deteriorating and there are no effective mechanisms for removing incompetent workers. The reasons behind this include the inefficient use of public assets, the lack of a proper control system, a lack of transparency and the pressure on public administration decisions from business/political lobbies (Friedman, 1997; Mazur, 2003; Rybiński, 2009). Additionally, the proper functioning of the public administration system is undermined by corruption and ethical breaches, with the public administration in many countries suffering from a lack of transparent procedures in the execution of public tasks. The OECD countries have taken steps to support, promote and implement standards aimed at improving the quality of management and work in public administration.

Those steps have resulted in a number of important solutions, including the OECD Convention on Combating Bribery of Public Officials and the OECD document stating the Principles of Corporate Governance, which establishes rules of ethical conduct and bribery prevention or monitoring as a tool for improved public sector management. The purpose of these measures is to provide support to governments in monitoring the civil service and public administration, and to establish effective structures for the promotion of ethical behaviour as well as combatting bribery among public sector officials (Bertók, 2001).

To help ensure the proper spending of public funds, increase the effectiveness of these funds and reduce the risk of inefficiency and corruption occurring, OECD countries have decided to standardize and monitor public administration operations. Thus, integrity standards have been introduced and the decision was made to monitor them. The term "integrity" refers to the values, rules and norms on which public sector entities, especially the public administration units, base their day-to-day operations. The overarching objective of implementing these rules and norms is to establish a culture of integrity throughout the whole cycle of performing public functions or the cycle of any service or task implemented by the public administration. The rules emphasize the importance of procedures introduced in order to improve transparency and management quality, and prevent offences, as well as establishing a process for monitoring their application and identifying the cause of any breaches. When these rules are implemented from the top down, starting at the senior executive level, the desired code of conduct is more likely to be followed by lower level staff, thus making the concept of integrity a common standard.

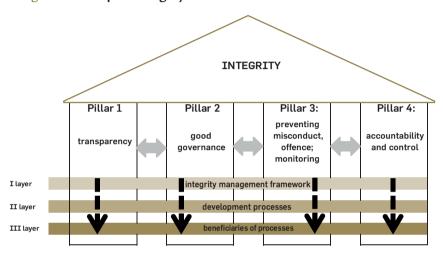
There is a particular need for integrity when there is a possibility that conflicts of interest may arise which threaten professional judgment or which may lead to actions



affecting the fundamental national interest. The existence of conflicts of interest is an indicator of corruption and the breaching of ethical standards. Conflicts of interest can take a number of different forms: real, apparent and potential (OECD, 2005).

By consensus, the concept of integrity has been founded on four pillars (OECD, 2009); Figure 1 is a graphic representation of this concept.

Figure 1. Concept of integrity



In turn, the four pillars are segmented into a number of layers: the framework for integrity management (e.g. ethical code, code of conduct regarding conflicts of interest, policy for dealing with irregularities, etc.), the development processes, and the beneficiaries of these processes (the so-called integrity actors – the public administration workers) who have a vested interest in promoting integrity in the public sector (Bertok et al., 2009). The concept of integrity seeks to address the following problems: gifts, conflicts of interest, selective application of the law/non-conformity with the law, lobbying, confidentiality, discretion, corruption, and lack of autonomy.

In recent years, the concept of integrity has been extended from the individual level (rules respected by individuals) to the organizational level (rules obeyed by collectives, understood as public administration organizations or groups of workers) (Skidmore, 1995; Laufer, 1996).

The purpose of this paper is to show the reasons for and importance of implementing integrity standards in public administration. As an additional aim, we conduct a cluster analysis which provides insight into how different member states apply the rule of integrity, arranging countries into groups where the similarities are the strongest. The analysis aims to identify trends in the specific attributes (variables) of integrity and par-

allels in these attributes among the countries regarded as similar within the geopolitical system of Eastern Europe.

The paper is divided into four thematically linked parts. The first, theoretical, part contains a synthetic review of the reasons for implementing integrity standards and its importance for modern public administration. The second part (Sections 2 and 3) of the paper refers to the issue of maintaining integrity standards in OECD countries and explains the reasons for monitoring and measuring those standards. Section 4 shows the data and research methods used and presents the findings of the empirical study of the data characterizing the phenomenon of integrity in OECD countries. The final part of the paper sets out the conclusions and recommendations for further analyses.

2. The reasons for implementing integrity and its importance in modern public administration

In order to promote a professional code of conduct in public administration, we usually need standards, incentives and sanctions. Governments are particularly interested in monitoring the areas where the private sector meets the public sector, and public sector officials make discretionary decisions on the basis of legal regulations, competences and powers. This is where we observe the loss of public trust in public administration. Moreover, public servants have to face complex new problems (regarding objectives, conflicts of interest, adaptation to changes) resulting from public sector reforms such as delegating some competences to other entities, greater discretion on the part of the executive branch (decentralized decision-making), procedural changes and new public procurement paradigms, changed relations between the public and private sectors and, lastly, the increased importance of market mechanisms. Influencing factors also include limited funds, which force the reduction of the workforce, and globalization (including admission to EU structures), which has resulted in extensive contact with other ethical and cultural norms. All the above factors have led to a change in how the role of the public sector is perceived by citizens (Bertók, 2001; Markowski et al., 2014; Wojciechowski, 2014; Zwoliński, 2015; Król, 2015).

In this context, a debate has sprung up about the difficulties facing public administration. In this debate, social actors (politicians, public servants, citizens) define public problems, discuss ways of addressing them and, after having identified solutions, participate in their implementation and face their consequences. Relationships between social actors (politicians, public servants, citizens) are characterized by a great concern for the public interest and a preference for solutions that are accepted by the public. The public administration has assumed the role of the agent executing the instructions formulated either by social actors that have been selected in a democratic process or by public sector



managers driven by an economic rationale. Their work in this regard is essentially collaborative, and focuses on defining and redefining the public interest, and specifying action plans and competences. What strengthens this process is the socialization of public servants so that they internalize the social values, particularly professionalism, honesty and conforming to the professional code (Mazur, 2012; Mazur, 2016).

The concept of professionalism in public administration operations is usually associated with transparency, ethical behaviour and honesty in pursuing tasks. The transparency rules oblige public servants to collect complex information about past, on-going and future actions concerning public finance (at both the state and local government level). That information highlights the need to improve the quality of decisions made by public bodies and helps identify potential areas of risk in the public sector (being subject to internal control)¹ (Supernat, 2009; Tomaszewska et al., 2013). The implementation of this rule and statutory regulations concerning ethical behaviour and public officials' integrity is fundamental to the proper functioning of civil society, whose responsibility it is to encourage public authorities to support long-term social development. Easily accessible and comprehensible information is vital for the accurate evaluation of government policies and, consequently, for rational decisions at the polls. The transparency of public finances, as well as the ethics and honesty of public officials, reinforces public supervision over public policies. They also strengthen the accountability of governments, including self-governments, in international markets and on the global political scene, and represent important components in the country's rating (Kosikowski, 2005; Kotowska, 2014; Gliniecka, 2015; Sawulski, 2015). Good conduct and its effects (which are monitored on the basis of available information) are measurable and can be evaluated by members of society; however, such measurements are based on information gathered by the public administration. What is essential for the accuracy of this measurement and evaluation are ethical standards of professional performance shared by all public administration staff.

In the functioning of public administration, ethical problems often appear at the point where the public sector meets the private sector. In OECD studies, it has been pointed out that there are three types of barriers — systemic, cognitive and communicational — to this public-private cooperation that cause problems of an ethical or moral nature, which may then lead to fraud and corruption (Giedrojć, 2015; OECD, 2015a; OECD, 2015b).

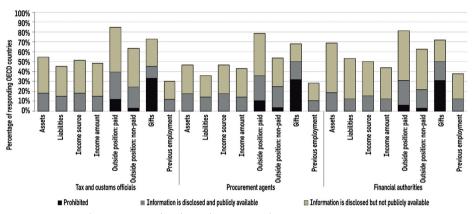
The above barriers give rise to a number of irregularities in the collaboration between public administration and the business sector (International Visegrad Fund, 2012), such as corruption, a lack of transparency, as well as a lack of disclosure of tasks and

According to the provisions on transparency in the Public Finance Act, chapters 4 and 6, articles 17, 21, 130, 221 and 230b.

AESTIMATIO, THE IEB INTERNATIONAL JOURNAL OF FINANCE, 2017. 15: 100-123

decisions. Figure 2 shows the problems related to the code of conduct in three primary areas of public administration: customs and tax officials, procurement agents and financial authorities.2

Figure 2. Level of disclosure of government appointees' private interests



SOURCE: OECD DATA (WWW.OECD.ORG/GOV/ETHICS/48720289.XLSX)

The honesty, trustworthiness and transparency of public administration actions can be undermined by irregularities in the collaboration between public administration and the business sector (Figure 2). Public servants who take part in decision-making and/or dealing with the business sector are particularly exposed to the risks of loss of honesty and trustworthiness.

The questions of openness, transparency and ethical behaviour are embedded in the wider concept of good governance, aimed at increasing administrative potential and improving management quality in the public sector or, in the broader sense, at encouraging macroeconomic stabilization and economic growth. (Sawulski, 2015) The areas that require reinforcement are: administrative decision-making, public procurement and finance (expenditure in particular).

With a view to supporting proper public expenditure, enhancing its effectiveness and reducing the risk of ineffectiveness and corruption, the OECD countries have decided to standardize and monitor the activity of public administration.³ The expression of public authorities' honesty and accountability is referred to as "integrity" (www 2; OECD, 2009) and is regarded in the OECD countries as a cornerstone of good governance, both at the state and local administration level.

It should be emphasized that the survey was performed only once in the OECD countries, due to the changed OECD directive in 2015. In 2008-2012, almost all the OECD countries took steps to reform their systems in order to improve their integrity standards, especially in the area of public procurement. As a consequence, there has been a change in the range and type of information about the observance of integrity standards and the disclosure of breaches.

³ See OECD (2000a, 2015a).



An organization is considered to meet the standards of integrity and transparency when it is capable of participating in ethical decision-making. This capacity encompasses an awareness of moral questions arising in the process of making decisions related with public tasks. Here, an important problem needs to be solved regarding reconciling the obligations imposed by the integrity standards with business and budgetary plans, as well as implementing decisions guided by a sense of moral responsibility (Petrick *et al.*, 2000)⁴. Strong tensions can develop between what is morally and ethically right, and the need to gain an advantage or meet the requirements, indicators and objectives involved in satisfying the needs of a local community. Additionally, there is an internal conflict between a potential non-formal reward and a decision a public servant has to make. The territorial self-government units are not free of this dilemma (their responsibilities also include decision-making and the assessment of results and effectiveness) but it takes a different form (Gregory, 1999; Denhardt *et al.* 2000; Braithwaite, 2003).

The pursuit of planned effects (including measures) can lead to the breach of integrity standards, and in particular, to corruption. The resulting dysfunctions strongly affect the social system and undermine the trust in public administration.

3. Maintaining integrity standards in OECD countries

Treisman (2000) showed the role of legal and democratic traditions in reducing corruption. Countries with a long history of democracy enjoy significantly lower levels of corruption and higher moral standards, while the so-called "young democracies" struggling with their authoritarian past often fail to deal with the pathologies discussed here (Grosse, 2000). Also, the on-going economic globalization processes, especially the growing competition in the markets, have an effect on the increased interest in irregularities and ethical standards in the public sector. Public authorities on different levels are showing a growing interest in supporting economic processes or attracting domestic and foreign investors. Such a situation may create conflicts of interest (Mauro, 1995; Mauro, 1997; Grosse, 2000). In the public sector, it is common to refer to market values rather than to the public service ethos (Mazur, 2011; Mauro, 1995; Mauro, 1997; Wei, 1997; Della Porta *et al.*, 1997, 1999; Friedman *et al.*, 2000; Grosse, 2000; Filipiak *et al.*, 2009).

In this context, "integrity" refers to the application of values, principles and standards in the daily activities of public sector organizations. Governments are under growing

⁴ Some public sector units have been commercialized or transformed into companies with a majority public shareholding and as such act according to business rules. When entrusted with contracts to execute public administration duties, they are obliged to perform them according to the established integrity standards. The remaining public sector units base their operations on budget planning in a traditional or activity-based approach.



AESTIMATIO, THE 18 INTERNATIONAL JOURNAL OF FINANCE, 2017. 15: 100-123

pressure from the public to use information, resources and authority for their intended purposes. This situation requires enhanced mechanisms to improve public servants' accountability for their new discretionary powers and to ensure that they adhere to current values and meet citizens' expectations. The right balance between devolution and accountability is of central importance in achieving a well-performing, professional public service.

Ensuring that the integrity of official decision-making is not compromised by public officials' private interests is a growing public concern. In response, the OECD surveyed the policies and practices of member countries and developed practical instruments for governments to modernize their conflict-of-interest policies. All of them are based on standards of integrity. They are an important tool for improving the transparency of decision-making, the work of public administration, good management, prevention of misconduct as well as accountability and control in public procurement. Most OECD countries introduced instruments such as codes of integrity, which include the basic principles, values and standards of conduct expected of public administration and public decision makers. Most OECD countries rely on textbooks, manuals, the use of websites and internal communication to ensure that the public is aware of the values and ethics of the profession.

Based on the experience of all OECD countries, standards of integrity were introduced that refer to the application of values, principles and norms in the daily operations of public sector organizations. In particular, the standards suggest that (OECD, 2000a):

- 1. Ethical standards in public administration should be transparent and codes of conduct should serve this purpose.
- 2. Ethical standards should be reflected in the legal framework (laws, regulations, disciplinary action, penalties, etc.).
- 3. Ethical standards in public administration should be publicly available.
- 4. Public administration officials and persons holding managerial positions (including decision makers) should know their rights and responsibilities.
- 5. Political commitment should reinforce ethical conduct.
- 6. Political commitment should not cause violations of standards of conduct in public administration, the ethical standards of the profession, public decision-making, etc. - the principle of political neutrality.
- 7. Decision-making process in public administration should be transparent and open to inspection (including by the public).
- 8. There should be clear guidelines for interaction between the public administration, society and business.
- 9. Decision makers (occupying managerial positions) should act in an ethical manner and promote behavioural standards of integrity.



- 10. Procedures and practices in public administration should promote ethical conduct.
- **11.** The conditions of employment in public administration and management processes should comply with the established ethical principles, procedures and codes.
- **12.** There should be established procedures and sanctions in case of improper behaviour which breaches integrity standards.

Standards of integrity and the monitoring of these standards are aimed at improving public confidence in public administration. Since legality, fairness and political neutrality are fundamental principles of integrity, the OECD countries promote these values, monitor their compliance, analyse the results of research and work to strengthen them.

4. Case study: data, methods and results, analysis and discussion

4.1. Data and methods

The study covers the OECD member states. The phenomenon of integrity has not been satisfactorily explored due to the use of different models to determine the occurrence of suspicious transactions. The present article provides a method for measuring integrity in such a way that the results can help monitor whether integrity standards are enforced according to the third integrity pillar. A questionnaire was used in this study, the assumptions of which were developed by the OECD.5 The study focuses on disclosures The study focuses on disclosed private interests in decisionmaking by public administration. The data are expressed as a percentage by means of a composite index referring to disclosures in public administration. A composite indicator is obtained by combining several basic indicators, with such a combination generally restricted to an aggregation (using a standard additive or multiplicative operation) of weighted basic components. The methodology used in this study for the construction of a composite indicator is based on the nine-step approach detailed in Saltelli et al. (2004) and Nardo et al. (2004). The stylized 'checklist' that the OECD (2008) provides for constructing a composite indicator contains 10 (apparently different) stages. But the measurement methodology is vitiated by an error, as it is founded on member states' declarations, which have formed the basis for the questionnaire used to collect information from public administration units.

The composite index has been built according to the concept proposed by Nardo et al. (2004, 2005) in their research report. Based on the composite index, compar-

⁵ Annex D of the Government at a Glance publication (OECD 2015a) provides detailed data on disclosure of private interests and public availability, information on calculation methodology and the idea behind building the questionnaire.

⁶ For the survey rules and reference to the questionnaire see OECD (2008).

isons are made between the different OECD countries and steps are taken to implement the assumptions of the fourth integrity pillar.

The measurement of integrity was made in 2014 on the basis of public officials' disclosed private interests, and it distinguishes between different branches of government and the positions occupied in public administration. Table 1 shows the results of a survey conducted in the OECD countries concerning the observance of integrity standards; this data forms the basis for the k-means clustering performed in Section 4.2. The data in Table 1 show the disclosures expressed as a percentage. The value "0" and the symbol "..." for the composite indexes indicate countries that did not answer the question and those that do not monitor a given group of integrity standards, respectively.

Table 1. Measure of the observance of integrity standards

	private	I. Level of disclosure and public availability of private interests across branches of government (x_{σ})				II. Level of disclosure and public availability of private interests by the level of public officials in the executive branch $(x_{\rm b})$				
Indicator	Level of disclosure and public availability of private interests, Executive branch (x _{1a})	Level of disclosure and public availability of private interests, Legislative branch (X2a)	Level of disclosure and public availability of private interests, Judicial branch (X3a)	Level of disclosure and public availability of private interests, At risk areas (x_{4a})	Level of disclosure and public availability of private interests, Head of the executive (X _{1b})	Level of disclosure and public availability of private interests, Ministers or members of cabinet	Level of disclosure and public availability of private interests, Political advisors / appointees	Level of disclosure and public availability of private interests, Senior civil servants (X4b)	Level of disclosure and public availability of private interests, Civil servants (X _{5b})	
		*				(x _{2b})	(x _{3b})			
Country Australia	Index	Index	Index	Index	Index	Index	Index	Index	Index	
Australia	38,33	75	14,58	25	75		8,33	29,17	4,17	
	31,25	54,17	29,17	20,83	37,5	37,5	25	25	25	
Belgium	37,5	41,67	0	20,83	41,67	41,67	41,67	41,67	20,83	
Canada	66,67	70,83	10,42	20,83	75	75	75	75	33,33	
Chile	35	62,5	56,25	29,17	50	62,5	0	62,5	(
Czech Republic	29,17	58,33	0	58,33	58,33	58,33	0	58,33	(
Estonia	52,78	79,17	39,58	11,11	79,17	79,17	0	70,83	8,33	
Finland	41,67	0	27,08	16,67	87,5	87,5		25	8,33	
France	58,33	70,83	75	6,94	62,5	75	75	75	(
Germany	19,17	66,67	25	33,33	16,67	16,67		25	25	
Greece	38,89	79,17	41,67	33,33	79,17	79,17	25	25	25	
Hungary	59,03	87,5	45,83	41,67	87,5	87,5	41,67	41,67	12,5	
Iceland	25	75	8,33	4,17	75	75	0	0	(
Ireland	38,89	62,5	6,25	12,5	62,5	66,67	58,33	33,33	12,5	
<u>Israel</u>	45	54,17	43,75	45,83	50	50	50	45,83	29,17	
Italy	32,5	70,83	70,83	43,06	50	50	25	25	12,	
Japan	28,33	58,33	20,83	25	62,5	37,5	0	25	16,67	
Korea	81,94	87,5	83,33	83,33	87,5	83,33	83,33	83,33	66,67	
Mexico	41,67	41,67	41,67	41,67	41,67	41,67	41,67	41,67	41,67	
Netherlands	36,67	50	45,83	0	62,5	62,5	16,67	25	16,67	
New Zealand	49,58	87,5	0	20,83	87,5	87,5	16,67	33,33	19,05	
Norway	65	50	37,5	18,06	75	75	58,33	58,33	58,33	
Poland	38,89	87,5	25	20,83	56,25	87,5	0	16,67	16,67	
Portugal	54,17	100	37,5	20,83	100	100	8,33	8,33	8,33	
Slovak Republic	59,72	87,5	39,58	8,33	87,5	87,5	87,5	4,17	4,17	
Slovenia	25	18,75	29,17	11,11	29,17	29,17	16,67	29,17	16,67	
Spain	37,5	54,17	8,33	8,33	62,5	62,5	0	62,5	(
Sweden	50,83	54,17	29,17	22,92	70,83	70,83	37,5	37,5	37,	
Switzerland	23,33	25	10,42	19,44	25	25	25	20,83	20,83	
Turkey	58,33	50	50	50	50	50	50	50	50	
United Kingdom	59,17	75	12,5	27,78	87,5	91,67	41,67	41,67	33,33	
United States	60	100	66,67	29,17	100	66,67	66,67	66,67	(
OECD - Average	44,35	63,61	32,23	25,98	64,78	64,84	32,5	39,45	19,48	
Brazil	30,83	43,75	37,5	29,17	29,17	41,67	41,67	41,67	(
Colombia	37,5	37,5	37,5	37,5	37,5	37,5	37,5	37,5	37,5	
Latvia	87,5	87,5	87,5	87,5	87,5	87,5	87,5	87,5	87,5	
Russia	66,67	66,67	66,67	66,67	66,67	66,67	66,67	66,67	66,67	

SOURCE: HTTP://STATS.OECD.ORG/



The level of disclosure of public officials' private interests differs across the three branches of government. In the vast majority of the surveyed OECD countries, the legislative branch registers the highest level of disclosure and availability of public information. In the 'at-risk' areas including tax and customs offices, public procurement and financial authorities, the index is the lowest. In the executive branch, the integrity index varies widely between countries.

The average level of disclosure in the OECD countries is closely related with the level of seniority in the public administration. The highest index of disclosure is reported in a group of senior servants and political advisors or appointees. Such a situation is a consequence of the implementation of integrity standards (pillars 3 and 4), as well as integrity-related legislation.

With a view to assessing the level of integrity, the following issues were analysed: the level of disclosure and public availability of information regarding private interests across branches of government (Group I; the resultant of four variables); and the level of disclosure and public availability of information regarding private interests according to the level of public officials in the executive branch (Group II; the resultant of five variables).

More specifically, in Group I the analysis covered:

- Level of disclosure and public availability of information regarding private interests, executive branch.
- Level of disclosure and public availability of information regarding private interests, legislative branch.
- Level of disclosure and public availability of information regarding private interests, judicial branch.
- Level of disclosure and public availability of information regarding private interests, at-risk areas.

In Group II the following issues were analysed:

- Level of disclosure and public availability of information regarding private interests, head of executive branch.
- Level of disclosure and public availability of information regarding private interests, ministers or members of cabinet.
- Level of disclosure and public availability of information regarding private interests, political advisors/appointees.
- Level of disclosure and public availability of information regarding private interests, senior civil servants.

• Level of disclosure and public availability of information regarding private interests, civil servants.

In order to assess the trends in integrity characteristics (variables) k-means clustering is used. The analysed OECD member states are divided (segmented) into sub-sets (clusters) of countries that show similar levels of integrity. The purpose of the cluster analysis performed by means of the k-means algorithm is to identify similar objects in the whole set and then to form groups consisting of objects that differ as little as possible from one another within one cluster and as much as possible from the objects in the other clusters (Pociecha, $et\ al.$, 1998). The algorithm is as follows (Hartigan and Wong, 1979):

- 1. Determine the number of clusters.
- 2. Determine the initial cluster centres.
- 3. Calculate the distance between objects and centres.
- 4. Assign objects to the clusters.
- 5. Determine the new cluster centres.

The OECD countries are segmented according to the generalized k-means clustering provided by STATISTICA Data Miner, with the optimal number of clusters (groups of countries) being determined by means of the V-fold cross validation (VFCV) test. VFCV, with $V \in \{1, \ldots, n\}$, was introduced by Geisser (1975) and is the most popular cross-validation procedure. A specific feature of VFCV is that choosing V uniquely determines the size of the training set:

$$n_t = (n(V-1)/V \tag{1}$$

and the number of splits B = V. The bias of VFCV decreases with V since $n_t = n(1-1/V)$ observations are used in the training set. However, the variance of VFCV decreases with V for small values of V, whereas the leave-one-out procedure (V = n) is known to suffer from high variance in several areas such as classification or density estimation (Geisser, 1975).

The algorithm divides the initial set of objects (in this case countries) into a growing number of clusters and assesses the precision of division each time the number of clusters increases. The number of clusters stops increasing when the increase in precision does not exceed a threshold value (by default it is 5%), that is, when adding another cluster does not significantly improve the results of the model (Geisser, 1975).

Countries are classified according to the standardized values of diagnostic characteristics:



$$z_{jk} = \frac{x_{jk} - \bar{x}_j}{S_i} \tag{2}$$

 z_{ik} - the standardized value of the *j*-th characteristic in the *k*-th object (country),

 x_{jk} - the value of the j-th characteristics in the k-th object (country),

 \bar{x}_j - the mean (cross country) value of the *j*-th characteristic, S_j - the standard deviation (cross country) of the *j*-th characteristic.

As is well known, the standardization helps eliminate the influence of the units in which the variables are measured on the clustering result.

4.2. Results

In the first step, the analysis covers descriptive information referred to in Table 1 on the level of disclosure and public availability of information regarding private interests across branches of government — Group I-variables: x_{1a} , x_{2a} , x_{3a} , x_{4a} — collected for 36 countries. The variance of these variables is neither too large nor too small (their coefficient of variation is clearly under unity) and, in addition, they are not strongly correlated with other variables, thus fulfilling the criteria proposed in Helwig (1981) for the selection of the variables included in the analysis. Table 2 shows the basic descriptive statistics of variables in Group I.

 Table 2. Descriptive statistics of variables describing integrity as the disclosure of public officials' private interests across branches of government (Group I)

Descriptive statistics	Variables								
Descriptive statistics	<i>x</i> _{1<i>a</i>}	x _{2a}	x _{3a}	х _{4а}					
Mean	45.61	64.88	38.19	30.06					
Minimum	19.17	18.75	6.25	11.70					
Maximum	87.50	100.00	87.50	87.50					
Coefficient of variation (%)	35.97	30.80	58.06	66.71					

As can be seen in Table 2, the descriptive statistics of the variables describing integrity as the level of disclosure and public availability of information regarding private interests across branches of government point to the significant disparity among the surveyed countries. The coefficient of variation of x_{3a} and x_{4a} is twice as high as that of x_{1a} and x_{2a} , which suggests larger differences in said level of integrity across the countries under study in the judicial branch and at-risk areas than in the executive and legislative branches.

The k-means clustering algorithm applied divides the group of the countries under analysis into two clusters (Table 3). The first cluster consists of 15 countries: Chile,

AESTIMATIO, THE 1EB INTERNATIONAL JOURNAL OF FINANCE, 2017. 15: 100-123

Estonia, France, Greece, Hungary, Israel, Italy, Korea, Norway, Portugal, Slovakia, Turkey, USA, Latvia and Russia (42% of the total number of countries), while the second one includes the other 21 countries (58% of the total analysed): Australia, Austria, Belgium, Canada, the Czech Republic, Finland, Germany, Iceland, Ireland, Japan, the Netherlands, New Zealand, Poland, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, Brazil and Colombia. From Table 3 it can be seen that the countries grouped in cluster 1 display a vector of means much higher than that of countries corresponding to cluster 2.

The analysis of information describing this cluster enables us to refer to it as a segment that groups the countries with the highest level of integrity. Several post-communist countries, such as Estonia, Hungary, Slovakia, Latvia and Russia are included in this cluster. The second cluster consists of countries that are less successful in implementing integrity standards.

It may seem surprising that the integrity standards of some countries in cluster 2, such as Canada, Germany, Japan and Switzerland are lower than those of countries such as Greece or Turkey, which are in group 1. However, as can be seen in Table 1, the level of disclosure and public availability of information regarding private interests for countries such as Greece or Turkey is higher than in Canada (in the judicial branch and in the at-risk areas), Germany (in the executive and judicial branches), Japan (not only in the executive and judicial branches, but also in the at-risk areas) and Switzerland (regardless of the branch).

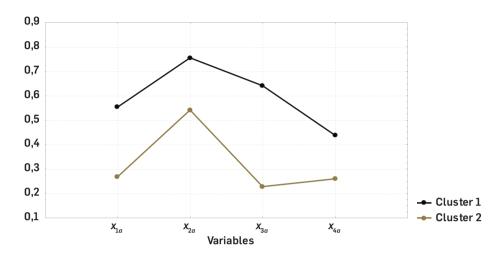
Finally, it is of note that, as can be seen in Figure 3, all the variables show marked differences between the individual clusters.

Table 3. Means of clusters for integrity described by level of disclosure and public availability of information regarding private interests across branches of government (Group I)

	Variables				Number	Percentage
Cluster	X _{1a}	X _{2a}	X _{3a}	X _{4a}	of cases	(%)
No 1 (Chile, Estonia, France, Greece, Hungary, Israel, Italy, Korea, Norway, Portugal, Slovakia, Turkey, USA, Latvia, Russia)	56.99	75.56	56.11	38.33	15	41.67
No 2 (Australia, Austria, Belgium, Canada, the Czech Republic, Finland, Germany, Iceland, Ireland, Japan, the Netherlands, New Zealand, Poland, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, Brazil, Colombia)	37.47	54.17	19.94	22.72	21	58.33



Figure 3. Mean standardized values of diagnostic variables in individual clusters for level of disclosure and public availability of information regarding private interests across branches of government (Group I)



When the focus is on the disclosure of private interests according to the level of public officials in the executive branch — variables x_{1b} , x_{2b} , x_{3b} , x_{4b} , x_{5b} (Group II) — a certain cross-country variance of the above variables can be observed (see Table 4), especially in the cases of x_{3b} (political advisors/appointees) and x_{5b} (civil servants). However, it does not violate the criteria in Helwig (1981) for the inclusion of variables in the cluster analysis (in addition, multicollinearity problems were not found), and consequently all variables in Group II were considered.

■ Table 4. Descriptive statistics of the variables describing integrity as disclosure of private interests according to the level of public officials in the executive branch (Group II)

Descriptive statistics	Variables								
Descriptive statistics	<i>x</i> _{1<i>b</i>}	x _{2b}	x _{3b}	x _{4b}	<i>x</i> _{5b}				
Mean	63.72	64.12	34.31	41.55	22.64				
Minimum	16.67	16.67	0	0	0				
Maximum	100.00	100.00	87.50	87.5	87.50				
Coefficient of variation (%)	34.52	33.43	81.23	53.68	96.07				

As with the variables in Group I, considerable cross-country variation can be observed in the variables describing integrity as disclosure of private interests according to the level of public officials in the executive branch, especially, as stated above, in the cases of x_{3b} and x_{5b} .

This notable level of variance, greater than that of the Group I variables, results in a larger number of clusters. The *k*-means algorithm divides the group of surveyed countries into five clusters. Cluster 1, the largest one, includes Australia, Finland, Greece, Hungary, Iceland, the Netherlands, New Zealand, Poland, Portugal, Sweden and the United Kingdom. Austria, Germany, Italy, Japan, Slovenia and Switzerland are grouped in cluster 2. The third cluster includes Belgium, Ireland, Israel, Mexico, Turkey, Brazil and Colombia. Cluster 4 includes Canada, France, Korea, Norway, Slovakia, USA, Latvia and Russia, and cluster 5, the smallest one, is composed of Chile, the Czech Republic, Estonia and Spain.

■ Table 5. Means of clusters for integrity described as disclosure of private interests according to the level of public officials in the executive branch (Group II)

			Manada an	D			
Cluster	X _{1b}	X _{2b}	X _{3b} X _{4b}		X _{5b}	Number of cases	Percentage (%)
No 1 (Australia, Finland, Greece, Hungary, Iceland, the Netherlands, New Zealand, Poland, Portugal, Sweden, the United Kingdom)	78.98	82.20	18.71	25.76	16.51	11	30.56
No 2 (Austria, Germany, Italy, Japan, Slovenia, Switzerland)	36.81	32.64	18.06	25.00	19.45	6	16.67
No 3 (Belgium, Ireland, Israel, Mexico, Turkey, Brazil, Colombia)	44.64	47.03	45.83	41.67	27.38	7	19.44
No 4 (Canada, France, Korea, Norway, Slovakia, USA, Latvia, Russia)	80.21	77.08	75.00	64.58	39.58	8	22.22
No 5 (Chile, the Czech Republic, Estonia, Spain)	62.50	65.63	0.00	63.54	2.08	4	11.11

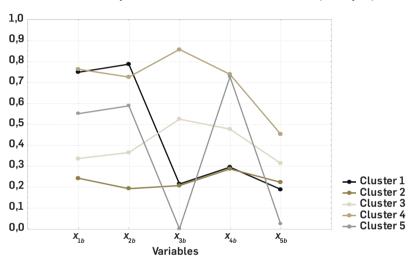
Note that the countries grouped in cluster 4 are those with the greatest level of disclosure and public availability of information regarding private interests, regardless of the level of public officials in the executive branch. Thus, the countries included in this cluster are those with the highest level of integrity. For the rest of the clusters, the level of integrity depends on the level of public officials. Cluster 1 shows very good marks for the head of the executive branch and the ministers, but for the other three categories the level of integrity does not reach 20%. A similar finding is revealed for countries in cluster 5: they display good results at the level of the head of the executive, the ministers or members of the cabinet and senior civil servants; however, the results for civil servants are very bad. The degree of integrity at the level of political advisors/appointees is not measured in the countries grouped in this cluster. Countries in cluster 3 show better results than those of cluster 2, regardless of the variable; in addition, both clusters group the countries with the lowest degree of integrity at the level of head of the executive and ministers.



In Figure 4 it can be seen that all the variables rather strongly differentiate the surveyed countries, but, as stated above, there are some similarities in the means in the following cases:

- For variable x_{1h} in clusters 1 and 4,
- For variable x_{4b} in clusters 4 and 5,
- For variables x_{3b} and x_{4b} in clusters 1 and 2.

Figure 4. Mean standardized values of diagnostic variables in individual clusters for level of public officials in executive branch (Group II)



The results on disclosure show the extent of dysfunction that must be treated as a phenomenon affecting both the social system in place and the performance of the public administration. The groups of countries resulting from the k-means clustering performed in this article confirm that all the OECD countries are making continued efforts to implement integrity standards. The data presented in Table 1 show divergence between countries, which may indicate non-compliance or inadequate observance of the principles of integrity (because there are disclosures). One can also consider why incomplete information was provided for the study (improperly completed questionnaires), a situation which indicates dysfunction in public administration operations, in the form of failure to comply with the principles of integrity. Therefore, there should be a demand for actions to strengthen the principles of integrity and improve the quality of future studies.

At any rate, the countries that perform best are as follows:

• In terms of the level of disclosure and public availability of information regarding private interests across branches of government: Chile, Estonia, France, Greece,

Hungary, Israel, Italy, Korea, Norway, Portugal, Slovakia, Turkey, USA, Latvia and Russia.

 In terms of the level of disclosure of private interests according to the level of public officials in the executive branch: Canada, France, Korea, Norway, Slovakia, USA, Latvia and Russia.

The countries listed above boast the highest integrity composite indices. Note that the groupings do not confirm the assumption that the post-communist countries are similar in this respect. Russia stands out in this group with its high composite indices.

The Visegrad Group (V4)⁷, the most regionally similar countries that have been cooperating for years, are in different clusters, thus showing no notable similarities in terms of integrity standards. The study thus does not verify the hypothesis of significant similarities between countries within the geopolitical system including Poland, Hungary, Slovakia and the Czech Republic.

6. Discussion

The OECD countries are facing a number of problems associated with both ethics and the reinforcement of democratic behaviour that will encourage integrity in public administration. Observing integrity standards in public service not only improves transparency, but also supports the monitoring of and fight against corruption-generating practices, as well as promoting an ethical code of conduct. It also provides citizens with a sense of security and confidence in the public administration's impartiality.

Accordingly, the most important measures taken in the OECD countries in terms of the public interest are:

1. A common position on issues such as gifts, conflicts of interest, selective application of the law/ non-conformity with the law, lobbying, confidentiality, discretion, corruption and lack of autonomy; defining the phenomenon, its importance, potential impact, instruments to counter risks of pathology, corruption or breach of integrity standards (Bilhim et al. 2005; McGee et al. 2006).

An alliance of four Central European states – the Czech Republic, Hungary, Poland and Slovakia.



- 2. Development, promotion and implementation of instruments allowing the effective execution of ethical standards, such as the public sector code of conduct (ISO does not always ensure the observance of integrity standards), as well as law enforcement. Society expects public officials to act according to professional standards.
- 3. Ensuring high quality information and accessibility of data about public sector operations as an expression of transparency and quality, providing access to information in a user-friendly, comprehensible manner and in appropriate formats; proactive support from the government to foster innovative re-use, processing and sharing of public data (OECD, 2015a).
- **4.** Reinforcement of professionalism in public administration, with a particular focus on public servants' competences, clear job descriptions in the form of instructions; observance of the elementary rules of the division of competences, accountability and task delegation; implementation of lifelong learning and code of conduct training programmes.

Undoubtedly, it is essential to promote the adopted methodology of integrity assessment in order to compare measurements and monitor changes. In this context, the question arises as to the questionnaire used to collect data. It is one of the most sensitive issues which cannot be addressed through administrative or managerial procedures; we can only trust that public servants will not provide false data. The methodological approach developed by Nardo *et al.* (2004, 2005) does not give rise to objections as to the reliability of the measurements.

Policies to reinforce the honesty and trustworthiness of the public authorities require commitment on the part of the public administration itself, as it is a main beneficiary of the measures taken, the developed codes and standards, as well as of the monitoring of the transparency of its operations.

The honest and accountable conduct of public authorities is an important issue and plays a vital role in the OECD studies. The member states actively promote the integrity, ethical code and credibility of their operations and decisions. The published data point to the desirable measures to be taken both in individual OECD countries and in the organization as a whole.

Although the principle of integrity is key, it is also essential to respect such elementary rules as the democratization of public life and to shape individual and collective attitudes of public servants and the business environment, thus encouraging them to act according to integrity standards.

References

- Bertók, J. and Maesschalck J. (2009). Towards a Sound Integrity Framework: Instruments, Processes, Structures and Conditions for Implementation, Workshop 1 of the Global Forum on Public Governance, OECD Conference Centre. Paris.
- Bilhim, J. and Neves, B. (2005). New Ethical Challenges In A Changing Public Administration, Centre for Public Administration & Policies Social and Political Sciences Institute of Lisbon Technical University Centre for Public Administration & Policies, Lisbon.
- Braithwaite, V. (2003). Tax System Integrity and Compliance: The Democratic Management of the Tax System, in: Braithwaite V. (Ed.), *Taxing democracy: Understanding tax avoidance and evasion*, Ashgate, Aldershot, pp. 269-287.
- Della Porta, D. and Meny, Y. (1997). Democracy and Corruption in Europe, Pinter, London and Washington.
- Della Porta, D. and Vannucci, A. (1999). Corrupt Exchanges. Actors, Resources, and Mechanisms of Political Corruption, Aldine de Gruyter, New York.
- Denhardt, R.B. and Denhardt, J.V. (2000). The New Public Service: Serving rather than Steering, Public Administration Review, 60(6), pp. 549-559.
- Filipiak, B. and Ruszała, J. (2009). Instytucje otoczenia biznesu, Difin, Warszawa. (in Polish)
- Friedman, E., Johnson, S., Kaufmann, D. and Zoido-Lobaton P. (2000). Dodging the Grabbing Hand: the Determinants of Unofficial Activity in 69 Countries, *Journal of Public Economics*, 76, pp. 459-493.
- Friedman, M. and Friedman, R. (1997). Tyrania status quo, Panta, Sosnowiec. (in Polish)
- Geisser, S. (1975). The predictive sample reuse method with applications, Journal of the American Statistical Association, 70, pp. 320-328.
- Giedrojć, K. (2015). Efektywna współpraca administracji i biznesu. Rekomendacje działań, Studia BAS, 1(41), pp. 29-49. (in Polish)
- Gliniecka, J. (2015). Przejrzystość i jawność jako reguły gospodarowania publicznymi środkami pieniężnymi,
 Gdańskie Studia Prawnicze, T. XXXIII, pp. 155-175. (in Polish)
- Gregory, R.J. (1999). Social Capital Theory and Administrative Reform: Maintaining Ethical Probity in Public Service, Public Administration Review, 59(1), pp. 63-75.
- Grosse, T.G. (2000). Działania anty-korupcyjne w państwach członkowskich OECD, Florencja, 2000, Available at: http://www.antykorupcja.gov.pl/ak/analizy-i-raporty/oecd/3528,Dzialania-antykorupcyjne-w-panstwach-czlon kowskich-OECD.html. (in Polish)
- Hartigan, J.A. and Wong, M.A. (1979). Algorithm AS 136: A K-Means Clustering Algorithm, Applied Statistics, 28(1), pp. 100-108.
- Hellwig, Z. (1981). Wielowymiarowa analiza porównawcza i jej zastosowanie w badaniach wielocechowych obiektów gospodarczych, in: Welfe W. (Ed.), Metody i modele ekonomicznomatematyczne w doskonaleniu zarządzania gospodarką socjalistyczną. PWE, Warszawa, pp. 46-68. (in Polish)



- Kosikowski, C. (2005). Prawne aspekty realizacji zasad jawności i przejrzystości finansów publicznych, Available at: https://www.nik.gov.pl/plik/id,1558.pdf. (in Polish)
- Król, P. (2015). Moralność podatkowa jako reakcja obywatela na działalność państwa, Doradca podatkowy, 3, p. 5. (in Polish)
- Laufer, W.S. (1996). Integrity, Diligence, and the Limits of Good Corporate Citizenship, *American Business Law Journal*, **34**(2), pp. 157-181.
- Markowski, G., Mileszyk, N., Sobiech, R., Stokowska, A. and Wiaderek, G. (2014). Konflikt interesów w polskiej administracji rządowej prawo, praktyka, postawy urzędników, Fundacja im. S.Batorego, Warszawa. (in Polish)
- Mauro, P. (1995). Corruption and Growth, The Quarterly Journal of Economics, 110(3), pp. 681-712.
- Mauro, P. (1997). The Effects of Corruption on Growth, Investment, and Government Expenditure: A Cross-Country Analysis, in: Elliott K. (Ed.), Corruption in the Global Economy, Institute for International Economics, Washington, pp. 83-107.
- Mazur, S. (2003). Narodowe modele administracji publicznej, in: Hausner J. (Ed.), Administracja publiczna, PWN, Warszawa, pp. 63-86.
- Mazur, S. (2011). Państwo integrujące zasoby, in: Mazur S. (Ed.), Państwo integrujące zasoby potencjał rozwojowy a jakość regulacji publicznych, Małopolska Szkoła Administracji Publicznej Uniwersytetu Ekonomicznego w Krakowie, Kraków, p. 21. (in Polish)
- Mazur, S. (2012). Etos służby publicznej i jego oblicza, in: Mazur S. (Ed.), Etos w administracji służba publiczna, menedżerski profesjonalizm czy przestrzeganie procedur? Instytut Badań nad Gospodarką Rynkową, Gdańsk, pp. 9-16. (in Polish)
- Mazur, S. (2016). The Culture of Institutionalised Distrust, in: Reflections on Performance, integrity and trust in the public sector in Europe, EUPAN, Brussels, pp. 9-16.
- McGee, R.W. and Tusan, R. (2006). The Ethics Of Tax Evasion: A Survey of Slovak Opinion, Andreas School Of Business Working Paper Series, Barry University, Miami Shores.
- Munda, G. and Nardo, M. (2005). Constructing Consistent Composite Indicators: the Issue of Weights, Institute for the Protection and Security of the Citizen, Joint Research Centre, Ispra, Italy.
- Nowak, K. (1990). Metody taksonomiczne w klasyfikacji obiektów społeczno-gospodarczych. PWE, Warszawa. (in Polish)
- OECD (2000a). *Trust in Government Ethics Measures, OECD Countries,* OECD Publishing, Paris. Available at: https://www.oecd.org/gov/ethics/48994450.pdf
- OECD (2000b). Annex.1998 Recommendation of the OECD Council on Improving Ethical Conduct in the Public Service, including Principles for Managing Ethics in the Public Service, in Building Public Trust: Ethics Measures in



- OECD Countries, OECD Publishing, Paris. Available at: https://www.oecd.org/gov/ethics/Principles-on-Improving-Ethical-Conduct-in-the-Public-Service.pdf
- OECD (2005). Managing Conflict of Interest in the Public Sector, OECD Publishing, Paris. Available at: https://www.oecd.org/gov/ethics/49107986.pdf
- OECD (2008). Handbook on Constructing Composite Indicators, OECD Publishing & JRC, Paris. Available at: http://www.oecd.org/std/leading-indicators/42495745.pdf
- OECD (2009). Principles for Integrity in Public Procurement, OECD Publishing, Paris. Available at: http://www.oecd. org/gov/ethics/48994520.pdf
- OECD (2015a). Government at a Glance 2015, OECD Publishing, Paris. Available at: http://www.oecd-ilibrary.org/governance/government-at-a-glance-2015_gov_glance-2015-en
- OECD (2015b). Improving Co-Operation between Tax and Anti-Money Laundering Authorities: Access by Tax Administrations to Information Held by Financial Intelligence Units for Criminal and Civil Purposes, OECD Publishing, Paris. Available at: https://www.oecd.org/ctp/crime/report-improving-cooperation-between-tax-anti-money-laundering-authorities.pdf □
- Pasieczny, J. (2010). Patologie organizacji w okresie kryzysu, Zarządzanie i Finanse, 4(2), pp. 117-128. (in Polish)
- Petrick, J.A. and Quinn, J.F. (2000). The Integrity Capacity Construct and Moral Progress in Business, *Journal of Business Ethics*, 23(1), pp. 3-18.
- Pociecha J, Podolec B., Sokołowski A. and Zając K. (1998). Metody taksonomiczne w badaniach społeczno-ekonomicznych, PWN, Warszawa. (in Polish)
- Rybiński, K. (2009). Gdybym miał władzę, *Wprost*, z 29 marca 2009. Available at https://www.wprost.pl/tygodnik/156026/Gdybym-mial-wladze.html. (in Polish) ☐
- Saltelli, A., Tarantola, S., Campolongo, F. and Ratto, M. (2004). Sensitivity Analysis in Practice: A Guide to Assessing Scientific Models, John Wiley & Sons, New York.
- Sawulski, J. (2015). Audyt (nie)przejrzystości finansów publicznych w Polsce, IBS Policy Paper, No. 2, pp. 2-23.
 (in Polish)
- Skidmore, M.J. (1995). Ethics and Public Service, The Annals of the American Academy of Political and Social Science, vol. 537, pp. 25-36.
- Supernat, J. (2009). Transparentność w funkcjonowaniu instytucji Unii Europejskiej, in: Kijowski D. and Suwaj P. (Eds.), Patologie w administracji publicznej, Wolters Kluwer business, Warszawa, pp. 646-649. (in Polish)
- Tanzi, V. (1998). Corruption Around the World: Causes, Consequences, Scope and Cures, IMF Working Paper, Washington.
- Tanzi, V. and Davoodi, H. (1997). Corruption, Public Investment, and Growth, IMF Working Paper, Washington.
- Tomaszewska, E. and Strzałkowski B. (2013). Faworytyzm i protekcja jako zjawiska patologiczne w administracji publicznej. Przyczyny, konsekwencje i próby przeciwdziałania, in: Fundowicz S., Filipiak K. and Świtala P. (Eds.) Administracja publiczna wobec wyzwań współczesności. SKAUTH, Radom, pp. 90-100. (in Polish)
- Treisman, D. (2000). The Causes of Corruption: a Cross-national Study, Journal of Public Economic, 76(3), pp. 399-457.

- Ustawa z dnia 27 sierpnia 2009 roku o finansach publicznych. Dz.U. 2009 No 157 poz. 1240 as amended. (The Public Finance Act) (in Polish)
- Wojciechowski, M. (2014). Koszt władzy w polskim samorządzie terytorialnym, Difin, Warszawa. (in Polish)
- Zwoliński A. (2015). Zasada dobra wspólnego jako podstawa etyki służb finansowych państwa, in: Smaga M. and Winiarz M. (Eds.) *Dyscyplina finansów publicznych. Doktryna, orzecznictwo, praktyka*. C.H. Beck, Warszawa, pp. 679-698. (in Polish)

WebReferences

- www 1. http://stats.oecd.org/# 🗁
- www 2. http://www.oecd.org/gov/ethics/publicsectorintegrityreviews.htm#Introduction 🗁
- www 3. http://www.oecd.org/gov/ethics/48720289.xlsx 🗁