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- **Corporate responsibility reporting according to Global Reporting Initiative: an international comparison**



- **Drepturile acționarilor – principiu de bază al guvernănei corporative, prin intermediul jurisprudenței specifice**
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- **The rights of shareholders – basic principle of corporate governance by means of case-specific jurisprudence**
- **Boardroom diversity and audit fees: director ethnicity, independence and nationality**
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An analysis of corruption: the American continent versus Romania

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The rights of shareholders – basic principle of corporate governance by means of case- specific jurisprudence

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Abstract

Respecting shareholders' rights represents one of the fundamental principles of corporate governance, underpinning the establishment of economic entities, as a form of association of individuals and / or legal entities in order to carry out profit-oriented activities. However, there are situations in which the management, the other shareholders, or even the authorities, do not respect certain shareholders' rights, leading to a number of negative effects, such as the closing of companies. Based on these considerations, in this paper, we set as research objective to analyze the circumstances, which may affect shareholders' rights. To meet the research objectives, we analyzed the case-specific jurisprudence published by the courts of law till 31st of December 2015. The results of the study show that the shareholders' rights, which are not respected, include: the property right, the right to receive dividends, the right to participate and vote in the general assemblies of shareholders, the right to be elected in the governing bodies, and not the least, the most important one in accounting terms, the right to be informed.

Keywords: corporate governance, the right to be informed, property right, the right to receive dividends, the right to vote, governing bodies

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Introduction

Corporate governance represents a set of responsibilities and practices exercised by the Board of Directors and the executive management, in order to achieve strategic objectives, ensure risk management and the examination of the responsible use of resources' (IFAC, 2009). The theories regarding corporate governance are linked to financial instruments' issuers, wanting to maximize the results of their companies, while the emergence of the concept is due to the fact that the private sector has always played a very important role in the life of a country, contributing towards ensuring the socio-economic balance.

Globally, the international organizations have played a key role in the development of the concept. Thus, the Organisation for Economic Co-operation and Development (OECD) has drafted certain guidelines containing a set of recommended principles to be applied by companies. The first set of principles was developed in 1999 and, in 2004, an improved version of these was published. Their analysis reveals that, among the shareholders' rights to be respected by both the governing bodies and by other shareholders, there are included: the right to be informed, the property right, the right to receive dividends, the right to participate and vote in the general assemblies of shareholders and the right to be elected in the governing bodies. Consequently, we shall proceed at these rights' further assessment.

In this context, property is a core element in defining the concept of corporate governance. It lies at the foundation of the establishment of companies, the associates pooling certain goods, on which they have a property right, in order to pursue economic activities aimed at gaining economic benefits.

"The property right is that subjective right, which gives expression of the appropriation of a good, right which allows the owner to possess, use and dispose of the good, in its own power and self-interest, and in compliance with the existing legislation" (Bîrsan, 2001). The Universal Declaration of Human Rights adopted and proclaimed on 10 September 1948 by the General Assembly of the United Nations stipulates in Article 17 that *"Anyone has the right to own property, alone as well as in association with others [...] no one can be deprived arbitrarily of his/her property"* (UN, 1948).

Property theory is referred to in Article 65 of the Law no. 31/1990 regarding the commercial companies, thus – *"[...] the goods representing a contribution to the company become its property [...]"* as well as in article 66: *"[...] the creditors of the associate may exercise their rights only on the part of the shareholder benefits due after the balance sheet [...]"*.

With reference to *guaranteeing shareholders' property right*, the national regulations stipulate that the right of property of the nominative shares issued in material form is transmitted by means of the statement made in the shareholders' register and by a note made on the title. If nominative shares, the ownership is transferred through an entry in shareholders' register. The property right over quoted shares, traded on a stock exchange, is transferred in accordance with the requirements of the capital market law. In the case of bearer shares, the property right is transferred with the simple possession of the physical stock certificate (Law no. 31/1990).

As for *respecting shareholders' rights in issues related to the general assemblies of shareholders (GASs)*, we note that GASs can discuss, approve or modify the annual financial statements. Associates or shareholders make decisions based on the reports prepared by the Board of Directors, management, supervisory board and financial auditor. Also, the ordinary general assembly of shareholders decides, when appropriate, the allocation of profits to dividends, appoints and dismisses the financial auditor, and sets the duration of the financial audit contract.

After analyzing the report of the Board of Directors, the annual financial statements and financial auditor's report, the general assembly of shareholders decides on the discharge from duty of Board members.

Regarding the recommendations on voting rights, national regulations state that shareholders exercise their right to vote at the general assembly in proportion to the number of shares they own.

On *convoking the general assembly of shareholders*, national rules stress that the general meeting is convened by the Board of Directors or management. If the entity's shares are nominative, the convocation can only be done by registered letter. The convening notice must include a series of elements such as: location, time and agenda.

Companies must comply with international recommendations regarding information disclosure, so

that all persons involved in the mechanism of corporate governance to have access to the information necessary in the decision making process. The annual financial statements, along with the annual report of the Board of Directors and the proposal regarding the distribution of dividends, may be studied by shareholders at the headquarters of the entity. At shareholders' request, copies of these documents may be issued under certain conditions concerning the minimal costs.

Entities with a website must disclose online the information included in the convening notice as well as its annual financial statements, the annual report of the Board of Directors, the Management Report and the financial auditor's report. The economic entities whose financial statements are audited must compulsorily publish the financial auditor's report. If some shareholders need additional information, they may address written questions to the Board, which is expected to address them in the general assembly.

In order to ensure business continuity, a solution is needed so that the decisions of the general assembly take effect. In this respect, national regulations stipulate that the decisions are mandatory even for shareholders who did not attend the meeting or voted against. They can still ask in court the annulment of a decision, which was taken in violation of the legal requirements.

1. Literature review

Corporate governance principles were at the basis of studies elaborated by various authors in scientific papers. Thus, some authors have addressed the issue of a conceptual framework alternative to the existing one. To support their arguments, they used agency theory (Ciancanelli and Reyes Gonzales, 2000, pp.4-5).

With regard to the national implementation of the OECD principles on corporate governance, a series of studies was developed on the degree of implementation of these principles in the Romanian banking sector (Bîgioi, 2012). In connection with the enforcement of OECD principles on corporate governance, there were developed several studies on their implementation in emerging economies (Feleagă et al., 2012).

The results of some studies show that poor corporate governance affects the whole economy, with negative

consequences on economic development (Levine, 2003).

In other studies, there is analyzed the effect of corporate governance at company level on the cost of capital and how it is influenced this effect by the legal protection of investors (Chen, Chen and Wei, 2009). Other authors have explained the role that corporate governance plays in the performance of commercial banks (Macey and O'Hara, 2003).

Governance has been studied from a perspective different from the existing one, with more emphasis on control and management roles (Kim, Burns and Prescott, 2009).

Also, some papers addressed ethical issues in business and described the relationship between ethics theory and law (Crane, 2007). The analysis of how concentration of ownership affects the independence of the Board and audit committee, has indicated the negative impact of ownership concentration on board independence, but no impact on audit committee independence. The results suggest that the Board independence increases firm value (Setia-Atmaja, 2009).

Other authors have addressed: the long-term evolution of investors' protection in UK companies (Franks, Mayer and Rossi, 2009), the shareholders' right to vote in companies in the United States and Europe (Ferrarini and Chiodini, 2010), issues related to the control of a company by majority shareholders, at the expense of minority shareholders, in developing countries (Gilson, 2007).

By reviewing the literature mentioned above, we note that a great body of literature shows that the implementation of corporate governance principles by companies is beneficial for shareholders, leading to the maximization of their profits.

2. Data and research methodology

When preparing the study, we used data extracted from case-specific jurisprudence, as published by national courts of law. Thus, in the first stage, we extracted a sample of 120 sentences. They were issued by Bucharest Courthouse, till 31.12.2015 (<http://portal.just.ro/3/Lists/Jurisprudenta>). In the second stage, based on qualitative analysis, the sentences were grouped according to object of their actions and, out of

these, we extracted 20 decisions related to shareholder rights. These correspond to a sample of 17% of all sentences. We consider that the sample is representative. In the third stage, we selected the regulations invoked by the parties in the process. These were grouped by types of articles, and, based on quantitative methods, we determined which were the articles of law more frequently invoked by the complainants in their actions. In the last stage, based on qualitative analysis, we determined which of those articles relate to a non-compliance of shareholders' rights.

3. Defining the mathematical model on which the study was conducted

In order to determine which of the shareholders' rights were most commonly cited in court sentences, we have

determined their weight in total, using the following empirical model:

$$g(d_i) = \frac{d_i}{D_c}, \text{ where:}$$

$d_i \in [0; 100]$ and d_i represents the number of times law articles concerning shareholders' rights were invoked in Court's sentences; and

$$D_c = [g(d_1) + g(d_2) + g(d_3) + g(d_4) + \dots + g(d_i)] \text{ and}$$

D_c – represents the total number of times law articles concerning shareholders' rights were invoked in Court's decisions.

4. Results

From our study, we obtained the results summarized in Table 1:

Table 1. The analysis of shareholders' rights based on sentences of Bucharest Courthouse

No.	Judicial decision	The legal document cited	The object of the action	Type of right
1	Commercial sentence no. 4280/18.10.2005 of Bucharest Courthouse. The VI Commercial Division - irrevocable by the decision no. 449/30.01.2007 of the High Court of Cassation and Justice	Article 117 of the Law no. 31/81990 R	Annulment of the decision of shareholders' general assembly. Convening notice. Content. Shareholders right to information. Penalties for non-compliance.	The right to participate at the general assemblies of shareholders
2	Sentence no. 3518 of 18.06.2015, Court file no. 3608/3/2015, Bucharest Courthouse. The VI Civil Division	Article 192 paragraph (1) and 2 of the Law no. 31/1990, Article 193 paragraph (3), Article 196, Article 132 paragraph (2) and paragraph (3) of the Law no. 31/1990, Article 195 paragraph (3) of the Law no. 31/1990	Annulment of the decision of shareholders' general assembly. Double majority rule	The right to participate at the general assemblies of shareholders
3	Sentence no. 6336 of 23.06.2014, Court file no. 1453/3/2014/a2 Bucharest Courthouse - The VII Division	Article 14 and Article 19 of the Law no. 85/2006	The appeal against the decision of creditors' assembly	The right to participate at the general assemblies of creditors

No.	Judicial decision	The legal document cited	The object of the action	Type of right
4	Sentence no. 6336 of 23.06.2014, Court file no. 1453/3/2014/a2 Bucharest Courthouse - The VII Division	Article 14 and Article 19 of the Law no. 85/2006	The appeal against the decision of creditors' assembly	The right to participate at the general assemblies of shareholders
5	Commercial sentence no. 8022/13.06.2007 of Bucharest Courthouse, irrevocable by the commercial decision no. 1162/2007 of the Bucharest Court of Appeal	Articles 196, 132 and 133 of the Law no. 31/2990	Suspension of the enforcement of shareholders general assembly's decision. Conditions. Appearance law.	The right to participate at the general assemblies of shareholders
6	Commercial sentence no. 1327, public meeting on 7.02.2011, Court file no. 7268/3/2011, Bucharest Courthouse. The VI Commercial Division	Articles 133 and 132 of the Law no. 31/1990R	The admissibility conditions, in the presidential decree, regarding the shareholders general assembly's decisions, whose suspension is sought	The right to participate at the general assemblies of shareholders
7	Sentence no. 17200/3/2006 of Bucharest Courthouse in the court file no. 929/3/2006	Article 134 of the Law no. 31/1990	Annulment of shareholders general assembly's decision. Nullity of the proxies granted by majority shareholders in order to be represented in the the general assembly of shareholders	The right to participate at the general assemblies of shareholders
8	Commercial sentence no. 2458/24.05.2005 of Bucharest Courthouse - The VI Commercial Division, irrevocable by the decision no. 307/2007 of the High Court of Cassation and Justice	Article 195 of the Law no. 31/1990R	Annulment of shareholders general assembly's decision. Convocation unlawful. Consequences	The right to participate at the general assemblies of shareholders
9	Commercial sentence no. 4280/18.10.2005 of Bucharest Courthouse - The VI Commercial Division, irrevocable by the decision no. 449/30.01.2007 of the High Court of Cassation and Justice	Article 184 of the Law no. 31/1990R	Annulment of shareholders general assembly's decision. Convening notice. Content. Shareholders right to information. Penalties for non-compliance.	The right to vote
10	Sentence no. 3518 of 18.06.2015, Court file no. 3608/3/2015, of Bucharest Courthouse - The VI Civil Division	Article 192 paragraph (1) and (2) of the Law no. 31/1990, Article 193 paragraph (3), Article 196, Article 132 paragraph (2) and paragraph (3) of the Law no. 31/1990, Article 195 paragraph (3) of the Law no. 31/1990	Annulment of shareholders general assembly's decision. Double majority rule	The right to vote

No.	Judicial decision	The legal document cited	The object of the action	Type of right
11	Sentence no. 3518 of 18.06.2015, Court file no. 3608/3/2015, of Bucharest Courthouse - The VI Civil Division	Article 192 paragraph (1) and (2) of the Law no. 31/1990, Article 193 paragraph (3), Article 196, Article 132 paragraph (2) and paragraph (3) of the Law no. 31/1990, Article 195 paragraph (3) of the Law no. 31/1990	Annulment of shareholders general assembly's decision. Double majority rule	The right to participate at the general assemblies of shareholders
12	Sentence no. 3518 of 18.06.2015, Court file no. 3608/3/2015, of Bucharest Courthouse - The VI Civil Division	Article 192 paragraph (1) and (2) of the Law no. 31/1990, Article 193 paragraph (3), Article 196, Article 132 paragraph (2) and paragraph (3) of the Law no. 31/1990, Article 195 paragraph (3) of the Law no. 31/1990	Annulment of shareholders general assembly's decision. Double majority rule	Property right
13	Commercial sentence no. 8022/13.06.2007 of Bucharest Courthouse, irrevocable by the commercial decision no. 1162/2007 of the High Court of Cassation and Justice	Articles 196, 132 and 133 of the Law no. 31/1990	Suspension of the enforcement of shareholders general assembly's decision. Conditions. Appearance law.	The right to vote
14	Commercial sentence no. 1327, public meeting of 7.02.2011, court file no. 7268/3/2011, of Bucharest Courthouse - The VI Commercial Division	Articles 133 and 132 of the Law no. 31/1990R	The admissibility conditions, in the presidential decree, regarding the shareholders general assembly's decisions, whose suspension is sought	The right to vote
15	Commercial sentence no. 4971, public meeting of 18.04.2011, court file no. 17485/3/2010	Article 1431 (paragraph 1) of the Law no. 31/1990R	Nullity of sale-purchase agreement	The right to vote
16	Sentence no. 17200/3/2006 of Bucharest Courthouse in the Court file no. 929/3/2006	Article 134 of the Law no. 31/1990	Annulment of shareholders general assembly's decision. Nullity of the proxies granted by majority shareholders in order to be represented in the general assembly of shareholders	The right to vote
17	Commercial sentence no. 2458/24.05.2005 of Bucharest Courthouse - The VI Commercial Division, irrevocable by the decision no. 307/2007 of the High Court of Cassation and Justice	Article 195 of the Law no. 31/1990R	Annulment of shareholders general assembly's decision. Convocation unlawful. Consequences	The right to vote

No.	Judicial decision	The legal document cited	The object of the action	Type of right
18	Sentence no. 13662, of Bucharest Courthouse on 10.12.2008	Article 117, item 6 and 7 of the Law no. 31/1990	Annulment of the general assembly of shareholders. Expired mandates of the Board of Directors' members. General shareholders assembly – supreme governing body of the company	The right to vote
19	Sentence no. 3205, of Bucharest Courthouse on 12.03.2012, court file no. 6593/3/2012	Article 193 paragraph 3 of the Law no. 31/1990	Suspension of the enforcement of shareholders general assembly's decision.	The right to vote
20	Sentence no. 3518 of 18.06.2015, court file no. 3608/3/2015, Bucharest Courthouse - VI Civil Division	Article 192 paragraph (1) and (2) of the Law no. 31/1990, Article 193 paragraph (3), Article 196, Article 132 paragraph (2) and paragraph (3) of the Law no. 31/1990, Article 195 paragraph (3) of the Law no. 31/1990	Suspension of the enforcement of shareholders general assembly's decision. Double majority rule	Property right
21	Civil sentence no. 5316, public meeting on 04.07.2013, court file no. 31406/3/2011	Article 115 of the Law no. 31/1990, Article 207 of the Law no. 31/1990 and with the infringement of Article 26 (4) of Government Emergency Ordinance no. 88/1997	Nullity of the legal act. <i>Res judicata</i>	Property right over shares, Property right over tangible assets
22	Civil sentence no. 1060 of 18.02.2013, court file no. 41263/3/2012	Article 129 paragraph 1 of the Law no. 31/1990, Article 12 of the Law no. 137/2002, Article 142 and the following in the Government Order no. 577/2007	Annulment of shareholders general assembly's decision.	Property right over shares
23	Commercial sentence no. 8022/13.06.2007 of Bucharest Courthouse, irrevocable by commercial decision no. 1162/2007 of Bucharest Court of Appeal – V Division	Articles 196, 132 and 133 of the Law no. 31/1990	Suspension of the enforcement of shareholders general assembly's decision. Conditions. Appearance law	Property right over shares
24	Commercial sentence no. 1327, public meeting on 7.02.2011, court file no. 7268/3/2011, Bucharest Courthouse - VI Commercial Division	Articles 133 and 132 of the Law no. 31/1990R	The admissibility conditions, in the presidential decree, regarding the shareholders general assembly's decisions, whose suspension is sought	Property right over shares

No.	Judicial decision	The legal document cited	The object of the action	Type of right
25	Commercial sentence no. 2124 public meeting on 09.03.2010 Bucharest Courthouse - VII Commercial Division	Article 138 of the Law no. 85/2006	Request to attract personal liability	Property right
26	Commercial sentence no. 4690 meeting in the council room on 22.06.2010, court file no. 32525/3/2009	Article 59 of the Law no. 85/2006	Appeal against the report required by article 59 of the Law no. 85/2006	Property right
27	Commercial sentence no. 4971, public meeting on 18.04.2011, court file no. 17485/3/2010	Article 1431 (paragraph 1) of the Law no. 31/1990R	Nullity of sale-purchase agreement	Property right
28	Sentence no. 17200/3/2006 of Bucharest Courthouse, court file no. 929/3/2006	Article 134 of the Law no. 31/1990	Annulment of shareholders general assembly's decision. Nullity of the proxies granted by majority shareholders in order to be represented in the general assembly of shareholders	Property right over shares
29	Commercial sentence no. 4690, meeting in the council room on 22.06.2010 court file no. 2525/3/2009	Article 59 of the Law no. 85/2006	Appeal against the report required by Article 59 of the Law no. 85 / 2006, issued by the judicial insolvency practitioner	Property right
30	Commercial sentence no. 2 of 04.01.2011, Bucharest Courthouse, Court file no.49034/3/2009	Article 226 paragraph 1 letter c) of the Law no. 31/1990	Associate withdrawal. Inadmissibility of the action in case the company is dissolved	Property right over shares
31	Sentence no. 200 of 21.01.2015, Bucharest Courthouse, Court file no.36082/3/2014	Article 227 paragraph (l) letter b) and Article 235 of the Law no. 31/1990	Complaint against the resolution of O.R.C Director	Property right
32	Sentence no. 7363 of 28.09.2015, issued in the Court file no. 40598/3/2014	Articles 79 and 80 of the Law no. 85/2006	Action for annulment	Property right
33	Civil sentence no. 1009 of 02.03.2015, issued in the Court file no. 8549/3/2014	Article 237 paragraph 10 of the Law no. 31	Former associate's personal liability. Lack of interest	Property right
34	Civil sentence no. 6036/2013 issued in the Court file no. 28473/3/2013 Bucharest Courthouse – VI Civil Division	Article 5 item 6 of Securities and Exchange Commission's Regulation no. 6/2009, Article 7 of the above Regulation, Article 5.10 of the above Regulation	Suspension of the enforcement of shareholders general assembly's decision.	The right to be informed
35	Sentence no. 13662, issued by Bucharest Courthouse on 10.12.2008	Article 117 item 6 and 7 of the Law no. 31/1990	Annulment of the general assembly of shareholders. Expired mandates of the Board of Directors' members. General assembly of shareholders - supreme governing body of the company	The right to be elected

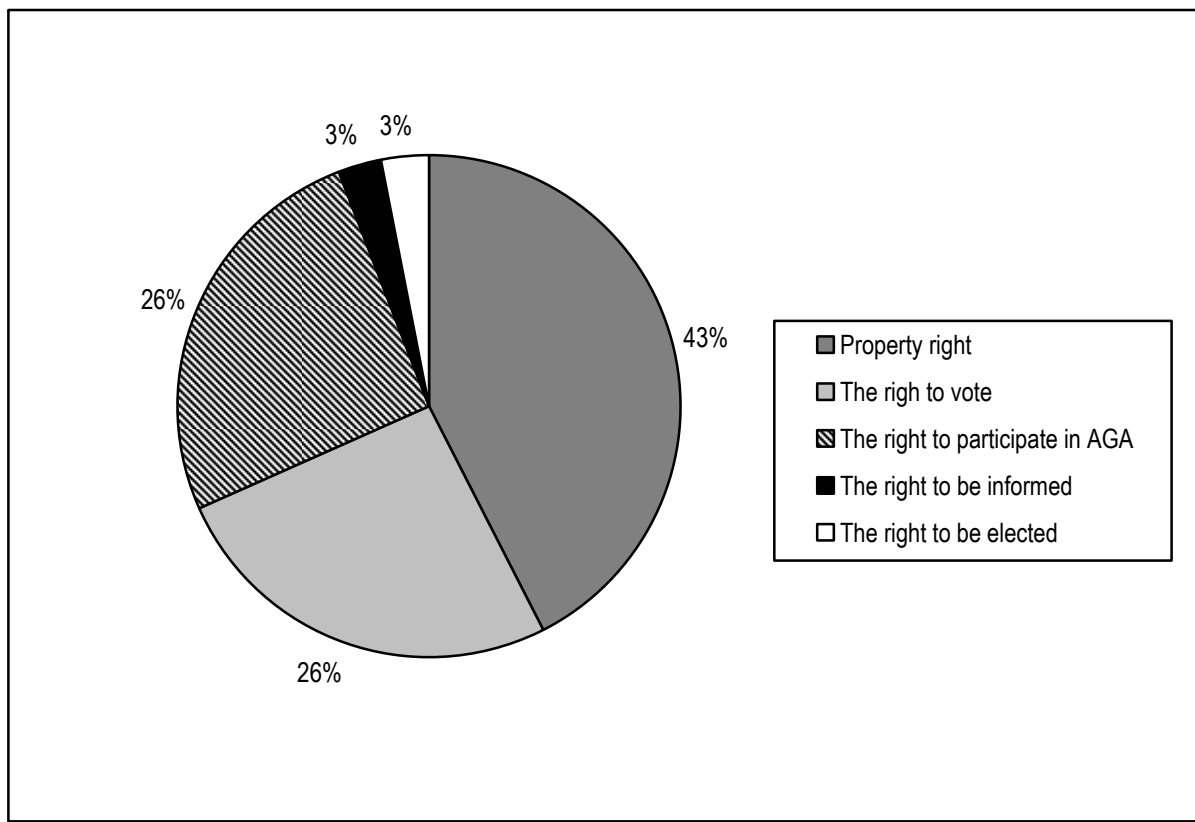
Based on the data in Table 1, we get the following | weights of shareholders' rights (Table 2):

Table 2. The weight of non-compliance with shareholders' rights in case-specific jurisprudence		
Type of right	Number of summons	Weight (%)
Property right	15	43%
The right to vote	9	26%
The right to participate at the general assemblies of shareholders	9	26%
The right to be informed	1	3%
The right to be elected	1	3%
Total	35	100%

Source: Authors' projections based on data extracted from specific jurisprudence

Graphically, the obtained results are as follows:

Figure 1. The weight of non-compliance with shareholders' rights based on Court sentences



Source: Authors' projections based on data extracted from specific jurisprudence

5. Conclusions

After analyzing the results, we observe that, among the shareholders' rights not respected by governing bodies and other shareholders, there are included:

- Property right, which accounts for 43%;
- The right to vote in the general assemblies of shareholders, which accounts for 26%;
- The right to participate in the general assemblies of shareholders, which accounts for 26%;
- The right to be informed, which accounts for 3%;
- The right to be elected in the governing bodies, which accounts for 3%.

Among the causes of non-compliance with shareholders' rights, we note:

- a. In the case of property right, the sentences targeted two main situations. The first concerns invoking the nullity of documents regarding the transfer of shares or a capital increase. Thus, minority shareholders have felt aggrieved in their rights, as it represents a contravention of the preemptive right. The second case concerns the property right in regard to the tangible assets owned by companies, minority shareholders requesting the annulment of the respective sale-purchase agreements. Among the reasons put forward by the complainants, we mention: sale of land and buildings at undervalued prices and in non-compliance with the competences of the governing bodies, as these were not authorized by the general assembly of shareholders to approve the transactions in question¹.
- b. In the case of the right to participate in the general assembly of shareholders and to vote, the Court sentences addressed more circumstances. Thus, in most cases, the complainants invoked the limitation of this right by various means². For example, certain shareholders have not allowed a shareholder to participate in the the general assembly and vote by proxy, citing the fact that in the Articles of

Association is not stipulated such a right. We believe that this represents a violation of shareholders' rights, corporate governance principles recommending the participation and voting in the general assembly of shareholders, including by proxy or by correspondence.

- c. Regarding the right to be informed, the sentences reveal that most situations refer to abuses of governing bodies in relation to: the refusal to convene the general assembly of shareholders, at the request of minority shareholders; the publication on short notice of the convening note of the general assembly of shareholders, so that shareholders do not have access to information regarding the date and place of the meeting. Furthermore, another situation relates to the refusal of the governing bodies to communicate shareholders the annual financial reports, directors' report, financial auditor's report and the proposal for profit distribution³.
- d. regarding the right to be elected, among the causes of non-compliance, we notice invoking the nullity of shareholders general assembly's decision, in which the General Manager is elected directly by it; or the delegation of certain powers to the General Manager is limited by shareholders general assembly, in order to impose the election of another person in that function⁴.

The results of our study show which are the main shareholders' rights not respected by companies' governing bodies and other shareholders, as revealed by the judicial practice. Given the results, we propose as further research direction, to determine the impact of the non-compliance of these rights on companies' financial results.

³ Civil sentence no. 6036/2013 issued in the Court file no. 28473/3/2013 Bucharest Courthouse – VI Civil Division

⁴ Sentence no. 13662, of Bucharest Courthouse on 10.12.2008. Thus, the complainant invoked the fact that de decision regarding the election of the General Manager of the company and the delegation of the managing attributes of the administrative board to the General Manager, according to art. 143 in the Law of the private companies is null as the delegation has to be express and the delegation act has to have a written form. It is the attribute of the administrative board to decide the delegation and the person or persons who benefit from the delegation. This act has to be acknowledged by a decision of the council, taken according to the law.

¹ Civil sentence no. 5316, public meeting on 04.07.2013, court file no. 31406/3/2011

² Commercial sentence no. 8022/13.06.2007 of Bucharest Courthouse, irrevocable by the commercial decision no. 1162/2007 of the Bucharest Court of Appeal, Division V

REFERENCES

1. Bîgioi, A.D. (2012), *Transparența raportării financiare, normele and profesia contabilă – în sprijinul guvernantei corporative*, Teză de doctorat, București, ASE.
2. Bîrsan, C. (2001), *Drept civil. Drepturile reale principale*. București, Editura ALL Beck.
3. Chen, K.C.W., Chen, Z. and Wei, K.C.J. (2009), Legal protection of investors, corporate governance, and the cost of equity capital, *Journal of Corporate Finance*, vol. 15, no. 3, pp. 273-289, DOI: <http://dx.doi.org/10.1016/j.jcorpfin.2009.01.001>.
4. Ciancanelli, P. and Reyes-Gonzalez, J.A. (n.d.), Corporate Governance in Banking: A Conceptual Framework, [online] Available at: SSRN: <http://ssrn.com/abstract=253714> or <http://dx.doi.org/10.2139/ssrn.253714>, [Accessed 5 January 2016].
5. Crane, A. and Matten, D. (2007), *Business Ethics: Managing Corporate Citizenship and Sustainability in the Age of Globalization*, 2nd Edition. New York, Oxford University Press.
6. Feleagă, N., Feleagă, L., Voicu, D.D. and Bîgioi, A.D. (2011), Corporate Governance in Emerging Economies: Evidence from Romania. In *Proceedings of the 7th European Conference on Management Leadership and Governance*, SKEMA Business School, 6-7 October 2011 Sophia-Antipolis, France.
7. Ferrarini, G. and Chiodini, F. (2010), *Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework*, ECGI Working Paper Series in Law No. 158/2010, [online] Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1596890, [Accessed 5 January 2016].
8. Franks, J., Mayer, C. and Rossi, S. (2009), Ownership: Evolution and Regulation, *The Review of Financial Studies*, vol. 22, no. 10, pp. 4009-4056, DOI: <http://dx.doi.org/10.1093/rfs/hhn108>.
9. Gilson, R.J. (2007), Controlling Family Shareholders in Developing Countries: Anchoring Relational Exchange, *Stanford Law Review*, vol. 60, no. 2, pp. 633-656, DOI: <http://dx.doi.org/10.2139/ssrn.957895>.
10. Kim, B., Burns, M.L. and Prescott, J.E. (2009), The Strategic Role of the Board: The Impact of Board Structure on Top Management Team Strategic Action Capability, *Corporate Governance - An International Review*, vol. 17, no. 6, pp. 728-743, DOI: <http://dx.doi.org/10.1111/j.1467-8683.2009.00775.x>.
11. Levine, R. (2003), *The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence*, Discussion Paper No. 3, Global Corporate Governance Forum, Washington DC, [online] Available at: http://siteresources.worldbank.org/INTAFRISUMAFTPS/Resources/Bank_Corporate_Governance_%28background%29.pdf [Accessed 5 January 2016].
12. Macey, J.R. and O'Hara, M. (2003), The Corporate Governance of Banks, *Economic Policy Review*, April 2003, pp. 91-107.
13. Setia-Atmaja, L.Y. (2009), Governance mechanisms and firm value: the impact of ownership concentration and dividends, *Corporate Governance: An International Review*, vol. 17, no. 6, pp. 694-709.
14. IFAC (2013), *Codul etic al profesioniștilor contabili*. București, CAFR.
15. IFAC (2009), *Manual de Standarde Internaționale de Audit și Control de Calitate. Audit Financiar*. București, CAFR.

Jurisprudence

1. Hotărârea nr. 13662, pronunțată de Tribunalul București în data de 10.12.2008
2. Hotărârea nr. 17200/3/2006, pronunțată de Tribunalul București în dosarul nr.929/3/2006
3. Hotărârea nr. 200 din data de 21.01.2015, pronunțată de Tribunalul București, în dosarul nr. 36082/3/2014
4. Hotărârea nr. 3205, pronunțată de Tribunalul București în data de 12.03.2012, în dosarul nr.6593/3/2012

5. Hotărârea nr. 3518 din data de 18.06.2015, Dosar nr. 3608/3/2015, Tribunalul București - Secția a VI-a Civilă
6. Hotărârea nr. 6336 din data de 23.06.2014, dosarul nr. 1453/3/2014/a2 pronunțată de Tribunalul București - Secția a VII-a
7. Hotărârea nr. 7363 din data de 28.09.2015, pronunțată în dosarul nr. 40598/3/2014
8. Sentința civilă nr. 1009 din data de 02.03.2015, pronunțată în dosarul nr.8549/3/2014
9. Sentința civilă nr. 1060 din data de 18.02.2013, dosar nr. 41263/3/2012
10. Sentința civilă nr.5316 ședința publică de la 04 Iulie 2013 Dosar nr. 31406/3/2011
11. Sentința civilă nr.6036/2013 pronunțată în dosarul nr. 28473/3/2013 Tribunalul București – Secția a VI-a civilă
12. Sentința comercială nr. 1327, sedinta publica de la 7.02.2011, dosar nr. 7268/3/2011, Tribunalul București - Sectia a VI-a Comercială
13. Sentința comercială nr. 2 din data de 04.01.2011, pronunțată de către Tribunalul București, în dosarul nr. 49034/3/2009
14. Sentința comercială nr. 2124 ședința publică de la 09.03.2010 Tribunalul București - Secția a VII a Comercială
15. Sentința comercială nr. 2458/24.05.2005 a Tribunalului București - sectia a VI -a Comercială, irevocabilă prin decizia nr. 307/2007 a Înaltei Curti de Casație si Justiție
16. Sentința comercială nr. 4280/18.10.2005 a Tribunalului București Secția a VI -a Comercială irevocabilă prin decizia nr. 449/30.01.2007 a Î. C. C. J
17. Sentința comercială nr. 4971, ședința publică din data de 18.04.2011, Dosar nr. 17485/3/2010
18. Sentința comercială nr. 8022/13.06.2007 a Tribunalului București, irevocabilă prin decizia comercială nr. 1162/2007 a Curtii de Apel București – Secția a -V-a
19. Sentința comercială nr.4690 Ședința din camera de consiliu de la 22.06.2010, Dosar nr. 32525/3/2009
20. Legea societăților comerciale nr. 31/1990
21. <http://portal.just.ro/3/Lists/Jurisprudenta>
22. <http://ssrn.com/en/>

Boardroom diversity and audit fees: director ethnicity, independence and nationality

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Abstract

This paper investigated the effect of boardroom diversity (herein a composite measure of boardroom ethnic composition, independent and foreign directors) on audit fees in the Nigerian context. A sample of companies listed on the Nigerian stock exchange between 2010 and 2011 was used. The study found that 51% of the sampled companies were ethnically diverse, with about 21% and 49% having foreign directors and independent directors respectively. Further, the results of the panel regression revealed that boardroom diversity had a positive relationship with audit fees. The findings indicate that boardroom diversity enhances board monitoring responsibility and therefore results in an increase in demand for auditors' effort. The findings of this study have implications for future policy recommendations and formulation because they indicate that boardroom diversity could be a desirable board characteristic that can strengthen the monitoring role of the board.

Keywords: Diversity, ethnicity, foreign directors, independent directors, Nigeria.

JEL Classification: M42, A14

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Introduction

The board of directors is supposedly a collection of individuals with heterogeneous competencies and capabilities pooled together to perform monitoring and advisory functions in a company (Walt and Ingley, 2003). Accordingly, the issue of what constitutes the correct mix of individuals and how these individuals improve board outcomes is of regulatory concern. The aftermath of each and every corporate governance failure has caused regulators to look inward and to see how boardroom composition and functions could be reformed to provide an effective oversight function (Ararat, Aksu and Cetin, 2015; Gul, Srinidhi and Tsui, 2008). This is critical most especially in countries where external monitoring mechanisms are practically non-existent and investors and regulators look forward to the monitoring role of the board of directors (Dahya, Dimitrov and McConnell, 2008). Most corporate governance regulatory requirements have laid emphasis on boardroom composition and demands for diversity in skills, knowledge and social representativeness of boardroom members.

The theoretical justification behind such requirements is found in both the agency theory and the resources dependency theory. The agency theory underscores the importance of boardroom diversity in ensuring an effective and independent board monitoring function. Meanwhile, the resource dependency theory establishes the significant role played by the board of directors in connecting a firm with the external resources needed for its survival; hence, the need exists for boardroom structures to be a reflection of the society in which it operates (Walt and Ingley, 2003). As it can be deduced from the two theories, boardroom diversity could improve board processes and outcomes. This is because individuals have distinct intellectual and social traits that are best harnessed when correctly pooled together. Diversity can be seen as the pool of differences among board members with respect to individual inherent traits and characteristics (Kearney, Gebert and Voelpel, 2009). Consistent with the agency theory postulation, this current study aims to investigate the relationship between boardroom diversity and the intensity of demand for audit service through the amount paid as audit fees in Nigeria.

As noted in Simunic's (1980) audit production function, audit charges reflect the expected efforts expended

during an audit engagement and auditor risk exposure. While research on audit fees is abundant, further investigation on their relationships with boardroom diversity has, to the best of our knowledge, yet to receive sufficient empirical attention, most especially in the context of Nigeria.

Nigeria is an interesting setting in which to study board diversity in the context of an emerging market because Nigerian society is culturally diverse. Nigeria, society comprises more than 200 ethnic groups divided along three prominent groups, namely, Hausa, Yoruba and Igbos. This composition is differently configured than countries like Malaysia in which similar studies have been conducted. For example, Malaysian law recognizes two groups: Bumiputera and non-Bumiputera. Those who are Bumiputera are known as "sons of the soil", and the Bumiputera ethnic group (Malays) are economically and politically favoured over the non-Bumiputera ethnic group, which comprises the Chinese and Indians. Conversely, the three ethnic groups in Nigeria have equal rights and claims to the political and economic resources of the country, hence no ethnic group is favoured.

Therefore, boardroom heterogeneity with respect to ethnicity to reflect the cultural dynamics in Nigeria society is imperative to promote effectiveness in companies (Adegbite, 2015). As noted one interviewee in Adegbite's study of corporate governance, "boards with sufficient tribal diversity are considered to have better governance systems and will further have a sense of belonging and identity throughout the country" (Adegbite, 2015, p. 16). This observation suggests that the presence of members of the three ethnic groups on a board might contribute positively to corporate performance with respect to a wealth of experiences and networking. It would be interesting as well to see how the presence of these three ethnic groups affects audit quality.

In addition, corporate governance practice as a "distinct concept" is of recent origin in Nigeria (Ofo, 2013) and is still evolving. Several recent regulatory reforms on corporate governance in Nigeria have included:

- the 2003 Code of Corporate Governance in Nigeria (SEC Code);
- the 2006 mandatory Code of Corporate Governance for Nigerian Banks post consolidation (CBN Code);

- the 2007 Code of Conduct for Shareholder Associations in Nigeria; and
- the National Code of Corporate Governance, which is currently being developed.

The Companies and Allied Matters Act, Cap. C20, Laws of the Federation of Nigeria 2004 had elaborate provisions on the appointment, removal, duties, and liabilities of corporate directors but had no provisions for types of directors (Proshare News, 2013). Therefore, boardroom structural diversity is still feeble due to insufficient capacities and the lack of independent directors on boards (Adegbite, 2015).

Moreover, corporate ownership has passed through various regulatory reforms among which are the 1962 Foreign Exchange Control Act, 1972 Indigeneity Policy, and the 1988 Privatization and Commercial Policy (Ahunwan, 2002). All these policies have implications for corporate governance practices. Similarly, findings of previous studies show that the traditional role and overbearing influence of family ownership has impacts on board process (see also Klein, Shapiro and Young, 2004; MacAvoy and Millstein, 2003). Accordingly, agency challenges emerging from the ownership structure in Nigeria compared with other English-speaking countries tend to expropriate minority interests (Adegbite and Nakajima, 2011).

Therefore, investigating how a composite measure of boardroom diversity cushions the effect of the agency problem in Nigeria context is interesting. Using a sample of firms from 2010 to 2011, evidence is provided supporting the theoretical preposition that board diversity enhances the board's monitoring role as it creates room for more independence in the boardroom. Specifically, we show that the extent of boardroom diversity is associated with the demand for more audit effort expressed by audit fees. Similarly, we test individual diversity proxies, and our findings reveal that all the three proxies exhibit a positive relationship, however only with the proportion of foreign directors in the boardroom. Our findings provide insights to regulators and investors on how corporate structure and operating results affect audit pricing. Therefore, the study extends and contributes to the body of knowledge in corporate governance and audit fee literature by using data from a less regulated environment.

The remainder of this paper is organised as follows. Section 1 provides a literature review and the hypothesis

for the study. Data and method of sampling are discussed in Section 2, and the research design/methodology in Section 3. The results and the analysis are discussed in Section 4. Finally, Section 5 includes a summary of our findings, implications and limitations of our findings, and suggestions for future studies.

1. Literature review and hypotheses development

Numerous studies have examined the relationships between board characteristics and board process outcomes such as firm performance (Amran and Ahmad, 2010; Ramdani and Witteloostuijn, 2010), value relevance of earnings (Carter, Simkins, and Simpson, 2003), and earnings quality and the intensity of demand for audit service via audit pricing (Carcello, Hermanson, Neal and Riley, 2002; Ahmad, Houghton and Yusof, 2006; Ahmad and Mansor, 2009). Extant studies on audit pricing starting from the seminal work of Simunic (1980) have pointed out client-related factors such as auditee size, auditee complexity, and auditee riskiness as important variables that influence the amount paid as audit fees in different regulatory and institutional contexts. Examples of such studies include Carcello et al. (2002), Abbott et al. (2003) and Boo and Sharma (2008) in the United States, Vafeas and Waagelein (2007) and Zaman, Hudaib and Haniffa (2011) in the United Kingdom, and Goodwin-Stewart and Kent (2006) and Stewart and Munro (2007) in Australia.

Further, other studies on the intensity of audit demand have established a relationship between board characteristics and audit pricing. The argument has been made that an independent and diligent board will demand a high quality audit service due to the incentive to protect board reputational capital, reduce board litigation risks and safeguard shareholder interests (Fama and Jensen, 1983; Gilson, 1990). The theoretical justification underlying this relationship is in line with Fama and Jensen's (1983) argument that independent directors have the incentive to monitor management due to their reputation; hence, independent directors are effective in disciplining management. Consistent with Fama and Jensen's (1983) theoretical postulation, Armstrong, Core and Guay (2014) reported that firms with a high number of independent directors are more transparent. Goodwin-Stewart and Kent (2006) found

that an audit committee with independent characteristics increase audit effort and audit fees. In their study, Mitra, Hossain and Deis (2007) documented a positive relationship between bulk institutional stock ownership and audit fees, while Carcello et al. (2002) reported that independent directors demand high quality audits as reflected in the amount paid as audit fees by an auditee.

Lately, academic researchers have recognized the influence of resource-rich composed boards of directors in providing critical resources needed by their firms (Hillman, Withers and Collins, 2009). The resource dependency theory acknowledges the interdependency between an organization and its environment (Pfeffer, 1972). In order to succeed, managers act in manners that minimize such dependencies when they constitute a threat or gain from them when they create opportunities.

Hence, the presence of foreigners on the corporate board could be argued as enhancing board competency by virtue of their foreign exposure in terms of skills, knowledge, values, norms, and understanding (Ruigrok, Peck and Tacheva, 2007). Ruigrok, Peck and Tacheva (2007) posited that foreign directors are not connected with closed domestic networks and are independent from management. Their presence on the board signals to investors, most especially minority foreign investors, that the firm is professionally managed and their rights are safeguarded (Oxelheim and Randøy, 2002).

Consequently, the presence of foreigners on the board might necessitate the demand for a high quality audit. As mentioned earlier, foreign directors tend to have different exposure to governance practices and are bound to import their foreign ideas into the way local companies are managed. This makes the board demand for an expanded audit scope grow in order to protect their reputational capital.

Similarly, from another perspective, several studies have investigated the influence of gender and ethnicity of directors on audit outcome. Studies on gender and ethnicity diversity have noted variations in individual traits dictated by gender and ethnic groups of individuals, which can affect decision-making process in the organisation. For instance, by their nature, females have been observed to be more risk averse and more independent-minded compared to their male counterparts. Accordingly, females exhibit a high level of monitoring intensity. Gul, Srinidhi and Tsui (2008) examined the association between female directors (proxy for board diversity) and audit fees, using a

sample of firms in the United States from 2001 to 2003. The authors reported that boards with a higher proportion of female directors in the boardroom demand more in terms of audits; thus, high audit fees are consistent with the agency theory.

Other studies like those of Yatim, Kent and Clarkson (2006) and Juhl, Subramaniam and Zain (2006) of Malaysia have observed board ethnic diversity effects on audit fees and all provided supporting evidence that the ethnic composition of the board impacts audit fees. Watson, Kumar and Michaelsen (1993) argued that culturally diverse group are assets through which group process and solutions to problem are achieved. To strengthen the argument, Baer, Niessen-Ruenzi and Ruenzi (2007), based on the information and decision-making theory, argued that team members are part of a different network and this enhances group knowledge and skills. Implicitly, team members have information from different sources, which helps to improve their performance. However, the social diversity theory maintained that ethnic diversity among team members could generate conflicts due to information asymmetry, lower satisfaction, and low commitment among members. Ahmad, Houghton and Yusof (2006) investigated the extent to which board ethnic associations affect the market for audit services in Malaysia. The authors established a significant relationship between ethnic associations of the board of directors and the choice of auditor.

Apart from the fact that the above studies were conducted in developed countries, empirical findings from these studies have been inconsistent (Felix, Gramling and Maletta, 2001; Godwin-Stewart and Kent, 2006; Vafeas and Waegelien, 2007). Although quite a number of studies examined board structure diversity (independent directors) and demographic diversity (director's ethnicity, nationality and gender diversity), these studies only used a single proxy and the findings of the studies mostly cannot be generalized or extended to other contexts. In addition, investigations of performance outcomes of single demographic and structural diversity attributes, respectively, are equivocal (Ararat, Aksu and Cetin, 2015).

Therefore, the current paper extends this area of research by developing a composite index of board diversity measure using Blau's (1977) measure of variety and investigating its effects on the intensity of audit demand in Nigeria. Board diversity is

operationalized by combining different diversity indicators compared to the single constructs used in prior studies. We argue that much insight into the studied phenomenon could be gained by integrating these different diversity indicators. In furtherance of the above conjectures, this study posits that:

H: Boardroom diversity (herein operationalised by combining difference diversity indicators) will lead to a higher demand for audit effort and a corresponding increase in audit fees.

2. Data and method of sampling

The sample includes all public listed firms on the Nigerian Stock Exchange with annual reports available online. Poor record keeping and the absence of data banks have bedevilled accounting research in Nigeria. Most often older copies of annual reports were burnt to create space for new

ones. Records were found for of 213 and 218 listed companies in 2010 and 2011 respectively, but after excluding all financial institutions, the researchers were left with 123 annual report observations for firms. This included 65 annual reports for 2010 and 58 annual reports for 2011. The sampling process is shown in **Table 1**. The mandatory changes in reporting and auditing requirements at the end of 2010 informed the choice of the study period. First, the new corporate governance code issued by the Nigeria Security and Exchange Commission in 2011 was supposed to be voluntarily adopted by all listed companies by April 2011. In addition, the federal reporting council vested with the responsibility of ensuring transparency and appropriate disclosure practices, was established in 2011 too. Second, all listed companies were to adopt the International Financial Reporting Standards by the end of 2012 and 2011 precedes the year of adoption.

Table 1. Sample collection procedure

Year	Total listed companies	Banks and other financial institutions	Not available online and NSE	Final sample
2010	213	81	67	65
2011	218	71	89	58
Sum	431	152	156	123

Source: Authors' compilation, 2016

3. Research design and variable measurements

Based on the theoretical framework and the hypothesis that was developed, the conceptual model of auditing pricing introduced by Simunic (1980) as extended by

Chan, Ezzamel and Gwilliam (1993) and Boo and Sharma (2008) was adopted in this study. A panel data regression model was used to examine the relationship between boardroom diversity and audit fees along with firm specific variables to control for company size, complexity and audit risk.

$$\begin{aligned}
 FEE = & \alpha_{it} + \beta_1 TBD_{it} + \beta_2 FOR_{it} + \beta_3 ETHNIC_{it} + \beta_4 INDP_{it} \\
 & + \beta_5 BLKSHR_{it} + \beta_6 MGROWN_{it} + \beta_7 RISKCOM_{it} + \beta_8 CORPCOM_{it} + \beta_9 LOGTO_{it} \\
 & + \beta_{10} RITA_{it} + \beta_{11} GEARING_{it} + \beta_{12} BIG4_{it} + \beta_{13} NOSUB_{it} + \epsilon_{it} + \mu_{it}
 \end{aligned}$$

Table 2. Variable description

Variable	Description
FEE	Natural logarithms of audit fees.
TBD	Composite measure of board dynamics.
FOR	The number of foreign directors in boardroom divided by board size.
ETHNIC	A dummy variable set to 1 for companies whose board is made up of the three ethnic groups and 0 if otherwise.
INDP	Percentage of independent directors on the board.
BLKSHR	The percentage of shares held by individual investors above 5 percent.
MGROWN	Percentage of shares held by directors
RISKCOM	A dummy variable set to 1 for companies that establish risk management committee.
CORPCOM	A dummy variable set to 1 for companies that establish corporate governance committee.
LOGTO	Natural logarithms of total assets.
RITA	Ratio of inventory to total assets.
GEARING	Long term debt divided by total assets
BIG4	A dummy variable set to 1 for companies audited by any of the Big4 audit firm and 0 if otherwise.
NOSUB	Number of subsidiaries plus one.
μ_{it}	Error term.

Source: Authors' compilation, 2016

4. Results of the analysis

4.1. Preliminary analysis

Table 3 shows the descriptive statistics for the full sample of 123 observations for the firms that were employed to run the audit fees model. The table presents the mean, minimum, maximum, and standard deviation values. As shown in Table 3, the audit fees for the sampled companies ranged between 400,000 Naira and 135,000,000 Naira (foreign exchange rate is 165 Naira for 1 dollar), and foreign-owned companies represented by FOR

had a mean value of 0.21%, the mean value for boardroom ETHNIC representation was 0.51% and INDP mean value was 0.49%. The value for individual concentrated ownership (BLKSHR) ranged between 0.05% and 0.99% and the maximum value of managerial ownership (MGROWN) was 3.79%. The results also showed that RISKCOM and CORPCOM had mean values of 36% and 28% respectively, indicating that less than half of the sampled companies had established a risk management committee and a corporate governance committee. The mean number of foreign directors on the board was 21%.

Table 3. Descriptive Statistics of Dependent and Control Variables

Variable	Observations	Mean	Standard deviation	Minim	Maxim
FEE	123	14,600,000	20,400,000	400,000	135,000,000
TBD	123	0.47	0.31	0.0	1.18
FOR	123	0.21	0.24	0	0.89
ETHNIC	123	0.51	0.50	0	1
INDP	123	0.49	0.28	0	1
BLKSHR	123	0.56	0.21	0.05	0.99
MGROWN	123	0.14	0.38	0	3.79
RISKCOM	123	0.36	0.48	0	1
CORPCOM	123	0.28	0.45	0	1
LOGTO	123	9.73	0.81	7.51	11.38
RITA	123	0.89	4.88	0	54.14
GEARING	123	10.76	18.52	0	122.37
BIG4	123	0.62	0.49	0	1
NOSUB	123	2.93	2.92	0	14

Source: Authors' compilation, 2016

4.2. Tests for random and fixed effects regression

The choice between random and fixed effects was based on the Hausman test (Green, 1997). In order to choose the appropriate model, the Hausman test was run because the Hausman test checks whether the errors (U_i) are correlated with the regressors. If $\text{pro} > \chi^2_{2} < 0.05$ (i.e., significant) the fixed effect model is used (Greene, 1997). The Hausman test shows a probability greater than 0.05, so the null hypothesis was rejected; hence, the random effects model is appropriate for the study. By implication, the individual error component is not correlated with the regression variables, thus OLS estimator is consistent.

4.3. Results of model

Table 4 presents the generalist square random regression results. A good linear fit was achieved with an adjusted R^2 of 64%. This suggests that the model explains more than of the 60% variation between the dependent variable and

the independent variable. The regression coefficient for the composite measure of board dynamics (TBD) in model 1 was positive and significant in predicting the amount paid as audit fees by Nigerian publicly listed companies. The finding is consistent with the agency theory, which states that an effective board will be more thorough in their monitoring role and therefore will make more demands in an audit engagement. Next, the regression coefficient for nationality of members of the board of director (FOR) in model 2 was positive and significant indicating that in order to be more transparent, foreign directors will pay more for audit services to ensure the credibility of financial statements and protect the reputations of the directors (Ahmad, Houghton and Yusof, 2006). In model three, the coefficient of boardroom ethnic balance (ETHNIC), which indicates the presence of the three prominent ethnic groups in Nigeria in the boardroom, the coefficient was positive although not significant. Lastly, in model 4, the coefficient for the percentage of independent directors (INDP) was positive but not significant.

	MODEL 1	MODEL 2	MODEL 3	MODEL 4	VIF
TBD	0.049 (2.84***)		0.033	0.021	7.47
FOR		0.524 (4.15***)			2.26
ETHNIC			0.033 (1.35)		6.28
INDP				0.021 (0.47)	
BLKSHR	0.074 (2.61***)	0.053 (1.530)	0.069 (2.44***)	0.074 (2.53***)	1.23
MGROWN	-0.081 (-3.61***)	-0.113 (-5.53***)	-0.076 (-3.4***)	-0.075 (-3.34***)	1.29
RISKCOM	-0.095 (-8.33***)	-0.088 (-5.78***)	-0.089 (-6.9***)	-0.099 (-8.08***)	1.47
CORPCOM	0.088 (6.29***)	0.099 (6.41***)	0.082 (6.01***)	0.086 (6.25***)	1.35
LOGTO	0.417 (37.81***)	0.399 (26.08***)	0.415 (40.11***)	0.418 (39.42***)	1.68
NOSUB	0.020 (6.16***)	0.026 (7.58***)	0.019 (5.58***)	0.021 (5.95***)	1.39
RITA	-0.098 (-7.72***)	-0.135 (-5.91***)	-0.087 (-7.2***)	-0.085 (-0.085***)	1.19
GEARING	-0.001 (-4.08***)	-0.001 (-1.52)	-0.001 (-4.13***)	-0.001 (-3.04***)	1.09
BIG4	0.277 (19.9***)	0.270 (14.02***)	0.284 (22.33***)	0.282 (20***)	1.18
_cons	2.629 (27.65***)	2.808 (20.82***)	2.653 (29.27***)	2.629 (27.18***)	
F	0.000	0.000	0.000	0.000	
Mean Vif					2.32
Adjusted Rs	64	60	60	60	

Notes: * = significant at 10%, ** = significant at 5% and *** = significant at 1%

Source: Authors' compilation, 2016

Across the three models the coefficient of individual block shareholders (BLKSHR) was positive and significant, although in model 2 the coefficient was not significant. The coefficient of managerial ownership was significant and negative across the three models. With respect to board risk committee (RISKCOM), the coefficient was negative and significant in the three models, and, for the corporate governance committee (CORPCOM), the coefficient was positive and significant in all the three models. In addition, and consistent with prior literature, firm-specific control variables such as client size proxy by log of turnover (LOGTO), client complexity proxy by number of subsidiaries (SUB) and the ratio of inventory to total assets (RITA) and client risk proxy by long term debt to total assets (GEARING) were all significant and in line with the findings of prior studies. Likewise, the coefficient of the proxy for Big4 auditors for auditor characteristics (BIG4) was positive and significant in all the three models.

Conclusion

Factors determining auditors' fees have been of great interest owing to the likely threat of high fees to auditors' independence. Similarly, boardroom diversity is widely being touted with the claim that it improves the oversight function of the board of directors. To examine such issues in the context of Nigeria, this study looked at the effect of boardroom diversity on audit demand expressed by audit fees. Overall, the paper contributes to the investigation on the diversity-audit demand relationship by showing that multiple diversity attributes have a compound effect on the extent of audit demand. The results found that the total board diversity (TBD) index developed in this study impacted the demand of the board of directors for audit services more significantly than the individual diversity attributes as TBD enhanced audit demand. This finding is consistent with theoretical justification that boardroom diversity improves the monitoring function of the board of directors because the board will likely comprise individuals with independent minds (Walt and Ingley, 2003). According to Carcello et al. (2002) and Knechel and Willekens (2006), independent and diligent board of directors will demand high-quality audit services to safeguard their reputations and avoid litigation risks arising from non-performance.

The current study's finding reflecting the Nigeria context may provide more relevant and interesting conclusions for emerging markets that exhibit similar corporate governance features most especially in countries with type two agency problems and with weak implementation and enforcement mechanisms. Based on this study, regulators could consider improving boardroom diversity, most especially with respect to the individual diversity features examined, would be an excellent measure to improve the effectiveness of boards of directors in Nigeria.

Like any other empirical study of this nature, this research is imperfect and has limitations requiring that the findings be interpreted within the purview of the highlighted limitations. The first limitation arises from the limited generalizability of the study. This is due to the small sample size and single country context that was necessitated due to the hand collection of data, the availability of data at the time of data collection and the need to control for institution differences in the sample. In addition, the present study excludes banks and other financial institutions due to their reporting structures. To this extent, the results of the sample may suffer from sample bias. Although the sample is a replica of many other emerging markets, future studies could use longitudinal data and adapt the model used in this current study to provide more robust findings.

Second, contextual variables capturing corporate governance practices in Nigeria that are distinct from what are obtainable anywhere else should be introduced in future studies on audit pricing in Nigeria. Probably, such variables could serve to explain the variations in audit fees better within the Nigerian context. Such variables could emanate from ownership structure types in the country or the dominance of one ethnic group in the board structure, if possible, in line with the risk averseness and business shrewdness of each ethnic group. Similarly, future studies could capture the overall effects of regulatory changes in the Nigerian financial reporting architecture and investigate how these affect the audit market as a whole.

Third, non-audit fees are lumped together with audit fees in the annual reports and consequently the study used auditor's remuneration. However, the study does not expect non-separate disclosure of these fees to affect the findings of the study because it is less relevant in Nigeria.

Lastly, consistent with resource dependency theory, future studies within this regulatory setting could examine the impact of networking of politically

connected firms and board negotiation skills on audit pricing.

REFERENCES

1. Abbott, L.J., Parker, S., Peters, G.F. and Raghunandan, K. (2003), The association between audit committee characteristics and audit fees, *Auditing: A Journal of Practice & Theory*, vol. 22, no. 2, pp.17-32, DOI: <http://dx.doi.org/10.2308/aud.2003.22.2.17>.
2. Adegbite, E. (2015), Good corporate governance in Nigeria: Antecedents, propositions and peculiarities, *International Business Review*, vol. 24, no. 2, pp. 319-330, DOI: <http://dx.doi.org/10.1016/j.ibusrev.2014.08.004>.
3. Adegbite, E. and Nakajima, C. (2011), Corporate governance and responsibility in Nigeria. *International Journal of Disclosure and Governance*, vol. 8, no. 3, pp. 252-271, DOI: <http://dx.doi.org/10.1057/jdg.2011.2>.
4. Ahmad, A.C. and Mansor, N. (2009), Board independence, ownership structure, audit quality and income smoothing activities: A study on Malaysian market, *Journal of Modern Accounting and Auditing*, vol. 5, no. 11, pp. 1-13.
5. Ahmad, A.C., Houghton, K.A. and Yusof, N.Z.M. (2006), The Malaysian market for audit services: Ethnicity, multinational companies and auditor choice, *Managerial Auditing Journal*, vol. 21, no. 7, pp. 702-723, DOI: <http://dx.doi.org/10.1108/02686900610680503>.
6. Ahunwan, B. (2002), Corporate governance in Nigeria, *Journal of Business Ethics*, vol. 37, no. 3, pp. 269-287, Stable URL: <http://www.jstor.org/stable/25074754>.
7. Amran, N.A. and Ahmad, A.C. (2010), Corporate governance mechanisms and performance: Analysis of Malaysian family and non-family controlled companies, *Journal of Modern Accounting and Auditing*, vol. 6, no. 2, pp. 2-15.
8. Ararat, M., Aksu, M. and Tansel Cetin, A. (2015), How board diversity affects firm performance in emerging markets: Evidence on channels in controlled firms, *Corporate Governance: An International Review*, vol. 23, no. 2, pp. 83-103, DOI: <http://dx.doi.org/10.1111/corg.12103>.
9. Armstrong, C. S., Core, J. E. and Guay, W. R. (2014), Do independent directors cause improvements in firm transparency?, *Journal of Financial Economics*, vol. 113, no. 3, pp. 383-403, DOI: <http://dx.doi.org/10.1016/j.jfineco.2014.05.009>.
10. Baer, M., Niessen-Ruenzi, A. and Ruenzi, S. (2007), The impact of work group diversity on performance: Large sample evidence from the mutual fund industry, CFR Working Paper No. 07-16, University of Cologne. [pdf] Available at: <http://hdl.handle.net/10419/57751> [Accessed March 9, 2016]
11. Blau, P.M. (1977), *Inequality and heterogeneity: A primitive theory of social structure*, vol. 7, New York: Free Press.
12. Boo, E.F. and Sharma, D. (2008), Effect of regulatory oversight on the association between internal governance characteristics and audit fees, *Accounting and Finance*, vol. 48, no. 1, pp. 51-71, DOI: <http://dx.doi.org/10.1111/j.1467-629X.2007.00229.x>.
13. Carcello, J.V., Hermanson, D.R., Neal, T.L. and Riley Jr., R.A. (2002), Board characteristics and audit fees, *Contemporary Accounting Research*, vol. 19, no. 3, pp. 365-384, DOI: <http://dx.doi.org/10.1506/CHWK-GMQ0-MLKE-K03V>.
14. Carter, D.A., Simkins, B.J. and Simpson, W.G. (2003), Corporate governance, board diversity, and firm value, *Financial Review*, vol. 38, no. 1, pp. 33-53, DOI: <http://dx.doi.org/10.2139/ssrn.304499>.
15. Chan, P., Ezzamel, M. and Gwilliam, D. (1993), Determinants of audit fees for quoted UK companies, *Journal of Business Finance and Accounting*, vol. 20, no. 6, pp. 765-786, DOI: <http://dx.doi.org/10.1111/j.1468-5957.1993.tb00292.x>.

16. Dahya, J., Dimitrov, O. and McConnell, J.J. (2008), Dominant shareholders, corporate boards, and corporate value: A cross-country analysis, *Journal of Financial Economics*, vol. 87, no. 1, pp. 73-100, DOI: <http://dx.doi.org/10.1016/j.jfineco.2006.10.005>.
17. Fama, E.F. and Jensen, M.C. (1983), Separation of ownership and control, *The Journal of Law and Economics*, vol. 26, no. 2, pp. 301-325, Stable URL: <http://www.jstor.org/stable/725104>.
18. Felix, W., Gramling, A. and Maletta, M. (2001), Determinants of external audit fees: The importance of a client's internal audit department, *Journal of Accounting Research*, vol. 39, no. 3, pp. 513-534.
19. Gilson, S.C. (1990), Bankruptcy, boards, banks, and blockholders: Evidence on changes in corporate ownership and control when firms default, *Journal of Financial Economics*, vol. 27, no. 2, pp. 355-387, DOI: [http://dx.doi.org/10.1016/0304-405X\(90\)90060-D](http://dx.doi.org/10.1016/0304-405X(90)90060-D).
20. Goodwin-Stewart, J. and Kent, P. (2006), Relation between external audit fees, audit committee characteristics and internal audit, *Accounting and Finance*, vol. 46, no. 3, pp. 387-404, DOI: <http://dx.doi.org/10.1111/j.1467-629X.2006.00174.x>.
21. Greene, W.H. (1997), *Econometric analysis*, Upper Saddle River, New Jersey: Prentice Hall.
22. Gul, F.A., Srinidhi, B. and Tsui, J.S. 2008. Board diversity and the demand for higher audit effort, [pdf], Available at SSRN 1359450, DOI: <http://dx.doi.org/10.2139/ssrn.1359450>.
23. Hillman, A.J., Withers, M.C. and Collins, B.J. (2009), Resource dependence theory: A review, *Journal of Management*, vol. 35, no. 6, pp. 1404-1427, DOI: <http://dx.doi.org/10.1177/0149206309343469>.
24. Johl, S., Subramaniam, N. and Zain, M.M. (2012), Audit committee and CEO ethnicity and audit fees: some Malaysian evidence, *The International Journal of Accounting*, vol. 47, no. 3, 302-332, doi: <http://dx.doi.org/10.1016/j.intacc.2012.07.002>.
25. Kearney, E., Gebert, D. and Voelpel, S.C. (2009), When and how diversity benefits teams: The importance of team members' need for cognition, *Academy of Management Journal*, vol. 52, no. 3, pp. 581-598, DOI: <http://dx.doi.org/10.5465/AMJ.2009.41331431>.
26. Klein, P., Shapiro, D. and Young, J. (2004), Board independence and the family-owned firm, *Canadian Investment Review*, vol. 17, no. 3, pp. 8-16.
27. Knechel, W.R. and Willekens, M. (2006), The role of risk management and governance in determining audit demand, *Journal of Business Finance and Accounting*, vol. 33, no. 9-10, pp. 1344-1367, DOI: <http://dx.doi.org/10.1111/j.1468-5957.2006.01238.x>.
28. Mitra, S., Hossain, M. and Deis, D.R. (2007), The empirical relationship between ownership characteristics and audit fees, *Review of Quantitative Finance and Accounting*, vol. 28, no. 3, pp. 257-85, DOI: <http://dx.doi.org/10.1007/s11156-006-0014-7>.
29. MacAvoy, P.W. and Millstein, I. (2003), The Emergence and the Development of the Governance Problem. In *The Recurrent Crisis in Corporate Governance*. Stanford, CA: Stanford University Press.
30. Ofo, N. (2013), Criteria for determining the independent status of independent directors in Nigeria: A critical evaluation, *International Company and Commercial Law Review*, pp. 382-393. [pdf]. Available at SSRN: <http://ssrn.com/abstract=2045545> [Accessed on March 9, 2016].
31. Oxelheim, L. and Randøy, T. (2003), The impact of foreign board membership on firm value, *Journal of Banking and Finance*, vol. 27, no. 12, pp. 2369-2392, DOI: [http://dx.doi.org/10.1016/S0378-4266\(02\)00395-3](http://dx.doi.org/10.1016/S0378-4266(02)00395-3).
32. Pfeffer, J. (1972), Size and composition of corporate boards of directors: The organization and its environment, *Administrative Science Quarterly*, vol. 17, no. 2, pp. 218-228, Stable URL: <http://www.jstor.org/stable/2393956>.
33. Proshare News (2013), Flow of Foreign Portfolio Investments on the Nigerian Stock Market [online], Available at: <http://www.proshareng.com/news/19093> [Accessed on March 9, 2016].
34. Ramdani, D. and Witteloostuijn, A. V. (2010), The impact of board independence and CEO duality on

- firm performance: A quantile regression analysis for Indonesia, Malaysia, South Korea and Thailand, *British Journal of Management*, vol. 21, no. 3, pp. 607-627, DOI: <http://dx.doi.org/10.1111/j.1467-8551.2010.00708.x>.
35. Ruigrok, W., Peck, S. and Tacheva, S. (2007), Nationality and gender diversity on Swiss corporate boards, *Corporate Governance: An International Review*, vol. 15, no. 4, pp. 546-557, DOI: <http://dx.doi.org/10.1111/j.1467-8683.2007.00587.x>.
 36. Simunic, D.A. (1980), The pricing of audit services: Theory and evidence, *Journal of Accounting Research*, vol. 18, no. 1, pp. 161-190, Stable URL: <http://www.jstor.org/stable/2490397>.
 37. Stewart, J. and Munro, L. (2007), The impact of audit committee existence and audit committee meeting frequency on the external audit: Perceptions of Australian auditors, *International Journal of Auditing*, vol. 11, no. 1, pp. 51-69, DOI: <http://dx.doi.org/10.1111/j.1099-1123.2007.00356.x>.
 38. Vafeas, N. and Waagelein, J. (2007), The association between audit committees, compensation incentives, and corporate audit fees, *Review of Quantitative Finance and Accounting*, vol. 28, no. 3, pp. 241-255, DOI: <http://dx.doi.org/10.1007/s11156-006-0012-9>.
 39. Walt, N. and Ingle, C. (2003), Board dynamics and the influence of professional background, gender and ethnic diversity of directors, *Corporate Governance: An International Review*, vol. 11, no. 3, pp. 218-234, DOI: <http://dx.doi.org/10.1111/1467-8683.00320>.
 40. Watson, W.E., Kumar, K. and Michaelsen, L.K. (1993), Cultural diversity's impact on interaction process and performance: Comparing homogeneous and diverse task groups, *Academy of Management Journal*, vol. 36, no. 3, pp. 590-602, doi: <http://dx.doi.org/10.2307/256593>.
 41. Yatim, P., Kent, P. and Clarkson, P. (2006), Governance structures, ethnicity, and audit fees of Malaysian listed firms, *Managerial Auditing Journal*, vol. 21, no. 7, pp. 757-782, doi: <http://dx.doi.org/10.1108/02686900610680530>.
 42. Zaman, M., Hudaib, M. and Haniffa, R. (2011), Corporate governance quality, audit fees and non-audit services fees, *Journal of Business Finance and Accounting*, vol. 38, no. 1-2, pp. 165-197, doi: <http://dx.doi.org/10.1111/j.1468-5957.2010.02224.x>.

Corporate responsibility reporting according to Global Reporting Initiative: an international comparison

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Abstract

The Global Reporting Initiative (GRI) is an organization that has managed to impose its reporting practices on corporate responsibility among large transnational companies. The model proposed by GRI is based on the supposed convergence between the economic, social and environmental dimensions of sustainable development. This convergence can be presumed at macroeconomic level, but at the level of enterprises, the three dimensions are often divergent. By analyzing the structure of reports included in the GRI database, our article aims to identify the factors that impact on company's behavior in the corporate responsibility reporting process. In addition, our research invites to answer the following question: is it not possible that these reports attempt to exaggerate company environmental and social performance, rather than to cause a change in their conduct?

Keywords: GRI, OECD, corporate reporting, corporate social responsibility, empirical study

JEL Classification: M14, M48

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1. Introduction

Over the past 35 years, there has been a significant increase in the number of standards concerning corporate social responsibility, coupled with a similar increase in their popularity. Thus, Ligteringen and Zadek (2005) notice that there are approximately 300 standards relative to corporate responsibility at global level and that all these standards and codes can be divided into three categories:

1. Normative frameworks which instruct companies what to do;
2. Guides which instruct companies how to evaluate and communicate information about their actions; and
3. Management systems which help companies integrate their activities.

Amidst this multitude of standards, Global Report Initiative (GRI) offers a guide through which environmental problems should be better connected to the other aspects that are fundamental in promoting the development of a sustainable society (Marimo, Alonzo-Almeida and Rodriguez, 2012). A significant number of researchers and institutions consider that GRI is the most frequently used standard at world level in corporate non-financial reporting (Skouloudis, Evangelinos and Kourmousis, 2009; Prado-Lorenzo, Gallego-Alvarez and Garcia-Sanchez, 2009).

Over the past years, it has been noticed that increasingly more companies have got involved voluntarily in the process of issuing and implementing corporate social responsibility standards, and especially environmental standards. Certain authors (Chersan, 2015) show that, as a result of their rising responsibility towards the society, companies have started publishing information on the impact of their activity on the environment, information on their own employees and aspects that are connected to corporate social responsibility, in separate reports that accompany financial statements made available to shareholders.

The so-called voluntary compliance implies going beyond legal obligations. Schwindenhammer (2013) studied company voluntary norm adoption and identified two types of behaviors:

- companies that contribute to the process of establishing and developing norms and consequently, they are considered *norm-entrepreneurs*, and

- companies that accept and implement certain norms and are considered *norm-consumers*. Norm-consumers can be grouped in two categories: those that accept norms and those that implement them.

Norm acceptance occurs after the institutionalisation of norms and it implies the fact that companies publicly admit that the norms have been adopted. Unlike norm acceptance, norm implementation always supposes an individual effort of the company that has to adjust its practices, especially in the field of corporate reporting.

Taking into account the degree of norm acceptance and implementation, Schwindenhammer (2013) identified three categories of entities:

- those that accept and implement international norms comprehensively (*all-embracing norm-consumer*);
- those that admit that their activity occurs under the incidence of these norms, but implement them incompletely and inconsequently (*incomplete norm-consumer*), and
- those that reject the acceptance and implementation of the norms (*non-consumer*).

The current company behaviour relative to the acceptance of the GRI corporate reporting model can be explained as follows, in a nutshell:

“If you want to be a ‘global player’ that is now socially accepted, you must at least subscribe to a few international norms concerning human rights and environmental protection, and issue reports that would highlight the efforts to implement these norms via changes in management and production rules” (Risse, 2007, p. 135).

We are going to make two types of analysis in the article:

1. An analysis of the origin of the companies which publish sustainability reports according to GRI, from the geographical point of view and from the belonging to the OECD;
2. An analysis of the entities which include reports in the GRI database from the point of view of the activity sector, of the size of the companies and of the GRI guideline applied.

This paper is structured as it follows: in the next section we presented a revision of the literature regarding the GRI reporting. A presentation of the research methodology and of the result of the study follow. The

paper ends with the discussions and conclusions of the research.

2. Literature review on reporting according to GRI

GRI has been launched in 1999 and since then a generally accepted framework on sustainability reports content, format and style has been developed (Brown, de Jong și Lessidrenska, 2009), which has extended companies' responsibility beyond their traditional role to publish financial information. After the third generation of GRI guides – G3 was published in 2006, 2013 saw the emergence of a fourth generation of GRI guides – G4, as a result of an extended and structured process of public consultation. Let us mention here that GRI does not monitor compliance with norms, nor does it sanction incompliance; it only requires companies to declare their level of applying the general GRI framework, thus differentiating between categories of firms that report according to these standards. Actually, the GRI guide suggests the ways in which a company can show what it does and, although it does not require organisational changes or external company performance appraisal, GRI carries out evaluations that analyze a company's adjustment to the issued guides. In order to increase the credibility of the issued reports, the latter are often checked by auditing firms such as Deloitte, PriceWaterhouseCoopers, KPMG or Ernst & Young. Over the last years, there has been a significant increase in the number of companies that apply G3 in their reporting process; this is the case especially with transnational companies from OECD (Schwindenhammer, 2013). Also, with the emergence of G4, we have identified an increase in reporting according to this latest guide, paralleled by the decrease in the number of companies that report according to G3. Actually, the very purpose of developing such guides is to offer better reporting solutions; therefore, the observed phenomenon is logical and it also occurred in the transit stage from G3 to G3.1.

In the same line of thought, Marimon, Alonzo-Almeida and Rodriguez (2012) argue that the objective of the GRI guide is to create reports that would complement, rather than replace, other company reports. GRI reports contain information related to a company's economic, environmental and social issues. This approach, known as Triple Bottom Line (Elkington, 1994), also

incorporates the so-called "3 p's" (*people, planet and profit*) and it offers a general framework that allows the evaluation and reporting of an entity's results based on economic, social and environmental parameters.

Writing about the reporting model proposed by GRI, Prado-Lorenzo, Gallego-Alvarez and Garcia-Sanchez (2009) state that it is a harmonized, standardized, easy to understand and objective report for companies worldwide. Also, Clarkson, Overell and Chapple (2011) state that recent studies indicate a significant relation between information published voluntarily (mentioned in the GRI guide) and environmental performance.

In 2011, the European Commission, upon revising the previous definition of corporate social responsibility, stated that it represents "the responsibility of enterprises for their impact on society" (European Commission, 2011, p.6). Thus, the new definition approaches companies in their discovered capacity as partners that can establish rules, namely as entities that have the technical expertise or important financial resources available that can be used to solve environmental issues.

Ligteringen and Zadek (2005) recommend companies the following actions that would lead to convergence around a set of standards, instruments and guides:

- adopting standards which will constitute the most probable general global framework concerning sustainability;
- promoting these standards, instruments and guides, investing in their development and adoption by others;
- supporting actions that allow companies to integrate the use of key standards, instruments and guides, so as to increase efficiency and create value;
- participating actively in standard development.

At the same time, one can state that the adoption of corporate social responsibility practices takes different paths in different countries of the world due to cultural, legal, political, economic and social differences. Thus, Konrad et al. (2006) argue that firms in developed countries wish to boost their reputation; hence, they highlight gender and minority issues from their internal activity, and they point out social activities as external activities. Developing countries wish to achieve visibility for international investors and, consequently, they focus on compliance with international requirements

concerning products and social issues. In addition, in developed countries, governments are the main promoters of corporate social responsibility practices, while in developing countries, governments are reluctant to legislation concerning the environment, labor conditions or curbing corruption. A similar opinion is shared by Jamali (2007), who noticed that corporate social responsibility does not raise particular interest in developing countries because the civil society in these countries is not sufficiently organized and governments do not promote corporate social responsibility practices.

On the other hand, Lähtinen and Myllyviita (2015) show in their study that topics such as “impact on landscape”, “length of impact”, “spiritual values”, “persistence of traditions” and “adaptability to cultural changes” are not at all approached in GRI guides.

Certain studies (Konrad et al., 2006; Waddock, 2008; Perez-Batres, Miller and Pisan, 2010) suggest that the desire to gain the market’s trust, to attract or maintain investors, respectively to improve a country’s image, is relevant in the process of adopting GRI standards. Other authors (Khanna, 2001; Porter and Kramer, 2006) consider that adopting corporate social responsibility standards can be used to identify competitive advantages.

3. Research methodology

In order to estimate the degree of compliance with GRI in corporate reporting at international level, we started from the GRI database, the limited version (available at https://www.globalreporting.org/services/Analysis/Reports_List/Pages/default.aspx), which comprises GRI reports published over the last three years (2013, 2014, 2015) and we analyzed the structure of these reports according to the following classification criteria: geographic distribution, sector of activity, category of enterprise and its relation to OECD. Within each category we then identified the degree of compliance with the various variants of GRI guides. Also, in order to study the evolution of tendencies to report according to GRI across a longer period of time, we included in the analysis the study performed in 2012 by Marimon, Alonso-Almeida și Rodriguez which also started from the GRI database, and which covers the period 1999-2010.

The database that we used in our study comprises the following categories of information: data about the reporting organization (its name, size, sector, country,

region) and data about reports (year of publication and type of report). For the year 2013, it also supplies information concerning the status of countries relative to the OECD. The number of entries in the database is significant: 4,828 firms for the year 2013, 5,211 firms for the year 2014 and 2,913 firms for the year 2015. The low number of entries for the year 2015 can be explained by the fact that we collected the information at the beginning of 2016 and the registration of reports on the previous year in the database is underway. Our study tackled only GRI certified reports (which comply with GRI, even though to different extents); hence, in comparison with the number of entries in the initial database, our study included 3,238 firms for the year 2013, 3,981 firms for the year 2014 and 2,405 firms for the year 2015. The analysis has been intuitive, based on direct observation and the comparative analysis of the database content, which allowed us to describe and explain the identified trends. For data processing, we started from the previously mentioned database, which is in an Excel format, and we used the facilities provided by Microsoft Office – Excel Pivot Tables. A limit of our study consists in the short period of time that we analyzed directly due to the lack of availability of data for previous time intervals.

4. Reporting according to GRI along geographical areas and depending on the status of countries in relation to the OECD

The highest number of GRI certified reports was registered in 2014: 3,981 companies published sustainability reports according to GRI, at world level, while in 1999 there had been just 6 companies. Developments for each region are presented in Table 1. Europe and Asia have the highest number of GRI certified reports. There are a few explanations for this state of facts: the European Commission declared 2005 the year of corporate social responsibility for European Union countries; Great Britain was the first country which appointed a minister to supervise sustainability policies; in France, there is the legal obligation that firms with more than 300 employees should draw social responsibility reports (Marimon, Alonso-Almeida and Rodriguez, 2012). At the same time, Finland, Sweden and Spain started accepting and imposing corporate

social responsibility rules at national level (Levy, Brown and de Jong, 2010). With reference to Asia, Welford showed in 2005 that although this area had registered a high rate of increase in the past years, however, its contribution to social responsibility was still minor. This

lack of activity was accounted for by the legislation which establishes, imperatively, the number of working hours, the maximum number of extra hours and the structure of salary expenses. Also, the author referred to the fact that long hours are a habitual practice in Asia.

Table 1. Geographic distribution of reporting according to GRI at world level

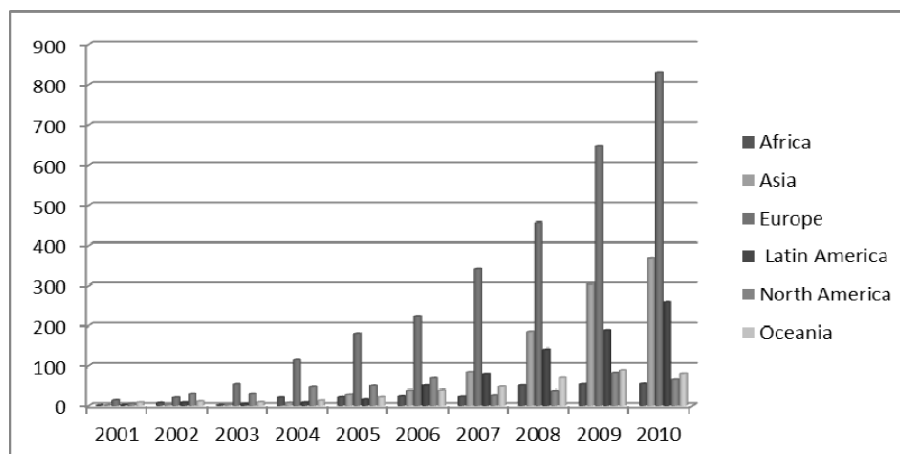
Year	Africa	Asia	Europe	Latin America	North America	Oceania	Total
1999	0	1	0	0	5	0	6
2000	3	7	1	1	2	1	15
2001	1	1	15	2	6	9	34
2002	8	3	22	9	31	12	85
2003	2	3	54	5	31	10	105
2004	22	8	115	9	47	14	215
2005	23	29	180	17	50	23	322
2006	25	39	223	51	70	40	448
2007	24	85	342	80	27	48	606
2008	51	185	457	141	38	71	943
2009	54	304	647	189	83	90	1367
2010	55	367	829	258	66	81	1656
2013	167	1119	1344	613	439	122	3804
2014	167	1183	1443	619	453	116	3981
2015	47	702	940	418	274	24	2405

Source: Marimon, Alonso-Almeida, and Rodríguez (2012) and GRI database (2016)

Figures 1 and 2 provide a synthetic representation of the evolution of reporting according to GRI. They capture the heightened increasing trend of this type of

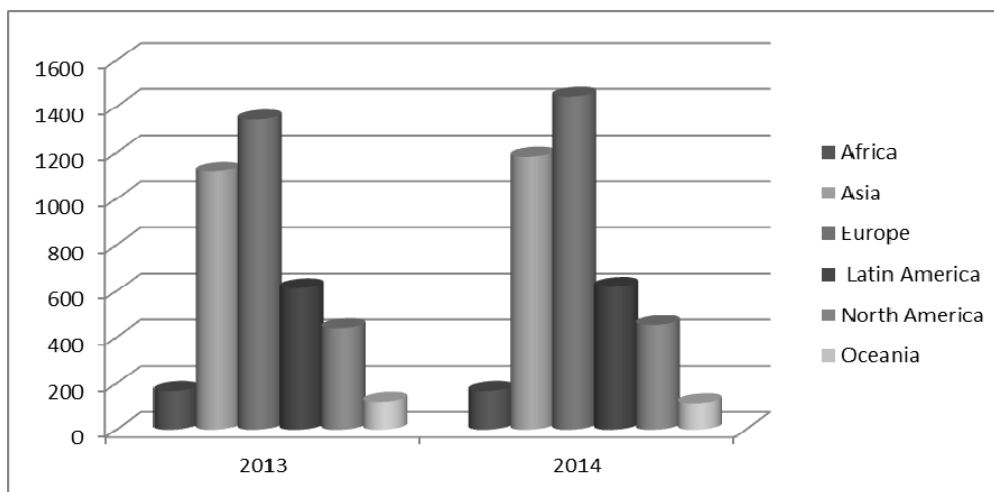
reporting until the year 2010, whereas in the period 2013-2014, the increasing trend was maintained, but at a moderate pace.

Figure 1. Evolution of reporting according to GRI during the period 2001-2010



Source: Own processing.

Figure 2. Evolution of reporting according to GRI during the period 2013-2014



Source: Own processing

In our analysis, one element that can be surprising is the low level of reporting according to GRI (as well as the very low increase rate of reporting during the period 1999-2010), registered among countries from North America – an area in which we have been accustomed to think of the USA as a promoter of reports to all categories of stakeholders. One possible explanation could be that although USA grants special attention to activities covered in sustainability reports, it does not need the GRI guide because companies that supply information on social and sustainability policies use other channels. However, during the last time interval analyzed

(2013-2014), at the level of North America, a higher increase rate was registered, although the level of reporting fails to come even close to half of the level registered in Europe. It is possible that this rise is the result of the increasingly stronger perception that the latest financial crisis was caused especially by the financial service sector, which is strongly represented in the USA.

Depending on the status of the country in which the reporting company is located, relative to the OECD, we noticed that for the year 2013 (the only one for which the GRI database supplies data), the situation concerning reporting according to GRI is as follows:

	GRI - G3	GRI - G3.1	GRI - G4	GRI - Referenced	Total	Percentage
Member of OECD	771	1,054	45	335	2,205	57.97%
Receives development aid through the OECD Development Assistance Committee (DAC)	421	789	16	215	1,441	37.88%
Non-OECD / Non-DAC	33	109	1	16	158	4.15%

Source: Own processing

We can notice that OECD member countries have the highest number of companies that report according to

GRI – 57.97%, followed by countries which receive development aid through the OECD Development

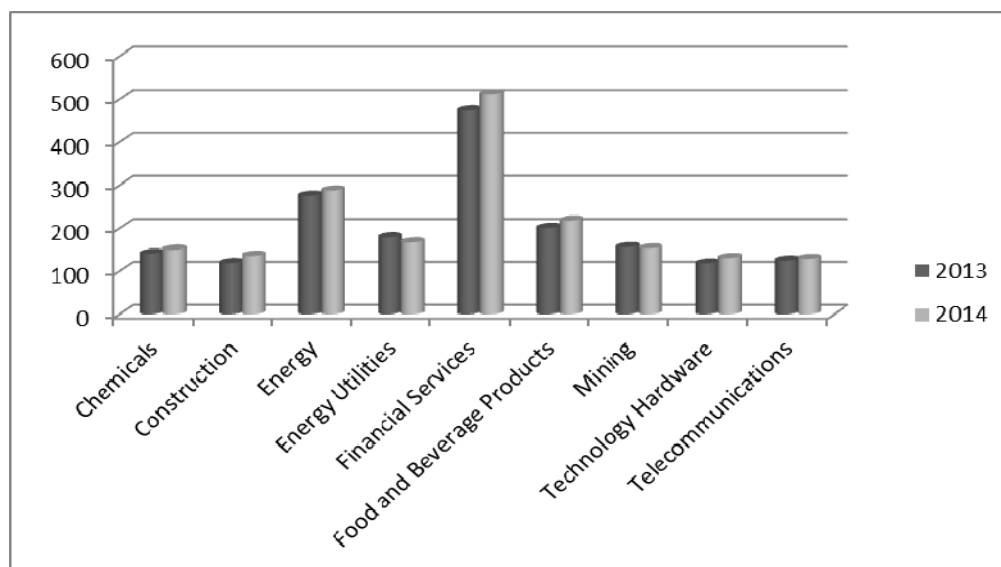
Assistance Committee (DAC) – 37.88%, while the number of firms which report according to GRI in countries which are not OECD members or which do not benefit from OECD support is very low – 4.15%.

5. Reporting according to GRI along sectors of activity, according to the category of firms and types of reports

The conducted analysis showed that reporting according to GRI was adopted by 38 different sectors of activity. Figure 3 indicates an increasing tendency to use GRI in each sector that is in top 9 in terms of reporting according to GRI (together, the analysed sectors represent 47% of GRI reports in each of the analyzed years).

The increasing tendency identified by us confirms the same evolution identified by Marimon, Alonso-Almeida and Rodriguez (2012) in a study that concerned the period 1999-2010. Unlike the mentioned study, which pointed out a heightened increase in reporting according to GRI, especially after 2006 (when GRI - G3.1 was issued), our research highlights a moderate increasing tendency. Although GRI initially emerged especially as a reporting recommendation concerning aspects connected to the environment, we noticed, just like Marimon, Alonso-Almeida and Rodriguez (2012) that financial services are the best represented sector over the last years in reporting according to GRI. Ogrizek (2002) suggests that this increasing tendency is the result of the influence of USA, where legal factors and activism establish the lines of action of companies that offer financial services.

Figure 3. Distribution of GRI reports along sector of activity (sectors in top 9 in the 2016 GRI database)



Source: own processing

We noticed that the energy sector (including the oil industry), the chemicals and mining are in the category of top sectors as far as reporting according to GRI is concerned, probably due to the (real or potential) negative influence of these sectors on the environment. Also, we noticed that companies operating in constructions, food and beverage products, technology

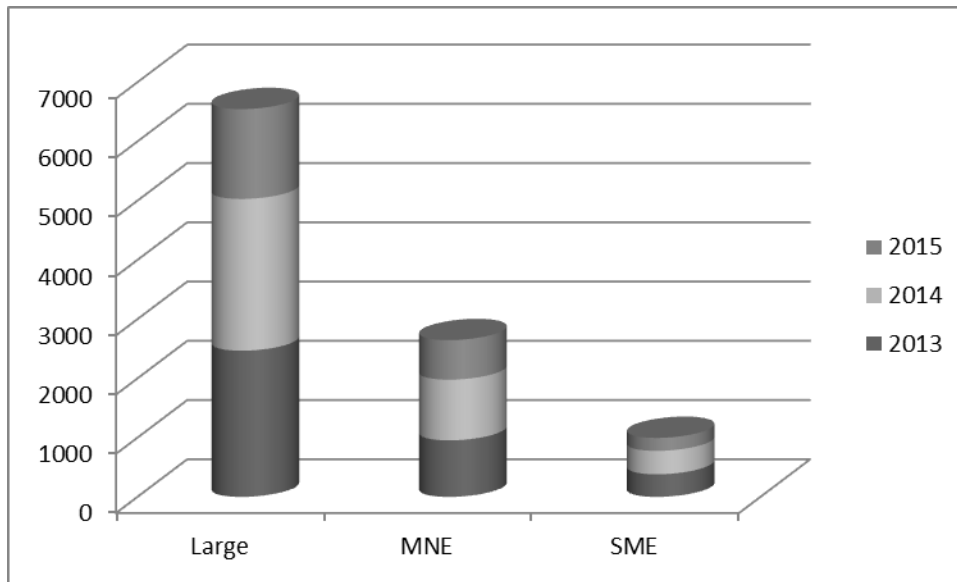
hardware and telecommunications industries are proactive in publishing corporate social responsibility reports, thus showing a heightened sensitivity to social and environmental problems.

By analyzing the structure of reporting according to GRI relative to company size and its evolution during the time interval covered by our study, we noticed that the top

position is occupied by large companies (which, by the EU definition, have more than 250 employees and a turnover higher than 40 million Euro or a total of the balance sheet higher than 20 million Euro – EU, 2013),

seconded by multinationals, followed, in the third position, by small and medium size companies. Similar results had previously been obtained by Preuss and Barkemeyer (2011).

Figure 4. Distribution of GRI reports according to category of firms

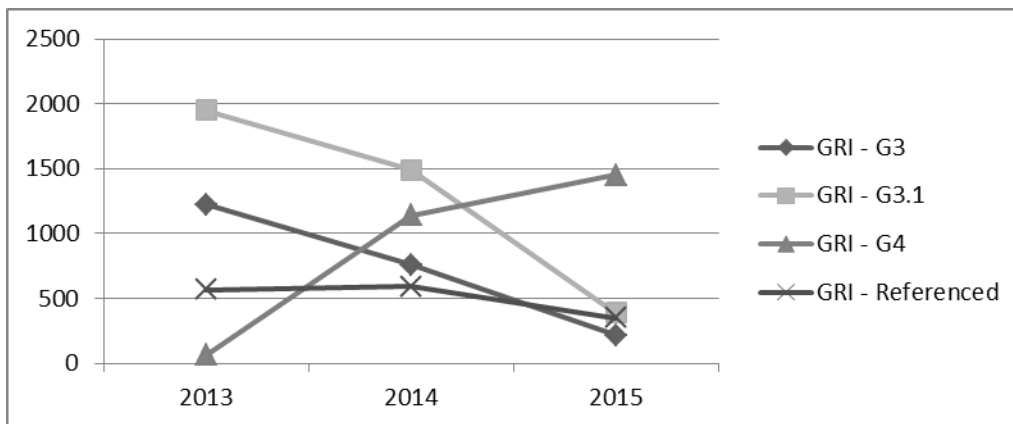


Source: Own processing

The result was predictable given that the process to collect, check and elaborate these reports supposes very high costs.

A final structure analysis aimed to estimate compliance of reports with the GRI guides that are currently applicable (GRI – G3, GRI – G3.1 and GRI – G4).

Figure 5. Comparative situation of the evolution of reports according to their compliance with GRI guides



Source: Own processing

Whereas before the emergence of GRI – G4, one could notice a relatively constant increase of reports prepared according to GRI – G3 and GRI – G3.1, after the publication of GRI – G4 in 2013, the number of reports prepared according to third generation guides dropped, while the number of reports prepared according to GRI – G4 increased. The evolution is not surprising if we consider that the writing up of new guides is carried out after a constant and structured process of consulting stakeholders, among which are especially firms interested in the process of reporting according to GRI. Therefore, any new guide meets company reporting intentions first of all, and subsequently, the information requirements of stakeholders. This context can also explain the relatively constant number of reports that take GRI as a reporting model, without complying with any particular guide.

6. Discussion and conclusion

First, we noticed that companies which operate in Europe and in Asia are ranked on the top position as far as publication of reports written according to GRI is concerned, and they are followed by companies that operate in Latin America.

Our observations confirm certain previous results. Thus, Waddock (2008) identifies the highest rate of GRI adoption in China and explains it by the fact that this country has been accused of disasters and abuse in terms of free competition and human rights; hence, China is concerned with improving its corporate social reporting practices and its reputation in terms of sustainability.

Second, a significant percentage of companies which operate in OECD member countries or in countries that benefit from assistance from the Committee to support OECD development report according to GRI, while companies situated in countries that are not OECD members or that do not benefit from this organization's support report according to GRI in an insignificant percentage.

Third, we noticed that GRI guides are adopted by companies which operate in sectors of high environmental risk (the chemicals, mining and energy). Many of these firms are also very visible on the capital market.

Fourth, we noticed a relatively constant increasing tendency among firms that report according to GRI, with a focus on large enterprises and multinational companies, that have significant resources. As Levy, Brown and de Jong (2010) also show, GRI standards and guides are ignored by small and medium size enterprises because publishing non-financial information is costly and quite complex.

Finally, we identified the firms' tendency to comply with the most recent guides and recommendations for corporate reporting, under the circumstances where several variants are applicable. Therefore, with the emergence of G4, one can notice an increase in reporting according to this guide, paralleled by the decrease in the number of companies that report according to G3. The phenomenon is logical and it was noticed also in the transit stage from G3 to G3.1.

Unlike previous studies that were carried out on a much smaller number of companies (for instance, Marimon, Alonso-Almeida and Rodriguez carried out a study on the GRI database from 2010, which comprised only 1,656 companies), our research used the GRI database from 2016, which comprises a significant number of registrations (the highest number of analysed companies was 5,211, in 2014). The limit was given by the smaller number of years for which we have managed to perform our analysis. However, the results obtained by us agreed with those obtained in previous studies.

Given what we have noticed so far, one can anticipate an increase in the degree of adopting GRI practices, despite the high costs associated to data collection, to report writing and checking (Koerber, 2010). Moreover, certain authors (Brown, de Jong and Lessidrenska, 2009) consider that the process to develop GRI standards will continue and it will benefit from support as long as new guides will be issued, with specific information for certain sectors and countries.

KPMG's latest study (2015) on corporate responsibility reporting shows that the tendency among companies to include more information on corporate responsibility in their annual financial reports is determined by two factors: first, information concerning corporate responsibility is increasingly

more perceived by shareholders as relevant to understand risks and opportunities that are specific to the company and, second, stock exchanges and governments institute requirements for companies concerning the inclusion of corporate responsibility data in annual reports.

Yet, the Volkswagen scandal raises many questions concerning what can be hidden in the very detailed and bulky reports that comply with the highest corporate social responsibility standards. Thus, an article by Schwindenhammer (2013) shows that 5 German companies (BASF, Bayer, Daimler, RWE and Volkswagen) fully comply with GRI norms

and, in addition, this observance is externally assured by suppliers of auditing services. The study also makes reference to an analysis performed in 2010 by the Institute for Ecological Economy Research, which indicates that firms which comply with GRI are best ranked in the hierarchy of firms that report sustainability information appropriately. However, despite this information supplied by German researchers, the Volkswagen scandal shows that, beyond reports that wish to present a certain image of the company, reality can be much different and, what is more serious, even in contradiction to these reports.

REFERENCES

1. Brown, H.S., de Jong, M. and Lessidrenska, T. (2009), The rise of the Global Reporting Initiative (GRI): a case of institutional entrepreneurship, *Environmental Politics*, vol. 18, no. 2, pp. 182-200, DOI: <http://dx.doi.org/10.1080/09644010802682551>.
2. Chersan, I.-C. (2015), Study on Practices and Tendencies in Integrated Reporting, *Audit Financiar*, vol. 13, no. 9(129), pp. 91-101.
3. Clarkson, P.M., Overell, M.B. and Chapple, L. (2011), Environmental Reporting and its Relation to Corporate Environmental Performance, *Abacus*, vol. 47, no. 1, pp. 27-60, DOI: <http://dx.doi.org/10.1111/j.1467-6281.2011.00330.x>.
4. Elkington, J. (1994), Towards the sustainable corporation: Win-win-win business strategies for sustainable development, *California Management Review*, vol. 36, no. 2, pp. 90-100.
5. EU (European Union) (2013). *Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC*. Retrieved from <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013L0034&from=EN>.
6. European Commission (2011). A renewed EU strategy 2011-14 for corporate social responsibility. COM(2011) 681. Brussels: European Commission, [pdf] Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0681:FIN:en:PDF> [Accessed 7 February 2016].
7. Global Reporting Initiative (2000), Sustainability Reporting Guidelines, Version 3.0, [pdf] Available at: <https://www.globalreporting.org/resourcelibrary/G3-Guidelines-Incl-Technical-Protocol.pdf>, [Accessed 7 February 2016].
8. Global Reporting Initiative (2000), Sustainability Reporting Guidelines, Version 3.1, [pdf] Available at: <https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-Technical-Protocol.pdf>, [Accessed 7 February 2016].
9. Global Reporting Initiative (2000), G4 Sustainability Reporting Guidelines. Reporting Principles and Standard Disclosures, [pdf] Available at: <https://www.globalreporting.org/resourcelibrary/GRI-G4-Part1-Reporting-Principles-and-Standard-Disclosures.pdf>, [Accessed 7 February 2016].
10. Global Reporting Initiative (2016), GRI Reports List (Limited Version) - 01.03.2016, [online] Available at: https://www.globalreporting.org/services/Analysis/Reports_List/Pages/default.aspx, [Accessed 7 February 2016].

11. Jamali, D. (2007), The Case for Strategic Corporate Social Responsibility in Developing Countries, *Business and Society Review*, vol. 112, no. 1, pp. 1–27, DOI: <http://dx.doi.org/10.1111/j.1467-8594.2007.00284.x>.
12. Khanna, M. (2001), Non-mandatory approaches to environmental protection, *Journal of Economic Surveys*, vol. 15, no. 3, pp. 291-324, DOI: <http://dx.doi.org/10.1111/1467-6419.00141>.
13. Koerber, C.P. (2010), Corporate responsibility standards: current implications and future possibilities for peace through commerce, *Journal of Business Ethics*, vol. 89, nr. 4 (suplim.), pp. 461-480.
14. Konrad, A., Steurer, R., Langer, M.E. and Martinuzzi, A. (2006), Empirical findings on business-society relations in Europe, *Journal of Business Ethics*, vol. 63, no. 1, pp. 89-105, DOI: <http://dx.doi.org/10.1007/s10551-005-7055-z>.
15. KPMG (2015), Currents of change: The KPMG Survey of Corporate Responsibility Reporting 2015, [pdf] Available at: <https://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/kpmg-survey-of-corporate-responsibility-reporting-2015-O-201511.pdf>, [Accessed 6 February 2016].
16. Lähtinen, K. and Myllyviita, T. (2015), Cultural sustainability in reference to the global reporting initiative (GRI) guidelines: Case forest bioenergy production in North Karelia, Finland, *Journal of Cultural Heritage Management and Sustainable Development*, vol. 5, no. 3, pp. 290-318, DOI: <http://dx.doi.org/10.1108/jchmsd-06-2013-0025>.
17. Levy, D., Brown, H.S. and de Jong, M. (2010) The Contested Politics of Corporate Governance: The Case of the Global Reporting Initiative, *Business & Society*, vol. 49, no. 1, pp. 88-115, DOI: <http://dx.doi.org/10.1177/0007650309345420>.
18. Ligteringen, E. and Zadek, S. (2005), The Future of Corporate Responsibility Standards, *Business and the Environment*, vol. 16, no. 6, pp. 12-13.
19. Marimon, F., Alonso-Almeida, M. del M. and Rodríguez, M del P. (2012), The Worldwide diffusion of the Global Reporting Initiative: what is the point?, *Journal of Cleaner Production*, vol. 33, pp. 132-144, DOI: <http://dx.doi.org/10.1016/j.jclepro.2012.04.017>.
20. Ogrizek, M. (2002), The effect of corporate social responsibility on the branding of financial services, *Journal of Financial Services Marketing*, vol. 6, no. 3, pp. 215-228, DOI: <http://dx.doi.org/10.1057/palgrave.fsm.4770053>.
21. Perez-Batres, L.A., Miller, V.V. and Pisan, J.P. (2010), CSR, sustainability and the meaning of global reporting for Latin American corporations, *Journal of Business Ethics*, vol. 91, no. 2 (supplem.), pp. 193-209.
22. Porter, M.E. and Kramer, M.R. (2006), Strategy & society: the link between competitive advantage and corporate social responsibility, *Harvard Business Review*, vol. 84, no. 12, pp. 78-92.
23. Prado-Lorenzo, J.-M., Gallego-Alvarez, I. and Garcia-Sanchez, I.M. (2009), Stakeholder engagement and corporate social responsibility reporting: the ownership structure effect, *Corporate Social - Responsibility and Environmental Management*, vol. 16, no. 2, pp. 94-107, DOI: <http://dx.doi.org/10.1002/csr.189>.
24. Preuss, L. and Barkemeyer, R., (2011) CSR priorities of emerging economy firms: is Russia a different shape of BRIC?, *Corporate Governance: The International Journal of Business in Society*, vol. 11, no. 4, pp. 371 – 385.
25. Risse, T. (2007), Social constructivism meets globalization. In D. Held & A. McGrew (Eds.), *Globalization theory. Approaches and controversies*, pp. 126-147, Cambridge, Polity Press.
26. Skouloudis, A., Evangelinos, K. and Kourmousis, F. (2009), Development of an Evaluation Methodology for Triple Bottom Line Reports Using International Standards on Reporting, *Environmental Management*, vol. 44, no. 2, pp. 298-311, DOI: <http://dx.doi.org/10.1007/s00267-009-9305-9>.
27. Schwindenhammer, S. (2013), Patterns and Explanations of Corporate Voluntary Norm Compliance: Results from a Structured Focused Comparison of German G500 in the Global Reporting Initiative, *German Policies Studies*, vol. 9, no. 2, pp. 123-160.

28. Waddock, S. (2008), Building a new institutional infrastructure for corporate responsibility, *Academy of Management Perspectives*, vol. 22, no. 3, pp. 87 – 108, DOI: <http://dx.doi.org/10.5465/AMP.2008.34587997>.
29. Welford, R. (2005), Corporate Social Responsibility in Europe, North America and Asia. 2004 Survey Results, *The Journal of Corporate Citizenship*, vol. 17, pp. 33-52, DOI: <http://dx.doi.org/10.9774/gleaf.4700.2005.sp.00007>.

An analysis of corruption: the American continent versus Romania

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Abstract

Corruption has become one of the most vicious mass phenomena, affecting, in most cases, the general wealth of the population. The paper closely surveys a set of measurable variables which have a very high impact over the dimensions of corruption as a phenomenon. Two of the aforementioned variables are part of a bureaucratic component, specific to the public system – the number of taxes, duties and contributions that an economic entity has to pay for the right to conduct business on the territory of a state, and the amount of time assigned for the payment of the duties for a year's interval. The variable, generally called the taxation level, assumes an economic perspective over the phenomenon of corruption, which may be encouraged or, on the contrary, inhibited by the government's fiscal strategy. The last component, called Human Development Index (HDI), assumes a social perspective over corruption, surveying the people's behavior, which is also able to amplify or decrease the dimensions of corruption as a phenomenon. The whole scientific attempt is synthesized in the form of a corruption map, based on the estimated spread of the phenomenon for each surveyed country.

Keywords: Corruption, Country charts, Corruption map, American Continent

JEL Classification: C31, D11, O11

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Introduction

Corruption is a mass phenomenon having multiple valences. As seen from an economic perspective, corruption may be considered as a threat to the democratic regimes, as it allows violation of social rules, generating social inequities and discrediting governmental institutions, which finally has negative effects over the economic development of a country (Straupenhurst, Ulrich and Strohal, 2006).

Generalized corruption is considered to happen when the general social services, which should be available for the population, are controlled by a small group of people which are intentionally using them for their own personal benefits (Jensen, Li and Rahman, 2010). A very good proof of the destructive potential corruption has when out of control may be found in a Latin-American country, namely Peru, which owns one of the largest gold mines in the world, Yanacocha, but is not able to capitalize this potential for the general wealth of the own population, which, in large majority, lives in poverty. Another proof for the destructive potential of corruption may be found in Russia. According to the Transparency International's report in 2010, Russia was the most corrupt country in G20, being at par with countries like Papua – New Guinea, Congo-Brazzaville or Kenya. From a social perspective, the corruption may be correlated with the power abuse allowed by a public office, for personal or group interest, so as to obtain financial, status-related or image-related advantages. The corruption phenomenon, exactly as a computer hacker, aims the vulnerable areas of the public system, and then illegally exploits them for personal benefits (Raicu, 2010).

A faulty legal system which allows for social inequities and does not require total transparency, may become an aggravating factor for the development of corruption. Corruption flourishes in the absence of transparency, while responsibility and transparency are basic prerequisites for its prevention (Pană and Nişulescu, 2013).

Uslaner (2008) finds that countries having authoritarian regimes also have an increased risk for the development of corruption, when compared to democratic states. Morris (2009) has developed some detailed analyses in this area, surveying the political elites' possibilities to reform and implement measures for the significant decrease of corruption, both in democratic and

totalitarian regimes. In order for the corruption to exist, it should act and be functional on two different directions. The first one is the corrupting power, the second is the corruptible power. The tighter the relation between the two, the higher the corruption level. Unfortunately, during the last years, in Romanian top offices were promoted a lot of persons missing a proper moral conduit and showing an open support for the political elites shaping the destiny of the people (Voicu, 2013). The two-directional approach of the corruption as a phenomenon can also be found in the European Commission's report regarding the directives for combating corruption in the private sector. Thereby, the phenomenon of corruption is divided into active corruption, designed to provide economic benefits for the preferential settlement of some issues, while passive corruption involves the passive acceptance or even the request of such economic benefits (Maxim, 2013). The government may be able to limit corruption at the level of companies, by means of an equal treatment for all companies, without size-based discrimination; as an economic entity, in the absence of sales value, profit or employees' number-related constraints, will not be tempted to apply unorthodox methods to place the aforementioned indicators between certain values (Nişulescu and Popescu, 2013).

Whatever the vision that we have on corruption, one of the most powerful tools in fighting this phenomenon is to inform and increase people's awareness about the disastrous consequences corruption may have over the general wealth and life standard.

1. Methodology

The purpose of this research is to support potential local or foreign investors having business operations in Romania and intending to also develop activity over the American continent. It is intended to achieve a quick and easy to interpret tool, which should be able to provide investors an overview of the social and economic environment of the concerned countries, so as the investors may act wittingly based on each surveyed country's profile and tolerance for corruption. The scientific demarche implies the literal sketching of a map of the American continent from the perspective of the corruption level and extension.

There are multiple entities studying corruption at the macroeconomic level, but one of the most prominent

and internationally recognized organizations is Transparency International, which performs yearly charts of all the countries in the world, based on the perceived general level of corruption. Hereby, Transparency International is an information provider, providing rankings of all world countries according to their scores. Such a ranking will be the dependent variable in this study, called “the perceived level of corruption”, the other variables will be reported to. For the other four independent variables (the number of taxes and duties, the time resources, the taxation level and the Human Development Index – HDI), which will more or less correlate with the dependent variable, the used data sources will be United Nations Human Development Report and the Paying Taxes Report for 2014, developed by PricewaterhouseCoopers. In developing the current research, the 2014 reports were chosen, as they were the only sources providing detailed and complete information for each analyzed country, so as the correlations could be performed.

The paper assumes as a novelty the fact that the resulting country rankings and the resulting map will be built based on the estimated level of corruption, by means of the four aforementioned independent variables. The first two variables (the number of taxes and duties and the time resources – as number of hours) represent the bureaucratic component of a state which may encourage or discourage the access of a foreign investor on the local market. The two variables are generally in correlation, in that the greater the values of the first variable, the bigger the time resources required for the payment of all the taxes and duties for a year. The next variable, taxation level, which is also oriented on the economic area, like the previous two, refers to the percent of the profit an economic entity has to pay as taxes and duties. The last variable, the HDI, also enclose a social side, as it refers to the actual life standard and development perspectives of an individual, which may shape the person’s behavior and contribution to the general level of corruption.

The working procedure for this research implies the use of statistical functions, correlation tools, as well as the Excel Data Analysis tool, which will return some coefficients expressed as percent so as to assess the degree of influence of each of the four dependent values over the dimensions of corruption as a phenomenon. By applying these percent values to each independent

variable, followed by the summation of the values of all the four for each country, an ascending sorted chart will be obtained. From comparability reasons, Romania will be included in the 31-countries sample. Thereby, based on successive comparisons to the values recorded for our country, we will be able to perform a highly accurate assessment of the dimension of corruption spread in each of the 31 countries. Based on the average level of corruption for the whole sample, three zones will be delimited as follows:

- Zone one encloses the countries where corruption has significantly lower levels, when compared against the whole sample average;
- Zone two encloses the countries whose score is close to the whole sample average;
- Zone three will enclose the countries having corruption levels significantly higher than the computed sample average.

After obtaining these rankings divided into zones, a map will be built and subsequently commented and analyzed from different perspectives.

2. Results and discussions

As a result of the data collection process for the year 2014, a database was obtained, as synthesized in Table 1.

As a result of using the statistical tool over the analyzed population, a set of correlation coefficients were obtained. The squared values of the correlation coefficients resulted as percent values, computed for each dependent variable, are as follows:

- The number of taxes and duties: 8.78%
- The time resources: 7.31%
- The taxation level: 10.12%
- HDI: 73.79%.

The database allows us to identify a few countries which will enter zone three without any doubt, as their values for time resources and taxation level are significantly higher than the average. The first country that stands out is Brazil, where an investor has to spend 2,600 hours a year in order to pay all the taxes and duties. Surprisingly, Brazil has only nine taxes and duties, which renders the average time spent in order to pay a tax or duty to become 280 hours, compared to the 5.12 hours

in Romania. A significant time resource value is also noted in the case of Bolivia, requiring 1,025 hours in order to pay 42 taxes and duties. As comparison, we may focus on Nicaragua, which also has 42 taxes and duties, but a time resource cost five times smaller than Bolivia, with 207 hours.

Significant time resources are also recorded for Venezuela – 792 hours and Ecuador – 654 hours. None of the aforementioned countries gets more than 50 points in the Transparency International chart, paradoxically the higher score being recorded for Brazil – 43 points, which sets this country at the same level as Romania, also having 43 points in the chart of corruption

perceived level. At the opposite end of Brazil reside Bahamas, having a yearly time resource value of 58 hours, rendering a spend of 3.22 hours for the payment of a tax or duty, as Brazil was having a value of 280 hours for the same purpose. Second to Bahamas, and the only one also having recorded yearly average time resources under 100 hours is Saint Lucia – 97 hours for 32 taxes and duties, rendering an average of 3.03 hours to pay a tax or duty, while the value for Romania is 5.12 hours. Even if the yearly average tax and duty payment time resource for Romania is over 173 hours under the average of the whole sample, our country is surpassed by the sample average with over 10 taxes and duties.

Table 1. Database with the data pertaining to all the analyzed countries

Countries	Perception of the corruption level	Number of taxes	Time resources	Tax (%)	HDI	Ranking
Antigua and Barbuda	74	57	207	41	0.783	24.86
Argentina	34	9	405	107.8	0.836	41.92
Bahamas	71	18	58	46.6	0.79	11.12
Barbados	74	28	237	40.8	0.785	24.49
Belize	52	29	147	33.2	0.715	17.18
Bolivia	35	42	1,025	83.4	0.662	87.54
Brazil	43	9	2,600	68.3	0.755	198.32
Canada	81	8	131	24.3	0.913	13.41
Chile	73	7	291	27.7	0.832	25.3
Columbia	37	10	203	76	0.720	23.94
Costa Rica	54	22	226	63.8	0.766	25.47
Ecuador	33	8	654	33.9	0.732	52.48
El Salvador	39	53	320	38.1	0.666	52.39
Grenada	63	30	140	45.3	0.750	18.01
Guatemala	32	7	326	40.9	0.627	29.05
Guyana	30	35	256	32.5	0.636	25.54
Haiti	19	47	184	40.4	0.483	22.02
Honduras	29	47	224	39.2	0.606	24.92
Jamaica	38	36	368	44.3	0.719	35.08
Mexico	35	6	334	53.7	0.756	30.93
Nicaragua	28	42	207	64.9	0.631	25.85
Panama	37	52	417	40.5	0.780	39.72
Paraguay	24	28	384	35	0.679	34.57
Peru	38	9	293	36.4	0.734	26.43
Dominican Republic	32	9	324	43.5	0.715	29.4
Saint Lucia	67	32	97	34.6	0.729	13.94
USA	74	11	175	46.3	0.915	19.12
Suriname	36	29	199	27.9	0.714	20.44
Trinidad and Tobago	38	39	210	29.1	0.772	22.29
Uruguay	73	33	310	41.9	0.793	30.58
Venezuela	19	71	792	61.7	0.762	70.94
Romania	43	39	200	42.9	0.793	32.97

Source: Authors' compilation, 2016

A front place is taken by Venezuela, having 71 taxes and duties, the highest value for the whole sample, followed by Antigua and Barbuda – 57 taxes and El Salvador – 53 taxes. Perfect equality and values high above the average are recorded for Haiti and Honduras, having 47 taxes and duties each. The lowest value belongs to Mexico – 6 taxes and duties, followed by Guatemala and Chile with 7 taxes and duties each. Even if the figures for Guatemala and Chile are quite the same, and the yearly time resource are around 43 hours, the Transparency International chart reveals a large gap in the perceived level of corruption for the two countries, where Guatemala scores 32 points, while Chile scores 73. This can be explained by the fact that it is not the bureaucratic components who generate the gap, but the taxation level, which is much larger in Guatemala, and the Human Development Index, which is a lot greater for Chile. Regarding taxation, a quite unusual situation may be observed in Argentina, where the taxation level is 107.8%. In other words, in order to

achieve a profit of 100 monetary units, an economic entity has to pay 29.4% as work-related taxes, 3% as direct taxation of profit, and another 75% with different profit-related taxes and duties. High taxation levels are also obvious for Brazil – 83.4% and Bolivia – 68.3%, while the lowest levels are observed in the case of Canada – 24.3% and Chile – 27.7%. The last variable, the Human Development Index (HDI) depicts the life standard of the people and is an important parameter for measuring corruption. Countries with the highest HDI values reside in North America – USA – 0.915 and Canada – 0.913, followed by two Latin American countries – Argentina – 0.836 and Chile – 0.832. Even if the average for the whole sample is 0.734, Romania has a significantly higher value – 0.793.

After applying the percentages to the four dependent variables (the number of taxes and duties, yearly time resources, taxation level and HDI), the result was a series of scores, or rankings, which were used to assign each country to a certain “zone”, as depicted in Table 2.

Table 2. Countries rankings and zones according to the estimated level of corruption

Country	Ranking	Zone	Country	Ranking	Zone	Country	Ranking	Zone
Bahamas	11,12	1	Chile	25,3	2	Jamaica	35,08	3
Canada	13,41	1	Costa Rica	25,47	2	Panama	39,72	3
St Lucia	13,94	1	Guyana	25,54	2	Argentina	41,92	3
Belize	17,18	1	Nicaragua	25,85	2	Ecuador	52,48	3
Grenada	18,01	1	Peru	26,43	2	Venezuela	70,94	3
USA	19,12	1	Guatemala	29,05	2	Bolivia	87,54	3
Suriname	20,44	1	Dom. Republic	29,4	2	Brazil	198,32	3
Haiti	22,02	1	Uruguay	30,38	2			
Trinidad & Tobago	22,29	1	Mexico	30,93	2			
Romania	22,97	1	El Salvador	32,39	2			
Columbia	23,94	1	Paraguay	34,57	2			
Barbados	24,49	1						
Antigua & Barbuda	24,86	1						
Honduras	24,92	1						

Source: Authors, 2016

In order to properly establish the three zones, the ranking of Brazil was eliminated, as it was significantly biasing the general average, and the reference value was 29.73 points. Oscillations were permitted around this value, in a general marge of +/- 5 points. Therefore, for the Zone 2, the interval was set between 25.3 points (Chile) and 34.57 points (Paraguay). The countries scoring less than 25.3 points were enclosed in Zone 1, while countries scoring more than 34.57 points were enclosed in Zone 3.

In the “estimated level of corruption” chart, the first place belongs to Bahamas which has the best score – 11.12 points, followed by Canada with 13.41 points and Saint Lucia with 13.94 points. The three aforementioned countries were noticed as having strong positive situations since the build of the database, as Bahamas and Santa Lucia were the only countries with yearly time resources

less than 100 hours for the payment of all the taxes and duties. Canada registered very good scores for the total number of taxes and duties, and also a very good HDI value. As compared against the sample average of 35.58 points, Romania scores 22.97 points, which places the country in Zone 1, together with Trinidad & Tobago, Haiti and Suriname. The lowest score from Zone 1 belongs to Honduras – 24.92 points, while the amplitude of Zone 1 is 13.8 points.

Concerning the Zone 2 (the zone having values close to the average of the sample), the first position belongs to Chile – 25.3 points and the last position belongs to Paraguay – 34.57 points, which renders an amplitude of Zone 2 38.83% lower than the amplitude of Zone 1. Zone 3 encloses the countries with the highest perceived levels of corruption, and also has the highest score variations from country to country. Therefore we can observe the lowest score in Jamaica – 35.08 points and the highest one in Brazil – 198.32 points. Brazil manages to establish the third consecutive record when compared against the other countries enclosed in the analysis. Since the beginning Brazil stood out with a very high number of hours for the yearly time resource – 2600, which rendered an average duration of 288 hours necessary for the payment of a tax, and now it is the only country scoring more than 100 points, a value 5.6 times higher than the average. When comparing with our country, it can be said that while Bahamas's score is just two times lower than Romania's, the score of Brazil is more than 8.63 times higher than our country's. The interesting fact is that, even if it is placed last, Brazil has a number of taxes and duties two times lower than Bahamas and 4.33 times lower than Romania.

Based on the performed analyses and the established rankings, according to the depicted methodology, a corruption map will be built. The map is meant to suggestively and easily present the whole scientific work. The map which encloses the countries of the American continent is depicted in **Figure 1**, and each country is marked with a 1, 2 or 3, according to the zone where is enclosed, based on the estimated level of corruption.

Figure 1. Corruption Map for the American Continent



Source: Authors, 2016

As a short conclusion we can state that in the northern and central parts of the American continent, corruption is at very low levels, while in Central and South America there is an increase becoming more and more pronounced as we advance south. Latin America has the highest levels of corruption, the Zone 3 countries prevailing in this area. Looking at the map as a whole, a certain correlation may be noticed between the economic potential of a country and the corresponding level of corruption, and this is the reason a very thorough research will be performed from this perspective, so as to establish the real level of influence economic potential has over the corruption level. The correlation between the two may prove to be correct even at global level, not only for the American continent. The current investigation of the countries in America is part of a larger research regarding the worldwide levels of corruption and their correlations. The results obtained from America will be compared and correlated with results obtained on the other continents, so as the final result will be a world map of corruption level.

3. Conclusions

Corruption is a mass phenomenon which cannot be isolated between the borders of a country or even a continent, has a cross-border behavior, and based on the authorities' interests and efforts in the area, it may be kept at low levels or, on the contrary, it may develop to very high levels.

Even if corruption is an integral part of people's behavior, it may be increased or suppressed by some specific measures.

As this study reveals, the bureaucratic component of every state plays a central role in the spread of corruption as a phenomenon, and the usual explanation of the fact is that investors value their time very much and, by consequence, they choose to behave immorally by offering money, goods and other advantages to public workers in order to solve their problems as soon as possible. As proof for this hypothesis we have the fact that countries like Brazil and Bolivia which have the highest time resource cost for the payment of duties, also have the highest perceived levels of corruption from the surveyed countries.

Another component having a determinant role in the dimension of corruption is the Human Development Index, which reveals that people, apart from greed and the will to become rich rapidly, also recourse to corruption in order to ensure a decent life standard, or in some situations, even to survive. As proof of this theory are the two countries from North America, having the highest HDI values (0.915 and 0.913), and both having top positions in Zone 1, which reveals very low levels of corruption.

Taxation level may influence corruption by the fact that people may choose to break the social rules not to survive or to save time, but also from pure greed. They consider it is more efficient to commit corruption acts and maximize profits, instead of working more or develop their business. Such countries, having a high taxation level are Argentina and Bolivia, both having some of the last positions of the chart, in Zone 3.

Following this scientific demarche, and also a study previously performed by Straupenhurst, Ulrich and

Strohler (2006) it can be confirmed that the economic potential of a country is correlated with the level of corruption in that country. According to the current study, the more developed the country, the lower the level of corruption (as in North America), and the poorer the country, the higher the corruption (as in Latin America).

Even if when the European Union is surveyed for corruption, Romania occupies one of the last places, when compared against American countries, it is situated in Zone 1. The reason may be that Romania recently cut the number of taxes and duties from 113 in 2012 down to 41 in 2013 and to 39 in 2014.

The current research also validates a study (Uslaner, 2008), which stated that countries having totalitarian regimes are more prone to high levels of corruption, when compared to democratic countries. It is obvious that in the countries where totalitarianism is quite non-existent (like USA and Canada), the corruption level is low, while in the Latin America regimes are very restrictive and corruption flourishes.

The highest time resources allocated for the payment of taxes and duties are observed in Brazil and Bolivia, while the average duration on the American continent is twice as much as the average duration for Romania.

The average taxation level for the whole sample is 46.43 percent, which is 3.53% higher than the Romanian taxation level of 42.9 percent. An interesting case is the one of Argentina, having a taxation level of 107.8%, which results in the fact that any company without external financial aid is unable to get profit, as the profit tax is only 3%, while the other 104.8% are taxation of the work and various duties.

The lower level of corruption among the surveyed countries is Bahamas, with a general score of 11.12 points, while the highest level of corruption is found in Brazil, which has a score of 198.32 points.

In terms of the estimated corruption level score, Romania falls within Zone 1, ahead of countries such as Colombia, Barbados, Antigua and Barbuda, respectively Honduras.

REFERENCES

1. European Commission (2014), Report from the Commission to the Council and the European Parliament. EU Anti-corruption Report [pdf] Available at: http://ec.europa.eu/dgs/home-affairs/e-library/documents/policies/organized-crime-and-human-trafficking/corruption/docs/acr_2014_en.pdf, [Accessed on 6 March 2016].
2. Jensen, N., Li, Q. and Rahman, A. (2010), Understanding corruption and firm responses in cross-national firm-level surveys, *Journal of International Business Studies*, vol. 41, pp.1481-1504, DOI: <http://dx.doi.org/10.1057/jibs.2010.8>.
3. Maxim, I. (2013), Globalizarea și criminalitatea organizată, *Revista de investigare a criminalității*, vol. 4, nr. 1, pp. 261-267.
4. Morris, S.D. (2009), *Political Corruption in Mexico: The Impact of Democratization*. Boulder, CO, Lynne Rienner Publishers.
5. Nișulescu, I. and Popescu, L.M. (2013), Research on the financial engineering motivations and methods, and their implications on the information produced, In *Accounting and Management Information Systems Conference Proceedings*, pp. 1134-1147, București.
6. Pană, E.C. and Nișulescu, I. (2013), Corruption with emphasis on health system, În volumul *Analele Universității Ovidius, Seria Științe Economice*, vol. 13, no. 1, pp. 250-254, Constanța, Ovidius University Press.
7. PricewaterhouseCoopers (2014), Doing Business Report: Paying Taxes 2014, [pdf] Available at: <https://www.pwc.com/gx/en/paying-taxes/assets/pwc-paying-taxes-2014.pdf>, [Accessed on 6 February 2016].
8. Raicu, F. (2010), Corupția ca factor generator de insecuritate, *Univers Strategic*, vol. 5, no. 12, pp. 204-214.
9. Staphenurst, R., Ulrich, M. and Strohal, S. (2006), Introduction: Parliamentarians fighting corruption, in R. Staphenurst, În volumul N. Johnston and R. Pelizzo (editori), *The role of parliament in curbing corruption*. Washington, DC: The World Bank, pp. 1-12.
10. Transparency International Romania (2014), Evoluția indicelui de percepție a corupției în România și în țările europene, [pdf] Available at: http://www.transparency.org.ro/politici_si_studii/indici/ipc/2014/CPI2014_RO_UE_Grafice.pdf, [Accessed on 6 March 2016].
11. Transparency International Romania (2014), Indicele de percepție a corupției, [online] Available at: http://www.transparency.org.ro/politici_si_studii/indici/ipc/2014/CPI%202014_Regional%20with%20data%20source%20scores_RO.pdf, [Accessed on 6 February 2016].
12. United Nations Development Programme, Human Development Reports: Inequality-adjusted Human Development Index [online] Available at: <http://hdr.undp.org/en/composite/IHDI>, [Accessed on 6 February 2016].
13. Uslaner, E.M. (2008), Corruption, inequality, and the rule of law: The bulging pocket makes the easy life, *New York: Cambridge University Press*.
14. Voicu, A. (2013), Despre drept, morală și religie, *Revista de investigare a criminalității*, vol. 4, no. 1, pp. 40-45.

The macro-economic analysis of public goods and their influence in the region of Czech Republic

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Abstract

In the region of Czech Republic, the provision of public goods is one of the State's most important activities with society-wide impacts. Therefore, the debate on the structure and scope of public budgets is legitimate and ongoing on a society-wide scale. Mainstream fiscal theory considers public goods to be one of the failures of market equilibrium, classifying them as being close to positive externalities. In this case, the activity of the State brings benefits to other entities that are not involved in this activity and do not even directly pay for it. The main characteristics of these goods include irreducibility of their amount in society, non-excludability and non-rivalry. There are a number of goods between purely private and purely public goods which, to varying extents, exhibit both elements. Today, the majority of goods provided by the public sector are of such a nature; as a result, the form of allocation and the subsequent redistribution of resources are crucial when analysing public goods. The present paper analyses public goods in the Czech Republic from an economic and legal perspective using Cost-Benefit Analysis, including their efficiency and society-wide benefits.

Keywords: Public goods, public economics, benefit, efficiency, free-rider problem, Cost Benefit Analysis, Czech Republic.

JEL Classification: E61, E62.

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Introduction

Until recently, the concept of public goods and public services had no explicit definition in the positive law of the Czech Republic. The Administrative Procedure Act merely referred to the concept of public use which will be mentioned later. This act, as well as other sources (Hendrych, 2009), only allowed us to indirectly infer legal and economic definition of public (collective) goods, or the “collective consumption goods”, in the Czech Republic. This changed on 1 January 2014, the effective date of the Civil Code. However, it only laconically provides that a thing intended for general use is a public thing (i.e. a public good). It is therefore clear that in terms of content and purpose, the definition does not capture the economic essence of public goods.

One of the first definitions of collective goods is mentioned in the neoclassical theory of equilibrium and the Pareto optimality (Pareto and Schiwer, 1927), which primarily addresses optimal allocation of resources and their subsequent redistribution to finance collective goods. The post-war period saw the publication of well-known works by Wicksell (1964) and Lindhal (1964), who considered the “integral approach” for all functions of the public sector (i.e. the allocation, distribution, redistribution, stimulation, control and emission functions), that is, the entire chain of activities from taxation to the subsequent use of a public good or service (Mikušová-Meričková and Stejskal, 2014). Also known in the Czech Republic, the pioneering work of Musgrave focusing on issues of Walrasian general equilibrium and general optimum (Musgrave, 1959; Musgrave, 1994) represents another impulse for the development of the theory of collective consumption goods. The theory of collective decision-making on tax allocation and subsequent redistribution was also dealt with by Bowen (1943). All of these, and many other papers, resulted in a solution to the issue of collective decision-making known as the “public choice theory” formulated by Arrow (1963), Buchanan, Tullock and others (Buchanan and Tullock, 1962).

In most cases, these theories are based on market-oriented and liberal economic thinking which does not favour State intervention in the economy. However, they admit the need for such interventions

in the form of the allocation of public funds and financing of public goods which are specific in terms of their purpose, creation, financing and use, and thus cannot be produced in a purely market environment. The free market fails in the case of public goods; therefore, the State has assumed responsibility to supply these goods throughout the society. Redistribution, being the result of a political choice, in most cases results in a greater or lesser degree of inefficiency which is justified by the need to address the impacts of income inequality, the free rider problem, or by political reasons in the social area.

The reasons for this inefficiency include the issue concerning the evaluation of ex-post benefit for the consumers of collective goods or of their value. In addition, the basic concept of neoclassical economics is often in contradiction with the observed reality around us (Mikušová-Meričková and Stejskal, 2014). The conclusions of neoclassical economic theories do not necessarily have universal validity given that they disregard the behavioural elements of the analysed economic problems (Mises, 2006).

Another author who has previously dealt with the concept of public goods was Samuelson in his book *The Pure Theory of Public Expenditure* (1954). Public goods bring common benefit in that the consumption of that good by any individual does not reduce the consumption by others. It is this quality that distinguishes public goods from private ones. Later, Samuelson further specified the term in his economics textbooks. It is a commodity whose benefits may be provided to all people without it leading to costs higher than those associated with the provision to one person. The benefits of these goods are indivisible and individuals cannot be excluded from their use (Samuelson, 2010).

Samuelson argued that the benefits of public goods are indivisibly spread across all members of society regardless of whether or not particular individuals wish to buy them. Samuelson’s theory named three economic functions of the State: promoting efficiency, fairness and stability. Although Samuelson’s classification of goods has been criticized many times and several other classifications were created later, all are based on his original characteristics; this definition was also adopted by the Macmillan Dictionary of Modern Economics (Pearce, 1995). Public goods are defined

primarily by the nature of their consumption rather than by how they are produced or financed. The fact that these goods are consumed by all consumers at the same time and in aggregate allows the conclusion that their consumption by one consumer does not reduce the consumption by others and therefore an extra unit of consumption involves zero (or near-zero) marginal cost.

This paper aims to analyse the concept of public goods from an economic and legal perspective and to quantify and define the function of public goods in, and their benefits for, the society. In order to achieve this aim, we have employed the CBA – Cost Benefit Analysis, as the most suitable input-output method for public budgets and public goods and their temporal discounting.

1. Benefit of public goods and its function in society

The above characteristics clearly show that it is impossible to force consumers of purely public goods to express their preferences through price because the market price of these goods does not exist and that there is non-rival consumption among consumers. Therefore, there is a real possibility of the “congestion effect” as the growing number of fiscal unit members leads to exceeding the capacity of the facility providing these goods and subsequently results in a sharp decline in the quality of consumption. This is due to the fact that if a good is provided gratuitously and its market price is neither known nor required, its consumption is likely to be higher than the effective consumption level, as consumers will require the good up to the point of zero marginal benefit and will disregard the real, non-zero cost of production.

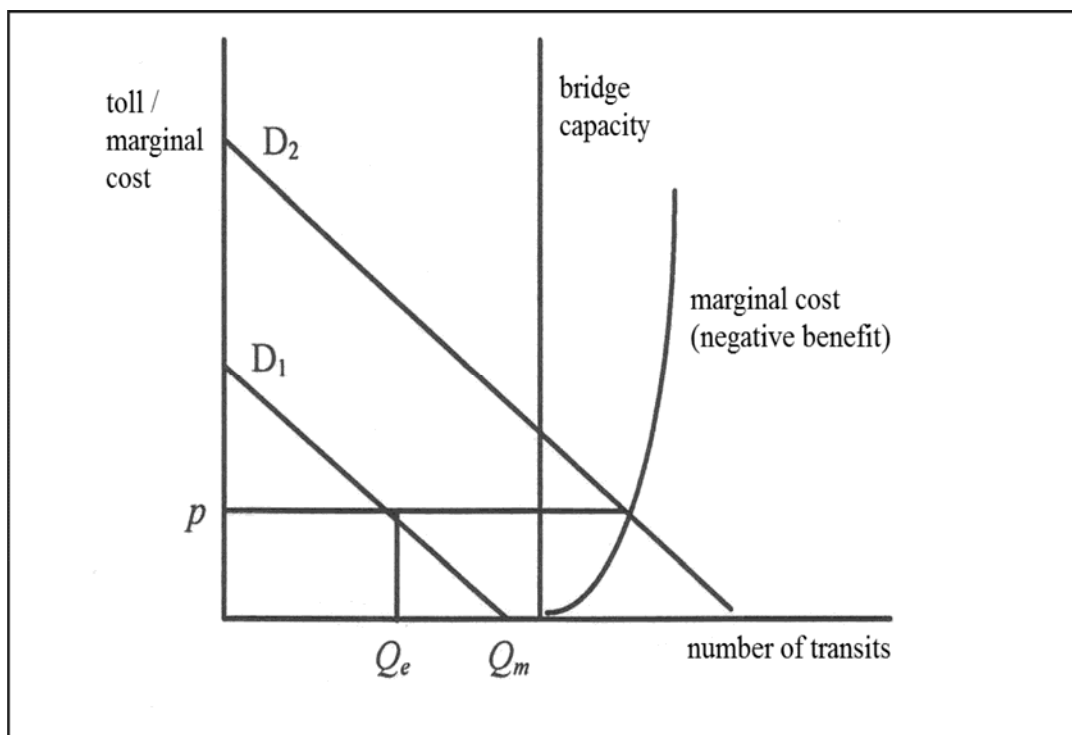
This concept of public goods, now widely accepted, was complemented by Stiglitz (1986) to include the free rider problem. Stiglitz argued that a free rider is an individual who consumes and uses a public good without paying for it. As a result, he benefits from those individuals who are willing to contribute to the public goods (e.g. indirectly through the tax system). Free riders cannot be excluded from consumption.

The cost of exclusion from consumption would be disproportionate. Other essential features and characteristics of public goods include zero or very low marginal cost of providing additional units of the public good. For example, the cost of flood protection measures will not increase even if the number of residents in the flood area increases by one. According to Stiglitz (1986), the second key feature is that it is essentially very difficult, or even impossible, to exclude individuals from the use of a public good. Therefore, the price system cannot act as a tool to “allocate” (provide) goods to consumers which, considering a competitive market, leads to a Pareto optimal quantity of goods because the good can also be consumed by an individual who has not paid for it. There is no reason why individuals should uncover their true willingness to pay. Such an individual can rely on benefiting from the consumption of those who are willing to pay. The provision and subsequent use of this good is therefore characteristic for being non-excludable.

Non-excludability is a traditionally indicated characteristic of public goods. Yet, today it can be technically defined (particular individuals can be excluded from consumption). These changes often result from changing technologies. For example, the development of cable television allows efficient and selective collection of fees for watching certain programmes, or computers significantly reduced the cost of collecting certain fees so that it is now possible to charge higher fees during rush hour or tolls at different rates, different times and for different cars, etc. (Stiglitz, 1997).

In this case, it is advisable to analyse whether or not the exclusion from consumption through prices is desirable or useful if the exclusion of an additional consumers does not reduce the overall benefit from the consumption of the good. In the case of non-rival consumption with zero marginal cost of consumption of an additional unit of the good, it is Pareto optimal to enable the consumption to all consumers whose benefit is greater than zero. In this case, exclusion is technically possible, but causes the loss of benefit as shown in **Figure 1**.

Figure 1: A good where exclusion is technically possible, but not desirable



Source: Malý, 1998

It is technically possible to collect toll to cross a bridge. However, if the bridge has sufficient capacity (demand D_1), it is not desirable to restrict the number of passages. If, nevertheless, toll p is introduced, the area under the demand curve D_1 , delimited on the x -axis by the interval $[Q_e, Q_m]$, will symbolize the loss of benefit. Demand exceeding the capacity of the bridge will lead to negative benefits, the benefit of the consumers will decrease (congestion effect, resulting in e.g. extended travel time). At that moment rival consumption occurs and market price could possibly regulate the number of passages (Malý, 1998).

Measurement and evaluation of the benefit in the provision of public services is complicated mainly due to the quantification of outputs and outcomes. Measuring the efficiency of public services is particularly challenging because they are often provided without direct payment by consumers or at a subsidized price. Therefore, measuring the efficiency and performance of the public sector has always tended to marginalize the outputs and

results and focus only on the size of the inputs. However, this approach is now obsolete and today we can use multiple ways to measure output and efficiency in the public sector (Benčo and Kuvíková, 2011).

Measuring the efficiency of providing public goods and services employs a range of methods from a wide range of input-output methods. The CBA is a measurement method which is probably the most suitable for the public sector and public projects. This method is based on a comparison of all considered costs and benefits of a given project, regardless of their addressee. Therefore, it is also referred to as the social form of cost-benefit analysis, with inputs and outputs being measured in units of value. Benefits are understood as any increase in utility, while, conversely, costs are understood as its decrease. The method can also be defined as a set of practical methods of optimal choice in the field of public economics respecting the criteria of maximum net profitability, all of the considered costs and benefits being expressed in monetary terms, whether directly or indirectly.

Identifying and measuring the total cost of a certain public programme (good) is not easy because measuring is necessary at several levels and in different ways. Likewise, it is relatively difficult to identify and quantify their benefits (utility) which follows from their diversity and, in some cases, from difficult measurability. Benefits represent the sum of satisfaction of individuals or groups of individuals which are provided by a particular public programme (good). Applying the CBA method is therefore dependent on the ability to define the overall costs and benefits and on the possibility to assess them, preferably in monetary terms for easier comparison.

As individual costs and benefits do not arise at the same time, but are usually spread over several years, they must be discounted with regard to the time factor. The later a benefit is available, the smaller the discounted factor. The present value will increase during the year to the future value depending on the interest rate:

$$FV = PV * (1 + r), \quad (1)$$

where:

PV – present value,

FV – future value,

r – interest rate.

In the n -th year, the FV is expressed as:

$$FV = PV * (1 + r)^n, \quad (2)$$

where:

n – number of years a public programme (good) provides a benefit.

Subsequently, we need to compare the benefit of the already defined and quantified costs and benefits:

$$\sum_{t=0}^T \frac{B_t - C_t}{(1 + r)^t} > 0, \quad (3)$$

where:

t – time period,

T – time horizon, where a public project (good) completes its economic life,

B_t – benefit in period t ;

C_t – cost in period t ;

r – interest rate.

The above equation implies that the public project (good) is economically beneficial if the discounted value of the benefits exceeds the discounted cost. The impact of the amount of the provided public good q per one economic entity can be expressed as CV (compensating variation), which expresses unit welfare, change of benefit for one member of society, or the quantification of flows that would occur if the supply or demand of one member of society changes while maintaining the current volume of benefit.

The change in total welfare can then be expressed as follows:

$$\Delta W(\Delta q) = w_1 CV_1(\Delta q) + w_2 CV_2(q) + \dots + w_n CV_n(\Delta q), \quad (4)$$

where:

CV^e – compensating variation induced by changes in the availability of a particular good q belonging to entity e ,

W^e – weighting of individual e -th CV impacting the welfare function.

The provision of public goods is one of the tools to multiply government spending. This case concerns an increase in GDP due to an increase in government provision of public goods by one *koruna*. The government's initial purchase of public goods sets in motion a chain of costs, so that one additional *koruna* in government spending will have the same effect as an additional *koruna* in investment.

If people consume r from each additional *koruna*, the overall multiplicative chain will look as follows:

$$1 + r + r^2 + \dots = 1/1-r = 1/1-MPC = 1/1-MPS \quad (5)$$

where:

MPC – marginal propensity to consume

MPS – marginal propensity to savings

However, the multiplier works both ways. If the government decreases the provision of public goods, then there will be a decline in GDP equivalent to the multiplier effect, maintaining constant taxes and other influences (*ceteris paribus*). This should be borne in

mind when applying restrictive fiscal policy and reducing spending on public goods.

There are many important aspects other than just the zero marginal cost of consumption. These include, for example, the fear of high income inequality. Limiting consumption is then considered to be socially undesirable, as it would be impossible for less well-off individuals to afford the consumption. For this reason, goods regarded as public include health care or rent-regulated housing, even if the marginal cost of providing such a good is definitely neither zero nor negligible. With regard to the foregoing, Hirshmann (1981) noted that changes in the consumption of public goods also occur due to changes in consumer tastes. He demonstrated that in history, there have been periodic variations favouring one or the other way of providing goods – privately or publicly. When consumers find that private goods do not fully satisfy them, they start focusing more on public goods. However, their expectations often remain unsatisfied even in the public sector and, as a result, consumers again return to private goods after some time.

The concept of public goods was defined similarly by Hyman (1990). He was more concerned with the relationship between the non-excludability and non-rivalry. Non-rivalry is especially a characteristic of pure public goods where quality is indivisible. Consumption by one user does not diminish the possibility of another user to consume the good, i.e. it is impossible to physically reduce the good. At the same time, Bénard (1990) distinguished two characteristics of a good: the manner of its allocation and the manner of its consumption. According to the institutional criteria, Bénard (1990) classified goods as market goods, impurely market goods and non-market goods. The criterion to distinguish between these types of goods is the presence and characteristics of the market price as the allocation mechanism. The price of market goods (which are dominant in mixed economies) is the result of interaction between supply and demand. In the case of institutional classification, a political decision on how to provide the goods is important. In principle, it is possible to decide to provide any good in a non-market way or directly or indirectly intervene in the price and availability of the good. These government interventions may aim to promote as well as discourage consumption. In other words, it is about how the goods reach the consumer, which can be set up by methods other than pricing tools, such as political decisions or legislation.

2. Economic criterion to classify goods

The existence of public goods is one of the signs of market failure. The market system, i.e. the competitive environment, is characteristic for legal or natural people deciding on production, consumption and the allocation of private funds. If the private sector is unable to provide certain services because it is impossible to make a profit, those services must be provided by the State and territorial self-governments (i.e. public administration). This is referred to as “allocation activity”. Providing these public services (goods), which we call pure or mixed, falls under the responsibility of public authorities at the national, regional and local levels. The range of competencies is established by law. It includes the actual public administration, education, healthcare, social services, social housing, justice, police, military, culture and heritage conservation, physical education and sport, science and research, public transport, communications, information systems and media, water management – including the regulation of water flows and other activities – environmental protection, and possibly also energy management (Peková, Pilný and Jetmar, 2008).

The economic criterion considers the way goods are consumed as well as what happens to the benefits provided by the consumption of the goods. It classifies goods into pure public (more specifically, pure collective), mixed and private. McKenzie and Tullock (1978) believed that public goods are those where the benefits provided by the consumption of such goods are shared by a particular group (such as the inhabitants of a country, region, city, etc.) as a whole when the good is provided to or consumed by one person. Examples often include goods such as national defence and efficient public administration at the national level and the traditionally mentioned lighthouses, street lighting or controlled intersections at the local level. Although the classification of criteria to economic and institutional ones is clear and logical, its schema presents a certain problem. Practice, as well as economic papers, often do not distinguish between “non-market” and “public”; more specifically, the term “non-market goods” is generally not used.

The above has been developed and refined by a note made by Malý (1998), previously presented by Sandler (1977), which concerned the fact that only few public

goods are purely public, i.e. those that simultaneously and cumulatively meet the conditions of non-rivalry and non-excludability. For example, if the army is concentrated in the north, people from the south may not be as protected as those in the north. Even the often-mentioned lighthouses were typically operated by the private sector in the past. Therefore, it seems that Samuelson's pure public goods play rather an important role as one of the poles between which there are a large number of real, existing mixed goods.

So the question becomes how to classify these observable goods. One of the many possible approaches is to take into account the characteristics of public goods. The classification then takes the following form as shown in **Table 1**.

Table 1. Schematic classification of goods		
Consumption	excludable	non-excludable
rival	A	B
non-rival	C	D

Source: Author's compilation, 2016

Pure public goods are symbolized by category D. Category A represents pure private goods. Goods falling under category B exhibit rivalry in consumption, but exclusion is difficult or impossible. Freely accessible resources are a good example. Contrary cases are illustrated by category C. These goods are non-rival, although exclusion from consumption is possible. If capacity has not been depleted, the passage of another vehicle over a bridge does not diminish the benefit of the others; however, exclusion can be done relatively easily by introducing toll. The same applies e.g. to theatre performances, pools etc. In these cases, market mechanism can be applied, although it can lead to inefficiency. However, that does not mean that in all these cases market failure must be remedied only by state intervention. The efficient provision of these goods can also be addressed by a private initiative. Developed by Buchanan (1965), the theory of clubs serves as the best example: the theory determines the conditions for the optimal production of category C goods where they are produced within a group of consumers.

According to the manner of distribution and redistribution of public goods, we can, in principle, classify public

goods into pure public and mixed ones. The consumption of pure public goods is automatic by their nature, as they are goods of pure collective consumption (e.g. the army). Their characteristics include, in particular, the impossibility to exactly determine the share of an individual in the consumption of a particular public good, as well as to prevent an individual from consuming the good (that is, an individual cannot be excluded from consumption). This characteristic is referred to as the indivisibility of consumption, which leads to non-excludability and is associated with non-rivalry (i.e. non-competitiveness) among consumers or users of a public good.

The quality of a public good is indivisible. Consumption of a good or service by one user does not prevent other users from the possibility of consuming it. However, excessive consumption of the good may lead to a decrease in its quality for all. An example is the congestion of a road (hence the congestion effect) resulting in slower traffic and other related aspects.

It is impossible to measure the consumption of a pure public good and determine the share of individual consumption, i.e. determine the amount of a "user fee" charged for the good or service. At the same time, the marginal cost of consumption of such a good is zero, or near zero. Stiglitz therefore argued that it is ineffective, as well as socially undesirable, to reduce the consumption of such a good. An example is the introduction of toll to cross a bridge. In this case, it is technically possible to introduce a toll; however, marginal cost (up to the maximum bridge capacity) of an additional car to cross the bridge is zero. Their introduction would only lead to a reduction in the overall social benefit, as part of the drivers would bypass the bridge and congest local roads.

Identically to pure public goods, mixed goods have the nature of collective consumption goods. The benefit from the consumption of such a good is individual. Unlike in the case of pure public goods, it is mostly possible to determine the exact share of a consumer in its consumption. It is therefore possible to determine a kind of "user fee" for consumption. Again, the term "free rider" comes into play, i.e. someone who consumes and uses a service or good without paying. However, quality (or standard) is indivisible. For example, the more pupils in a class, the lower the quality of education (compared to a class with fewer pupils).

Based on the manner of their consumption, mixed goods can also be divided into optional and mandatory

consumption. In the case of optional consumption, consumers may decide whether or not they want to use the service; therefore, they have a choice. For example, they may choose the preferred medical facility or school, whether they will go by public transport or which social service they will use. This is different in the case of mandatory services. Here, the State (i.e. public administration) lays down certain rules, thus determining the manner in which consumers are to use a particular good. An example is the system of basic education which has a mandatory duration, manner, etc.

3. General and special use of goods

As already mentioned above, the legal regulation governing public goods was introduced only on 1 January 2014 in the new Civil Code. Previously, the Administrative Procedure Act only provided for “public use”. The issue of public use relates to both public and private law and represents one of the borderline areas between the two. Public use is understood as the use of generally accessible material goods which corresponds to their intended purpose by an unlimited number of users.

Depending on the creation of the possibility of public use, we can distinguish two types of public use: general use and special use. General and special use are of public nature – the specific use of a material good intended for public use is not affected by the expression of the will of the owner (Hendrych, 2009). The user must also use the good in a way that does not preclude the use by other (even potential) users. Use that might limit the other users to an extent other than usual should be regarded as special use, or as prohibited conduct.

The legal possibility of general use arises directly from the law. Its content can be determined positively, or it may follow from various public-law restrictions relating to the protection of the interests, which have the nature of special interests in terms of the use itself. Alternatively, general use may not be specified by a legal regulation at all. In this case, one can conclude that such use must be usual given the intended purpose determined by the nature of each particular material good. For example, road users are, *inter alia*, obliged to adapt their behaviour to the construction and technical condition of the road. They are obliged to behave considerately and in a disciplined manner not to put the life, health or

property of other persons (i.e. the other road users) at risk.

The creation of the legal possibility of general use for a particular user is not connected to any expression of the will of any public administration executor, i.e. no administrative action.

In contrast, the permission of special use for a particular user is created based on an administrative act issued by the competent administrative authority and is always created for the intended user – the act’s addressee. The content of special use mainly follows from the said administrative act which usually has the nature of a permit. It defines the manner and duration of the special use; the law may also provide for modes – conditions of special use.

Public use concerns material goods – both natural goods and things created through human activity. They may include water, roads, public spaces, landscape, forest, some types of energy, radio spectrum, etc. For example, public places involve squares, streets, marketplaces, pavements, public greenery, parks and other areas accessible to everyone without restriction, i.e. intended for general use, and regardless of the ownership of the area. The definition of a public space (as can be seen) consists of a demonstrative definition of public space under the condition of “accessibility to all without restriction”. The imperative requiring a judicial act to be determinate demands that a generally binding ordinance determine such a space as accurately as possible, i.e. so that its location is specific enough and does not allow multiple interpretations. Public space is thus defined, regardless of the ownership of the immovable property where the public space is located. The designation of private property as a public space by a generally binding municipal ordinance cannot therefore be considered as equivalent to expropriation, or forced restriction of property right within the meaning of the Charter of Fundamental Rights and Freedoms.

Public use can therefore also apply to material goods which are privately owned. These may include parts of public spaces, such as the right to go through a passageway without the obligation of creating an easement. In these cases, public use may be restricted in some way (especially in terms of time – the public use of passageways may not be possible at night, etc.). In the case of certain material goods, the owner of such goods is completely irrelevant. The general use of forests applies both to State- or municipality-owned

forests, as well as to private forests (Hendrych, 2009). For example, everyone has the right to enter into a forest at their own risk, pick berries and collect dry twigs lying on the ground for their own use. In doing so, they are obliged not to damage the forest, interfere with the forest environment and to follow the instructions of the owner or lessee of the forest and his employees. Applicable law also regulates access to the countryside. Everyone has the right to free passage across land in the ownership or lease of the State, municipality or another legal entity as long as they do not cause damage to property or health of another person and do not interfere with the rights to the protection of personality rights or neighbours' rights. In the exercise of such a right, they must comply with the laws and respect the legitimate interests of the owner or lessee of the land. Arable land, meadows and pastures are excluded from this at a time when it may cause damage to the land cover or soil, or during pasture.

4. Financing of public goods

Historical research used public goods as an example to illustrate their existence. Lighthouses save lives and cargo, so it is most effective to provide for lighthouses gratuitously, because warning one ship of a danger costs the same as warning another one (Samuelson, 2010).

When Coase (1974), a British economist, described the history of lighthouses in England and Wales and found out that they were operated by private entities, the original view of lighthouses as a public good somewhat changed. Coase (1974) found that English lighthouses were operated under licenses granted by the king, and were financed by government "light fees" imposed on ships that were using ports in the vicinity. Coase (1974) concluded that, contrary to the view of many economists, the lighthouse service may also be provided by a private entity. In this case, we can see that if the provision of a public good can be associated with another good or service and if the government grants the right to collect fees to private entities, there may be an alternative way of financing the public good (Ochrana, 2011).

At present, public goods are overwhelmingly financed from public funds and their independent existence is predicated on the existence of public finances and the State's ability to allocate resources. This does not mean, however, that they are financed exclusively by these funds. Another way of providing for public goods is

through non-profit organizations that are established for this purpose by the State or local self-governing units, i.e. municipalities or regions. This funding is used in the case of a non-competitive environment where we cannot select a supplier, if the monopoly of a private enterprise is undesirable, or in the case of essential services, particularly preferred public goods for which it is necessary to ensure their absolute reliability (e.g. education).

In the case of public goods, essential aspects also include the public administration authority as well as the type of public funds used to finance the particular good. The State budget (through the Ministry of Transport) is used to finance, e.g., the construction and repair of motorways; by contrast, the construction and repair of 1st-class roads are financed by higher territorial, self-governing units (regions). The same applies to the financing of public universities, secondary schools and primary schools. Public universities are financed from the state budget through the Ministry of Education, Youth and Sports, secondary schools are financed from the budgets of higher territorial self-governing units and primary schools from the budgets of local territorial self-governing units (municipalities).

This financing method also applies in cases where it is impossible to find (e.g. in a selection procedure) a private legal or natural person willing to provide these public goods to citizens (Pospíšil, 2013).

Public goods are also provided through State and municipal enterprises, especially when providing goods difficult to be classified under market goods – the "half-market goods", where the market fails in their provision (an example being the generation of heat or maintenance of greenery) (Strecková, 1997). Another way of financing includes a joint venture, e.g., between two municipalities (micro-regions, voluntary associations of municipalities), or a joint venture between a municipality and the private sector, funding through contracts awarded to the private sector in a competitive environment based on a selection procedure, or funding through the civil sector represented by publicly beneficial organizations.

When providing for various public goods for citizens, the individual levels of public administration establish organizations, which primarily operate on a non-profit basis – these include subsidized organizations, charitable organizations and organisational components of the State, municipalities and regions. The provision of public goods becomes decentralised as the State

delegates its responsibility for the provision of certain public goods to individual levels of territorial self-government.

Conclusion

Public goods are considered a market failure and, in terms of the types of market failures, they represent the most common type of market failure throughout the economy. They have an undeniable society-wide impact and the participation and role of the State or its components as the main provider of public goods has been permanent and undeniable since the 1930s. Before then, public spending was mainly channelled to defence and foreign policy, but since the crisis of the 1930s the State's activities have refocused primarily to the public sector, the provision of public goods and services and to the social area. This is also reflected in the degree of redistribution of allocated resources, which was increasing throughout the 20th century.

When allocating resources and subsequently providing public goods, society, represented by the government, must decide:

- What types of public goods will be provided by each level of public administration;
- What quantities of a particular public good will be provided, or the total population for which a particular public good will be provided to reach "economies of cost sharing" and minimize the loss of the effect of centrally provided public goods;
- What standard of public goods can be provided given the limited amount of public funds.

Mixed goods – meaning those that are irreducible and excludable or reducible and non-excludable – may be and are of a divisible nature (in some cases) and of an indivisible nature (in other cases). Where it is possible to value (quantify) the consumption of a mixed good, it is also possible to determine a user fee per unit of consumption of such a good. Their consumption is then either:

- Optional – individuals can independently decide whether or not they will use the public good (public transport). These types of goods are provided to citizens for a user fee which is modified by price. This is because mixed goods do not pass through the market. They are not provided for profit and therefore they are provided to users for a user fee calculated on a non-profit basis.
- Mandated by the State (the law) – this primarily applies to preferred goods such as basic education. Their financing involves public budget funds. These types of goods are primarily funded from taxes while using redistributive relations within the system of public budgets. Therefore, it is sometimes referred to as redistribution services or redistributed (public or mixed) goods.

The main defining feature of public (and mixed) goods is the nature of their consumption rather than the nature of their production or financing. The consumption of "pure public goods" is fully irreducible among individual consumers making it difficult to exclude anyone from consumption through the price mechanism. The fact that these goods are consumed by all consumers at the same time and in aggregate allows the conclusion that the consumption of one consumer does not reduce the consumption of others. The marginal cost of producing an additional unit of the public good and its use is therefore zero. This characteristic logically leads to a lack of interest of the private sector in the production of such goods as well as the efforts of consumers to participate in the allocation of funds for their financing.

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REFERENCES

1. Arrow, K. (1963), *Social choice and individual values*, 2nd Edition, London, J. Wiley and Sons.
2. Bénard, J. (1990), *Veřejná ekonomika*, Praha, EÚ ČSAV.
3. Benčo, J. and Kuvíková, H. (2011), *Ekonomika veřejných služeb*, Banská Bystrica, Univerzita Mateja Bela, Ekonomická fakulta.
4. Bowen, H. (1943), The Interpretation of Voting and the Allocation of Economic Resources, *Quarterly Journal of Economics*, vol. 58, no. 1, pp. 17-26, DOI: <http://dx.doi.org/10.2307/1885754>.
5. Buchanan, J. and Tullock, G. (1962), *The Calculus of Consent: Logical Foundations of Constitutional Democracy*, Detroit, Michigan University Press.

6. Buchanan, J. (1965), An Economic Theory of Clubs, *Economia*, vol. 32, no. 125, pp. 67-79, DOI: <http://dx.doi.org/10.2307/2552442>.
7. Coase, R. (1974), The Lighthouse in Economics, *Journal of Law and Economics*, vol. 17, no. 2, pp. 357-376, DOI: <http://dx.doi.org/10.1086/466796>.
8. Hendrych, D. (2009), *Správní právo*, 7 vydání, Praha, C.H. BECK.
9. Hyman, D. (1990), *Public finance: A Contemporary Application of Theory to Policy*, Oak Brook, Illinois, The Dryden Press.
10. Malý, I. (1998), Veřejné statky a veřejně poskytované statky, *Politická ekonomie*, vol. XLVI, no. 6, pp. 861-868.
11. McKenzie, R. and Tullock, G. (1978), *Modern Political Economy: An Introduction to Economics*, New York, McGraw – Hill Book Company.
12. Lindhal, E. (1964), *Just Taxation – A Positive Solution. Classics in The Theory of Public Finance*, 3rd Edition, London, Macmillan & Co. Ltd.
13. Mikušová-Meričková, B. and Stejskal, J. (2014), Hodnota statku kolektivní spotřeby, *Politická ekonomie*, vol. 45, no.2, pp. 216-231, DOI: <http://dx.doi.org/10.18267/l.polek.947>.
14. Mises v, L. (2006), *Lidské jednání: Pojednání o ekonomii*, Praha, Liberální institut.
15. Musgrave, R. (1959), *The Theory of Public Finance*, London, McGraw-Hill Book Company.
16. Musgrave, R. (1994), *Veřejné finance v teorii a praxi*, Praha, Management Press.
17. Ochrana, F. (2011), *Ekonomika a řízení odvětví veřejného sektoru*, Praha, Ekopress.
18. Pareto, V. and A. Schiavone. (1927), *Manual of Political Economy*, New York, A.M. Kelley Pubs.
19. Pearce, D. (1995), *Macmillanův slovník moderní ekonomie*, Praha, Victoria Publishing.
20. Peková, J., Pilný, J. and Jetmar, M. (2008), *Veřejná správa a finance veřejného sektoru*, 3. Vydání, Praha, ASPI.
21. Pospíšil, R. (2013), *Veřejná ekonomika – současnost a perspektiva*, Praha, Professional Publishing.
22. Samuelson, P. (1954), The Pure Theory of Public Expenditure, *The Review of Economics and Statistics*, vol. 36, no. 4, pp. 19-32, DOI: <http://dx.doi.org/10.2307/1925895>.
23. Samuelson, P. (2010), *Ekonomie*, 18. Vydání, Praha, Svoboda.
24. Sandler, T. (1977), Impurity of Defence. An Application to the Economics of Alliances, *Kyklop*, vol. 30, no. 3, pp. 37-56.
25. Stiglitz, J. (1986), *Economics of the Public Sector*, W.W Norton Company.
26. Stiglitz, J. (1997), *Ekonomika veřejného sektoru*, Praha, Grada.
27. Strecková, Y. (1997), *Teorie veřejného sektoru*, Brno, ESF Masarykova univerzita.
28. Wicksell, K. (1964), *A New Principle of Just Taxation. Classics in the Theory of Public Finance*, 3rd Edition, London, Macmillan & Co. Ltd.

DATA

1. Charter of Fundamental Rights and Freedoms, Article 11(4)
2. Act no. 114/1992 Sb., on nature and landscape protection, Section 63(2) to (4)
3. Act no. 289/1995 Sb., the Forest Act, Section 19(1)
4. Act no. 13/1997 Sb., on roads, Section 19
5. Act no. 128/2000 Sb., on municipalities (Municipal Constitution Act), Section 34
6. Act no. 361/2000 Sb. on road traffic, Section 4(a).
7. Act no. 500/2004 Sb., the Administrative Code.
8. Act no. 89/2012, the Civil Code, Section 490

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