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# ***PUBLIC ADMINISTRATION***



## **CONDUCTING AND USING MONITORING IN PUBLIC PROCUREMENT CONTRACTS**

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**Abstract:** *Demand is a major potential source of innovation in public procurement contracts, yet the critical role of demand as a key driver has still to be recognised in contracting authorities' policy. This article discusses contract's monitoring as one of the key elements of public procurement contract performance. The paper starts by signalling the requirements of the new European rules in public procurement. It then defines the public procurement contract and embeds this concept within the taxonomy of monitoring. The rationales and justifications of public procurement monitoring to spur performance are discussed, followed by a consideration of the challenges of contracting authorities in institutionalising it. The aim of this paper is to develop a framework for measuring the performance of public procurement contracts. It also provides significant insights into the development of key performance indicators for measuring the performance of a contract.*

**Keywords:** *contract management, life-cyclefactors, performance indicators.*

### **INTRODUCTION**

The purpose of this paper is to study ways in which contracting authorities can improve their performance through public procurement contract management. While public procurement legislation is under change in Romania and the National Agency tries to implement standard frameworks, contracting authorities should evaluate their aim - the public interest, and the desired quality of goods, services and works necessary to acquire.

Like any other organization, it has become essential for public organizations to measure their performance effectively. Therefore, it is imperative for them to know about various performance measurement factors that influence their performance. However, our study is focused more on the public procurement contract performance and on identification of factors for measuring performance. In the Romanian system of public procurement we have a significant variation among the contracts used by the contracting authorities and most of them do not have performance indicators included. Our research hypothesis is that even if, in the Romanian public authorities we do not have a culture of performance based on key performance standards and indicators, public procurement contracts cannot be consider anymore without them. The findings may allow refinement of existing contract awarding strategies and of current regulations. We conclude that economic operators could benefit from monitoring contract using performance approach rather than seeking to acquire more new contracts.

## **THE CENTRALITY OF PERFORMANCE IN THE PUBLIC PROCUREMENT DIRECTIVES**

More than any other public sector issue the public contract supports the influence of the European Union (EU) law to varying degrees, depending on the ‘phase’ the contract is in. The public procurement contract’s strategy can be divided into three phases: (1) the definition of a need for a good, service or work, (2) the procurement procedure leading to the award of the contract, and finally (3) the contract management. (Cărăușan, 2017) As we already mentioned our interest for this paper is for the third phase, more precisely the importance of monitoring in public procurement process. The Directive 2014/24/EU brought innovations on procedural rules on negotiation, on the regime of contracts for certain social and health and some other services, on the electronic procurement technique, on the rules on social and environmental aspects, on the safeguards from corruption and on the ones to enhance small and medium enterprises participation. Besides these, now for our interest is the performance of the contract and the key performance indicators.

According to the Directive 2014/24/EU the contracting authorities may “lay down special conditions relating to the performance of a contract, provided that they are linked to the subject-matter of the contract<sup>1</sup>”. Special conditions may will include economic, innovation-related, environmental or social considerations if they have been foreseen in the initial procurement documents.

The Court of Justice of the European Union (CJEU) recently quashed the use of this provision in the minimum wage requirements, see *Bundesdruckerei C-549/13*<sup>2</sup> and in the environmental requirements, see the *Dutch Coffee C-368/10*<sup>3</sup>. In *Bundesdruckerei* case according to paragraph 28<sup>4</sup> CJEU stated that the minimum wage requirements can be classified as “special conditions relating to the performance of contract”, in particular “social ... considerations” only to the extent to a which is compatible with the Community/EU law. Likewise, in paragraph 36<sup>5</sup> of the same decision it was established that in the situation of a

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<sup>1</sup> Article 70 of the Directive 2014/24/EU

<sup>2</sup> Case 549/13 *Bundesdruckerei GmbH and Stadt Dortmund* available at <http://curia.europa.eu/juris/document/document.jsf?text=&docid=157851&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=240317> retrieved on December 12, 2017.

<sup>3</sup> Case 368/10 *European Commission and Kingdom of the Netherlands* available at <http://curia.europa.eu/juris/document/document.jsf?text=&docid=122644&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=222031> retrieved on December 12, 2017.

<sup>4</sup> Paragraph 28 of the Case 549/13 *Bundesdruckerei GmbH and Stadt Dortmund*: “In addition, although, as the European Commission maintains, the public contract at issue in the main proceedings appears, in the light of its objective and the amount of the contract, to come within the scope of application of Directive 2004/18, and assuming that the requirements relating to the minimum wage laid down in Paragraph 4(3) of the TVgG-NRW can be classified as ‘special conditions relating to the performance of a contract’, in particular ‘social ... considerations’, which are ‘indicated in the contract notice or in the specifications’, within the meaning of Article 26 of that directive, the fact remains that, in accordance with that latter provision, such requirements may be imposed only to the extent to which they are ‘compatible with Community law’.”

<sup>5</sup> Paragraph 28 of the Case 549/13 *Bundesdruckerei GmbH and Stadt Dortmund*: “In the light of all of the foregoing, the answer to the question referred is that, in a situation such as that at issue in the main proceedings, in which a tenderer intends to carry out a public contract by having recourse exclusively to workers employed by a subcontractor established in a Member State other than that to which the contracting authority belongs,



tenderer which carry out a public contract with employees of a subcontractor from another Member State the contracting authority may require the subcontractor to pay its workers a minimum wage fixed by the state legislation of the authority.

As it concerns the decision of the Court in the Case 368/10, paragraph 102<sup>6</sup> clarifies the ‘criteria of sustainability of purchases and socially responsible business’ to which a tenderer must comply as condition of contract performance and consider it, at the Commission submission, a general policy related to the technical and professional ability of the tenderer. Moreover, in recital 104<sup>7</sup> of the Directive 2014/24/EU, the Commission shapes the contract performance as fixed objective requirements which have no impact on the assessment of tenders and they should not be directly or indirectly discriminatory and are linked to the subject-matter that comprise the entire life cycle of goods, services and works. Everything is under the condition of being in the contract notice, the prior information notice used as a means of calling for competition or the procurement documents.

The solution set out in the text of the Directive is relatively friendly for contracting authority, but it might be misinterpreted. Competition could be distorted and equal treatment not guaranteed by means of the introduction of requirements that are not possible to validate at tender evaluation stage by the contracting authority. The distortion might be in the ex-ante compliance of tenderer and the breach of the contract clauses ex-post by being subject of penalties or other remedies. On the other hand, the Directive states, the situations in which the economic operator “has shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity or a prior concession contract which led to early termination of that prior contract liability for damages or other comparable sanctions”<sup>8</sup> are foreseen as motive for the exclusion. Even though, it is allowed that any applicant who finds itself in this situation “may provide evidence to the effect that measures taken by the economic operator are sufficient to demonstrate its reliability

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Article 56 TFEU precludes the application of legislation of the Member State to which that contracting authority belongs which requires that subcontractor to pay those workers a minimum wage fixed by that legislation.”

<sup>6</sup> Paragraph 102 of the Case 368/10 European Commission and Kingdom of the Netherlands: “The parties disagree regarding the classification of the requirement at issue, according to which the tenderers must comply with the ‘criteria of sustainability of purchases and socially responsible business’, inter alia by contributing to improving the sustainability of the coffee market and to environmentally, socially and economically responsible coffee production. The Commission submits that that requirement concerned the tenderers’ general policy and therefore related to their technical and professional ability within the meaning of Article 48 of Directive 2004/18. By contrast, according to the Kingdom of the Netherlands, that requirement applied to the contract at issue, meaning that it was a condition for performance of the contract within the meaning of Article 26 of that directive.”

<sup>7</sup> Recital 104 of the Directive 2014/24/EU: “Contract performance conditions are for laying down specific requirements relating to the performance of the contract. Unlike contract award criteria which are the basis for a comparative assessment of the quality of tenders, contract performance conditions constitute fixed objective requirements that have no impact on the assessment of tenders. Contract performance conditions should be compatible with this Directive provided that they are not directly or indirectly discriminatory and are linked to the subject-matter of the contract, which comprises all factors involved in the specific process of production, provision or commercialisation. This includes conditions concerning the process of performance of the contract, but excludes requirements referring to a general corporate policy. The contract performance conditions should be indicated in the contract notice, the prior information notice used as a means of calling for competition or the procurement documents.”

<sup>8</sup> Article 57, paragraph 4 (g) of the Directive 2014/24/EU.

despite the existence of a relevant ground for exclusion”<sup>9</sup>. This aspect must not be neglected by the contracting authorities when they select a tender and think of the contract management.

This new integrated vision of the Directive may open the way to significant improvements in the Romanian public procurement market. Consequently, the contracting authority should not forget about the limits of such a clause in the procurement process. The clause should be established in a way which do not disturb the competition and the equal treatment is guaranteed. Procurement management is traditionally considered as the most valuable part of procurement process affecting many aspects of the organizational performance. Even if, the tendency to measure the contract based on criteria of time, cost and quality do not accommodate, anymore, to the complexity of life-cycle performance we will start the research from these criteria. In future researches we will try to study how a contracting authority could ensure that the procured assets (goods, services and works) are ‘future proofed’.

### **WHY MONITORING OF PUBLIC PROCUREMENT CONTRACT AND NOT JUST THE ADMINISTRATION OF IT?**

Legal scholars look at the public procurement contract through the lens of the administrative contract and usually identify instruments in the “regulatory toolkit” to address the administration of the contract. Closely connected with the market requirements and the need to accomplish the wider public interest with goods, services and works with a better quality, we will enhance in this section the necessity of monitoring based on the contract performance requirements. In a competitive market, a supplier can choose not to meet or follow the standard, and simply decide not to do business with the contracting authority imposing the performance standard. Viewed in this light, procurement shares some features with the market-leveraging approach of subsidies (Light and Orts, 2017:4). As we mentioned before, the substantive Directives 2014/24/EU, 2014/25/EU and 2009/81/EC allow contract performance conditions, as long as these comply with EU rules and are indicated in the procurement documents.

To fully understand what performance standards and indicators are, the first step is to know what performance is. Neely et al. (2005), defines performance measurement as: “the process of quantifying the efficiency and effectiveness of action”, and performance measure as, “a metric used to quantify the efficiency and/or effectiveness of an action”. Furthermore, in literature is stated that performance might act as a motivation driver and a driver for continuous improvement and help achieve strategic objectives (Olsen et al., 2007). The answer for procurement performance might be found in the factors which influence the entire procurement process. Among them the quality and quantity ones (Q-factors), are the most common used and provide to the contracting authority a better tracking of the variation between the desired good, service and work and the actual one, the received one. It enhances accuracy in the process and decreases deviation from contract clauses. The purpose of quality factor is to verify existence, relevance and comprehensiveness of the standards established in procurement documents. A common error in the Q-factors is deviation in the amount received and the amount in the purchase order.

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<sup>9</sup> Article 57, paragraph 6 of the Directive 2014/24/EU.

The Q-factors are followed closely by the time one (T-factor), which measures how often there are deviations of the contract clauses, how much extra time is required to correct them or how often there are deviations on the invoices received that require extra work. The T-factor is about the entire life-cycle of the goods, services and works procured by the contracting authority and it is directly influenced by the life-cycle costing (LCC). The LCC methodology is an instrument for assessing the costs over time. The Directive 2014/24/EU<sup>10</sup> in art. 67 paragraph 2<sup>11</sup> corroborated with art. 68<sup>12</sup> recommends the use of life-cycle costing methodology which evaluates all of the costs over the life-cycle of works, goods and services. We recommend the use of the LCC methodology by the contracting authority, but, as we already mention, in the present research we will not study it.

Equally important, as we demonstrate above for the Directives outlook, are the ones which concerns sustainability – either they are financial, social and/or environmental (S-factors). The procurement budget and financial factors are the most common factors used as trigger of contracting authority decision to terminate a contract. Life-cycle costing methodology in public procurement helps to support sustainable growth. The contracting authorities are becoming far more aware of the fact that the life-cycle costing represents a better indicator of value for money than the price alone. Besides, the conventional approach of the life-cycle as financial assessment, the environmental one gets ahead, with the support of the CJEU case law (see the above section). The environmental impact may entails significant costs for the contracting authority in certain circumstances, even if, they are external and not directly born as the financial one. In general, materials and products used for services or constructed facilities, may have environmental impacts (e.g. emission of greenhouse gases) due to the processes done during the life-cycle of them, such as: manufacture, transport, assembly/disassembly, maintenance and disposal. A comprehensive LCC analysis also takes into consideration the life-cycle costs of reducing environmental impacts in the society. Because, generally, the contracting authority is a public institution which has as main purpose the accomplishment of wider public interest the social impact of procurement process should also be considered. The social impact could be analysed directly through specific indicators or through the financial or environmental ones. Anyhow, the

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<sup>10</sup> The same life-cycle costing rules and definitions apply under the special sectors Directive. The classical sector Directive and the special sectors one have parallel provisions: the text of articles 82 and 83 of the last is identical to the text of articles 67 and 68 of the first one.

<sup>11</sup> “The most economically advantageous tender from the point of view of the contracting authority shall be identified on the basis of the price or cost, using a cost-effectiveness approach, such as life-cycle costing in accordance with Article 68, and may include the best price-quality ratio, which shall be assessed on the basis of criteria, including qualitative, environmental and/or social aspects, linked to the subject-matter of the public contract in question.”

<sup>12</sup> “Paragraph 1. Life-cycle costing shall to the extent relevant cover parts or all of the following costs over the life cycle of a product, service or works: (a) costs, borne by the contracting authority or other users, such as: (i) costs relating to acquisition, (ii) costs of use, such as consumption of energy and other resources, (iii) maintenance costs, (iv) end of life costs, such as collection and recycling costs. (b) costs imputed to environmental externalities linked to the product, service or works during its life cycle, provided their monetary value can be determined and verified; such costs may include the cost of emissions of greenhouse gases and of other pollutant emissions and other climate change mitigation costs. Paragraph 2. Where contracting authorities assess the costs using a life-cycle costing approach, they shall indicate in the procurement documents the data to be provided by the tenderers and the method which the contracting authority will use to determine the life-cycle costs on the basis of those data.”

social costs are measured based on the burdens brought by the procured goods, services and works to the public services.

The QTS-factors foresee the inaccuracy of goods, services and works delivered in a procurement contract and if they are not monitored, they may influence the goals of the contracting authority, and probably the wider public interest. They should be tracked by all contracting authorities because in terms of performance they assess the five E-criteria – economy, efficiency, effectiveness, ethics and employees' empowerment (QTS-E). Besides, they stand for an efficient, effective, ethical, economical and empowered contracting authority, they back up the modification of the contract (see, for more on modification of public procurement contracts, Carausan, 2017).

Economy focuses on paying the cheapest price for similar goods, services and works, whereas efficiency is getting the maximum output of goods, services and works for a given input of resources or minimizing the input of such public resources for a given output of the procurement procedure (Sigma Brief 28, 2016:2). As Peter Drucker indicated there is no efficiency without effectiveness, because it is more important to do well what you have proposed (the effectiveness) than do well something else that was not necessarily to (Drucker, 2001, p.147). So, effectiveness assesses whether the performance obtained meets the objectives that were set, while ethics is about the conflict of interests and corruption prevention. The added empowerment criterion is much more important for the Romanian public procurement system than for other European countries, because even the public employees are the ones called to implement the entire procurement process the public authority leaves their training and the costs of it on their shoulders. The employee should be ready to undertake procurement activities on an ad-hoc basis grounded on the knowledge they have or on the access to professional staff who can provide this knowledge. Moreover, delegation of authority and responsibility is the key for having a well-functioning system especially when procurement is decentralized. If delegation is not provided, it can lead to the concentration of decision making under few individuals who have neither the training nor knowledge to take procurement decisions. Between the employees' knowledge and the contract performance there is a systematic matching.

For assessing the E-criteria, but not limited to them, the contracting authority must define a set of responsibilities which may include: drafting the documents of the procurement process; providing advice to economic operators; managing public procurement and developing contract management plan; reporting on procurement to other institutions/organisations; providing instruments and mechanisms for monitoring and evaluation, and supporting employees' training and knowledge development. The purpose of this last competence is to assess the degree of professionalism and knowledge of those responsible for implementation of procurement process. Everything should be backup by a system for safekeeping of all records and documents, elaborated and agreed in the procurement process. The QTS-E measurements in the contract management are the ones which take us beyond the simple administration of the contract. The QTS-E lead us to the implementation of the Key Performance Indicators (KPI) in the public procurement contracts as the answer to the contract performance. Most purchasing contracts include specific indicators, but most of the time they are buried in the contract details and poorly

tracked (see for example the projects of the framework contracts established by the Romanian National Agency for Public Procurement<sup>13</sup>).

Contract performance will be measured against KPIs and associated criteria which must be upon the beginning of the procurement process advanced and agreed.<sup>14</sup> Monitoring throughout the implementation of public procurement contract indicates the compliance degree of the parties, contracting authority and economic operator, with the KPIs. Monitoring aims to collect data during the implementation of the contract, mainly to answers to questions such as: how much has been spent, what are the goals achieved so far, who are the beneficiaries, are there differences between the proposed timetable and the actual one? Monitoring refers to the entire evolution of the contract, and it helpsthe contracting authority, and also the economic operator, in: providing qualitative observations and data on how well the goods and services are delivered or the works performed; verifying the achievement of the results/needs through the goods, services and contracted works; determining the degree of need to be reached as a result of the activities carried out by the supplier, provider, executor; determining the impact of the goods, services and works on the contracting authority's activity (e.g. providing better services to customers/citizens).

## **THE QUEST FOR KEY PERFORMANCE INDICATORS**

Procurement operates have become a lot more structured and systematic during recent years and there are well defined instructions for how the decisions in regard to design changes should be made. Evens so, procurement does not create the plans or the forecasts, but order the quantity specified in annual or multiannual procurement plan. It is important that key performance indicators to be identified, in procurement documentation, and the assessment of them to be a requirement of the contract. This may be required for subcontractor(s) also. Moreover, key performance indicators may be of particular importance where the contract stipulates that the contractor will be rewarded or penalised based on their performance relative to certain indicators.

The “quest” for KPI in public procurement contracts should be done under few limits which we recommend to contracting authority to consider them when wants to enact performance indicators. Among them we can mention:

- only performance indicators that are really important to the authority must be select to be included in the contract. Each indicator must reflect concrete benefits for the contracting authority.
- use simple indicators, it is not advisable to use complex performance indicators which require sustained work to determine them (such as the organization of complicated research and analysisetc.)
- each indicator must be easy to understand by the supplier. For example, using the "document delivery time to contracting authority or other beneficiary" parameter does not fully reflect the

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<sup>13</sup> They can be retrieved in Romanian at <http://anap.gov.ro/web/category/transparenta-decizionala/proiecte-in-consultare/?future=false>.

<sup>14</sup>In the Law no.98/2016, which transpose the Directive 2014/24/EU, it is stated in art. 221, paragraph 11 that the performance and quality conditions cannot be subject to the modification of public procurement contract, along with other elements of it.

tender's activity, as the delivery of documents is often carried out by courier companies. In this context, the "timeline for transmission of documents to the courier company" is more appropriate.

- performance indicators must not be subjective, but they must be appreciated and measured. For example, for the use of the "quality" indicator, the measurement scale and the compliance criteria against the required parameters must be provided. Several compliance factors should be used to assess the activity (such as the percentage ratio vs. the expected result). Even if, the tender exceeds the time terms or made a mistake in the quality and/or quantity of goods, services or works, should be aware of the fact that the payment(s) are done only after the correction of them. Moreover, remedies may be established by the contracting authority. The payment of economic operator(s) is a control in itself, but the power that contracting authorities have at this stage of the procurement process must not be used to unjustly delay or withhold payment to economic operators that have delivered the goods, services and/or completed the work (Sigma Brief 22, 2016:6).

- the task of regularly reporting the status of the main performance indicators should be done by the tenderer. In this way, the time allocated for calculating the indicators will be reduced, and the economic operator will be stimulated to better fulfil its obligations.

- flexibility to change performance without going through a new procurement procedure might be necessary in order to fulfil needs and obtain savings, but such flexibility could also represent a distortion of the competition and a breach of the equal treatment principle. Such flexibility, according to the Romanian public procurement rules is not allowed.

During the public procurement process a contracting authority puts a lot of time and effort into identifying reliable economic operator(s), negotiating favourable terms, and ensuring a strong basis for the award decision. Despite the best preparations, however, existing contracts often require modifications either based on the compliance with QTS indicators, or on the requirement of additional works; tender's demand for higher prices, subcontractors change. The contract terms and conditions should include mechanisms to cope with permitted modifications during the life of the contract. Currency fluctuation clauses and price indexation clauses are common examples where the need to make a modification can be foreseen and accommodated within the contractual clauses (Sigma Brief 22, 2016:5). Using KPIs for performance measurement ensures contracting parties that the contract is always under evaluation. This means that contract fluctuations are immediately visible and if performance is not reached, quickly the situations are redressed.

In procurement contracts, unlike any other activities, when the KPI shows that performance is consistently meets or exceeds the required level, the contracting authority cannot decide to raise the bar and set a higher standard to aspire to. For this reason, KPIs are essential for monitoring of the contract and not for the improvement of the contracting authority procurement process, at least not when it is underdevelopment. But, KPIs provide visibility of contract performance and allow objective ex-post evaluation of the contract and supports ex-ante evaluation of future procurement processes. When aligned with procurement goals of the contracting authority, KPIs take away the guess work and enable focus on progress towards the goals. A regular planning exercise instituted by law, or Directives, and trailed with KPIs augment a better preparation of multiyear plans for the contracting authorities, from which

annual procurement plans and estimation of the associated expenditures are derived and culminates to the contracting strategies.

## **CONCLUSIONS**

Nowadays the biggest challenge for most of the Romanian public institutions is a real and substantial application of performance measurements. Definitively, it is necessary to pursue performance through the measurements of specific indicators and control the variables that influence the state public procurement system issues. The aim of this paper was to contribute to the development of a comprehensive, yet practical and reliable tool for a systematic public procurement contract assessment, based on key performance indicators. The recommendations are according to the new regulatory procurement system of the EU. The outcome is an integrated analysis on the necessity to implement the contract monitoring based on key performance indicators.

As pillar of our research was in large the issue on how to conduct and use monitoring in public procurement contracts. And, in order to use it contracting authorities are advised to have standard procedures in place for the monitoring activities and to seek advice from other competent authorities in the case of large or complex contracts. Once the contract has been concluded, public procurement regulations are no longer applicable. In this phase the monitor may focus only whether the contract is duly executed, while safeguarding the rights of the public authority or may see the influences produced on the goals of the organisation or on wider public interest. Romanian public authorities do not have the culture of performance measurements and many of them may face the challenge of implement them. For this, the pro-active role in elaborating a Guide for contracting authorities, and also for the economic operators, on how to use the key performance indicators in public procurement contracts and to manage, in general, a contract through monitoring is longed-for in the Romanian system.

Public procurement performance measurement systems and indicators allow public employee to check the E-criteria and provides for the wider public data that are required for the analysis of the public sector performance. The performance measurement based on E-criteria is a must in this area of knowledge, either with the development of specific methodologies or to traditional performance measurement. The performance measurement in public procurement system cannot be imposed by law or by economic operators. The performance interdependency within the national system, the contracting authority and the contract monitoring must internalised, even if, the needs, objectives and methodologies for measuring contract performance at each level can differ.

## **References**

1. Cărăușan, M.V. (2017). The Public Procurement Contract – Mandatory Clauses, Romanian International Law Review, volume VII - December, Special Issue - Law and Administrative Justice from an Interdisciplinary Perspective.
2. Directive 2014/24/EU of the European Parliament and of the Council, of 26 February 2014, on public procurement and repealing Directive 2004/18/EC, Official Journal of the European Union L 94/65 of March 28, 2014.

3. Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC Official Journal of the European Union L 94/65, of March 28, 2014.
4. Directive 2009/81/EC of The European Parliament and of The Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security, and amending Directives 2004/17/EC and 2004/18/EC, Official Journal of the European Union L 216/76, of August 20, 2009.
5. Drucker, P. (2001). Eficiența factorului decizional [The efficiency of the decision makers], Bucharest, Destin.
6. Law no.98 on public procurement, Official Journal of Romania no. 390 of May 23, 2016
7. Light, S.E. and Orts, E.W. (2017). Public and Private Procurement in Environmental Governance (draft chapter for publication in the forthcoming Encyclopedia of Environmental Law (Edward Elgar), volume on Policy Instruments in Environmental Law eds. Ken Richards & Josephine Van Zeben.
8. Neely, A., Gregory, M. &Platts, K. (2005). Performance measurement system design: A literature review and research agenda, International Journal of Operations & Production Management, vol. 25, no. 12, pp. 1228-1263.
9. Olsen, E.O. et al.(2007). Performance measurement system and relationships with performance results. International Journal of Productivity and Performance Management, 56(7), pp. 559–582.
10. Sigma Brief 22 (2016).Public Procurement – Contract Management, OECD and EU, available at <http://www.sigmaweb.org/publications/Public-Procurement-Policy-Brief-22-200117.pdf>
11. Sigma Brief 28 (2016). Public procurement – Audit of Public Procurement, OECD and EU, available at <http://www.sigmaweb.org/publications/Public-Procurement-Policy-Brief-28-200117.pdf>



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# ***FINANCE***



## **INTEGRATED REPORTING IN EUROPE – FROM VOLUNTARY TO MANDATORY?**

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**Abstract:** *Nowadays, the regulators set out new rules for the financial and non-financial reporting because of the pressure of the stakeholders. On the other hand, a lot of information is published voluntary as a policy of the companies. Applied on a mandatory or a voluntary basis, integrated reporting provides at least two advantages: correlation financial - non-financial information (for stakeholders) and reputation (for companies). In the last years, European regulators try to emphasize the importance of non-financial information (especially the environmental and social aspects) for an appropriate understanding of the company's development, performance or position. In this context, European Parliament and the Council have adopted new rules for companies concerning the information they must publish. Within the current paper, we provide a description of the new European rules on companies reporting, an overview of the most recent literature related to integrated reporting and a longitudinal analysis of the European companies that registered their annual reports in the Global Reporting Initiative's Sustainability Disclosure Database.*

**Keywords:** *Integrated reporting, GRI, financial and non-financial information, CSR, regulation.*

### **1. INTRODUCTION**

Traditional, company reporting has been perceived as similar to financial reporting. But, in the last years, there has appeared a strong belief that the financial reports do not offer a complete view of the different dimensions of corporate activities and performance (Simnett *et al.*, 2009). For this reason, many companies have decided to disclose non-financial information, especially regarding social and environmental concerns, termed sustainability reports. Even if in the great majority of the world wide countries does not exist regulation requiring mandatory disclosure of this information, many companies publish their sustainability reports voluntarily. Some authors (Cho *et al.*, 2013) appreciate that this voluntary disclosure is a viable mechanism through which firm-specific information improves its usefulness and accuracy.

Nowadays, the question is no longer whether companies should disclose information on material sustainability risks and opportunities. It is about how they can improve the effectiveness of the disclosures they are already making. So, it is not about more disclosure, but better disclosure. The companies should view sustainability disclosure as an opportunity to tell their full value creation story and not as an obligation. But, despite the increasing tendency to publish sustainability reports, and although their size is growing, the utility and credibility of the reports have not increased, perhaps due to a lack of a link between financial and non-financial data published by companies.

The idea of managing, measuring and reporting the three elements of an organization's social, environmental and economic impacts gained prominence during the late 1990s and early

2000s (Dumay *et al.*, 2016). In this context, Integrated Reporting (<IR>) has been promoted as a solution to the shortcomings of financial reporting that will facilitate the development of reporting over the coming decades (IIRC, 2011). In fact, “economic, environmental, and social activities are linked, and their connections have the potential to create amazing value” (Eccles & Krzus, 2014: X).

## 2. LITERATURE REVIEW

In the last decade, at the international level, the movement toward better practices in corporate reporting has been strong and fast. The International Integrated Reporting Council (IIRC) was formed in 2010 and the Sustainability Accounting Standards Board (SASB) in 2011. In 2013, Global Reporting Initiative (GRI) released G4 Guidelines and IIRC published “The International <IR> Framework (<IR> Framework). An important event in this context was the first “IFRS & GRI Dialogue” which took place at Sao Paulo University, Brazil, in May, 2010, where <IR> was extensively debated.

Like many others good and innovative ideas, integrated reporting began in practice. The earliest integrated reports have been published by two Danish companies, Novozymes and Novo Nordisk, and a Brazilian company, Natura. The reason of this change in the reporting process for all of three companies was the recognition of a new reality: in the present, sustainability issues are essential to the long-term success of the business, and integrated reporting is the best way to communicate about this (Eccles & Krzus, 2014).

The International Integrated Reporting Council (IIRC) defines IR as “a process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation. An integrated report is a concise communication about how an organization’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term” (<IR> Framework, 2013: 33).

A strong argument of need for integrated reporting is that the existence of sustainability reporting as a separate reporting risks obfuscating rather than improving both financial and social and environmental performance of companies, either because it suggests conflicting or confused corporate objectives, or because sustainability reporting is in some way represented as non-core to the business (Eccles & Serafeim, 2013).

According to the <IR> Framework (IIRC, 2013: 16), the Guiding Principles are applied individually and collectively for the purpose of preparing and presenting an integrated report, informing the content of the report and how information is presented. Table 1 offers a short description of the Guiding Principles of Integrated Reporting.

**Table 1 The Guiding Principles of Integrated Reporting**

Principles	Meanings
Strategic focus and future orientation	An integrated report should provide insight into the organization’s strategy, and how it relates to the organization’s ability to create value in the short, medium and long term and to its use of and effects on the capitals.
Connectivity of information	An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization’s ability to create value over time.

Stakeholder relationships	An integrated report should provide insight into the nature and quality of the organization’s relationships with its key stakeholders, including how and to what extent the organization understands, takes into account and responds to their legitimate needs and interests.
Materiality	An integrated report should disclose information about matters that substantively affect the organization’s ability to create value over the short, medium and long term.
Conciseness	An integrated report should be concise.
Reliability and completeness	An integrated report should include all material matters, both positive and negative, in a balanced way and without material error.
Consistency and comparability	The information in an integrated report should be presented: <ul style="list-style-type: none"> <li>• On a basis that is consistent over time;</li> <li>• In a way that enables comparison with other organizations to the extent it is material to the organization’s own ability to create value over time.</li> </ul>

Source: IIRC, 2013: 16-23

The main purpose of these principles is to recognize the variation in individual circumstances of different organizations and to make possible an adequate degree of comparability across organizations. In this context, can be observed that <IR> Framework doesn’t focus on the identification of performance indicators, but it is driven by integrated thinking which should lead to integrated decision making toward the creation of value. Despite of the effort to develop the Guiding Principles of Integrated Reporting, the companies do not engage with IR as there is a perceived lack of interest shown by the investment community (Cheng *et al.*, 2015). On the other hand, there are studies suggesting that firms struggle to provide concise, complete and balanced integrated reports. In the same time, because the integrated reporting is a relatively new idea, there is necessary to achieve its full potential in terms of improving disclosure quality (Melloni *et al.*, 2017). Similar conclusions resulted from a study realized by Investor Responsibility Research Centre Institute (2013): “in the United States, although nearly all S&P500 firms made at least one sustainability related disclosure in their financial reports, only seven of these firms (less than 2 % of S&P500 firms) integrated their financial and non-financial information” (Lee & Yeo, 2016: 1222)

To comply with these principles, one of the proposed solutions is to combine two major concepts: integrated sustainability reporting and performance control using XBRL – integrated reports (Seele, 2016). Anyway, the IIRC anticipates that Integrated Report will be a single report, replacing rather than adding to traditional existing requirements. An Integrated Report is built around eight content elements that must answer to the question posed for each of them (see Table 2).

**Table 2 The Content Elements of Integrated Reporting**

Elements	Question
Organizational overview and external environment	What does the organization do and what are the circumstances under which it operates?
Governance	How does the organization’s governance structure support its ability to create value in the short, medium and long term?
Business model	What is the organization’s business model?
Risks and opportunities	What are the specific risks and opportunities that affect the organization’s ability to create value over the short, medium and long term, and how is the organization

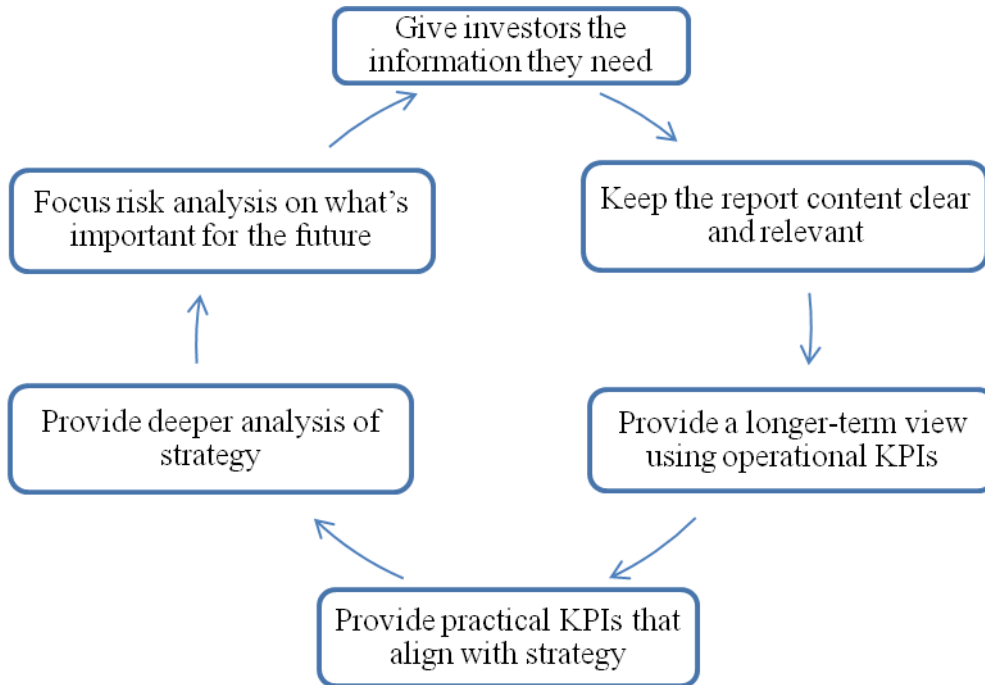
	dealing with them?
Strategy and resource allocation	Where does the organization want to go and how does it intend to get there?
Performance	To what extent has the organization achieved its strategic objectives for the period and what are its outcomes in terms of effects on the capitals?
Outlook	What challenges and uncertainties is the organization likely to encounter in pursuing its strategy, and what are the potential implications for its business model and future performance?
Basis of preparation and presentation	How does the organization determine what matters to include in the integrated report and how are such matters quantified or evaluated?

*Source: IIRC, 2013: 24-33*

Considering the last principle, the IIRC established a General reporting guidance. Despite the efforts of the IIRC to define principles for Integrated Reporting and to establish what kind of information must be content into Integrated Reports, the essence of the research question on this topic was very simply stated by Alexander & Blum (2016: 241): “How can we provide a full understanding of the current disappointment of sustainability reporting, in such a way as to identify new avenues for future actions?” The response has been given by the advocates of the new reporting trend (Cho et al., 2013; Eccles & Serafeim, 2013; Middleton, 2015). They sustain that the adoption of an Integrated Reporting approach is expected to improve the quality of information for providers of financial capital and to promote a more cohesive and efficient approach to corporate reporting by connecting previously disconnected pieces of financial and sustainability information (Baboukardos & Rimmel, 2016). In fact, Integrated Reporting seeks to offer a more holistic picture of the modern company shifting away from standalone sustainability or social responsibility reports toward a document that communicates a broader picture of business model value creation (KPMG, 2013). Nevertheless, only 3% of company annual reports that include corporate responsibility information qualify as integrated reports under the IIRC framework (KPMG, 2013), while 73% and 71% of companies in Europe and the Asia Pacific, respectively, already release some form of non-financial reporting.

In 2016, KPMG International realized a Survey of Business Reporting (KPMG International, 2016) which presents the main findings from a global analysis of the content of 270 larger listed companies’ reports, with the purpose to highlight weaknesses and identify good practices in the presentation of corporate information. The main findings are presented in the Figure 1.

**Figure 1 The characteristics of a good corporate reporting**



Source: Own Processing based on KPMG International, 2016: 4-5

At the European level, the debate on the topic of Integrated Reporting has grown as a consequence of IIRC initiative to discuss the proposal for Integrated Reporting Framework.

### 3. RESEARCH METHODOLOGY

This paper aims to identify and underline the most recent international integrated reporting studies and practices and also to analyze the state of the art in integrated reporting in the Europe from two points of view: first, from the perspective of the debate on the necessity of adoption <IR> as a referential for corporate reporting in Europe, and second, from the perspective of European companies practices in the process of disclose financial and non-financial information respecting the requirements of <IR> Framework.

At the beginning, are presented the current requirements and perspectives of integrated reporting from the IIRC website, and are analyzed the main researches and results of the representative studies on the topic <IR>. A very important part of this the research is represented by the analysis of the debate from Europe about the <IR> and by an analysis aimed to measure the degree of compliance with the principles formulated in the <IR> Framework by the European companies in the process of preparing annual reports and to identify the type of the companies who publish integrated reports. The data have been collected from the Global Reporting Initiative's Sustainability Disclosure Database and processed using the facilities provided by the Microsoft Office – Excel Pivot Tables. The analysis enabled us to describe and explain the

identified tendencies in the debating process about <IR> in Europe and in the European corporate reporting.

In order to measure the degree of compliance with the principles formulated in the <IR> Framework by the European companies, we started from the Global Reporting Initiative's Sustainability Disclosure Database (available at [https://www.globalreporting.org/services/Analysis/Reports\\_List/Pages/default.aspx](https://www.globalreporting.org/services/Analysis/Reports_List/Pages/default.aspx)), which comprises GRI reports published over the last eighteen years (1999-2016). The database that we used in our study comprises (for the first two years) the following categories of information: data about the reporting organization (its name, size, sector, country, country status, region), data about reports (date added, title, publication year, type, report Pdf address, report Html address). For the period 2001-2008 the data about reports have been completed by adherence level and status of the report. In 2009, have been added data about the sector supplement. 2010 was the first year when in the database the attribute integrated is assigned to the reports if the case. From 2012, the data about report became more analytical because have been added new fields: external assurance, type of assurance provider, stakeholder panel/expert opinion, assurance scope, level of assurance, assurance standard and the explicit reference to/use of the specific standards, principles, guidelines or clauses.

#### 4. DEBATE ON INTEGRATED REPORTING IN EUROPE

In Europe, Federation of European Accountants (FEE - Fédération des Experts-comptables Européens) assumed the leading role in the debate on Integrated Reporting in Europe, as the organization that represents the views of the European accounting profession. From the start of this debate, FEE addressed some important issues which are presented in the Table 3.

**Table 3 FEE Questions on Integrated Reporting**

The business case for Integrated Reporting	What are the key shortfalls in the current corporate reporting regime? Which existing reporting practices in the EU will need to be taken into consideration when seeking to create an integrated report?
The future of reporting	What challenges and barriers do you foresee for the adoption of Integrated Reporting in the EU? Should all corporate disclosure on financial, economic, social, environmental, governance and innovation impacts take place through Integrated Reporting by 2020? Why (not)?
Role of government	What is the best way to ensure the adoption of Integrated Reporting? Within the EU countries, does government have a role to play in accelerating the mainstream adoption of Integrated Reporting or should this be driven by voluntary commitments of business?

Source: FEE, 2011a

At the first roundtable on the Integrated Reporting, FEE President Philip Johnson commented: "Reporting is at the core of the profession and we have always supported its evolution. I see Integrated Reporting as a major development on which the Profession must contribute. We will encourage the IIRC and consider the development of both the framework and the Committee's governance: setting up a globally balanced and socially inclusive governance



and a robust due process will be key to success. We play our thought-leadership role in debating this cutting edge issue” (FEE, 2011b: 2). At the FEE event on Integrated Reporting, organized in May 2012, the debate on Integrated Reporting continued and some new issues have been discussed in the following areas: better defining the term economic value and social value of companies together with the questions of “value to whom?” and value by reference to what time period?; the challenge of “monetising”, where possible, the environmental impacts and natural resource use; understanding materiality and from whose perspective; given the developed reporting landscape how integrating reporting will interact with and, over time, impact existing practices; improving reporting should not be about adding layers of reporting or duplicating (FEE, 2012).

In April 2013 were published, on the same day, two important proposals which opened a new debate on the <IR>, both at the international and European level:

- The proposal for a Directive on the disclosure of non-financial information by the European Commission, and the
- Consultation Draft on the International Integrated Reporting <IR> Framework of The International Integrated Reporting Council (IIRC).

For Europe, this debate has led to the adoption, in 2014 of the Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups. According to the this, companies falling in the scope of the Directive will prepare a non-financial statement containing information relating to at least environmental matters, social and employee-related matters, respect for human rights, anti-corruption and bribery matters, in order to enhance the consistency and comparability of non-financial information disclosed throughout the European Union.

The purpose of the adoption of this Directive was in full accord with the objectives of Integrated Reporting (FEE, 2013):

- Achieve a more cohesive and efficient approach to reporting.
- Inform capital allocation decisions.
- Enhance accountability and stewardship.
- Support integrated thinking in long, medium and short term business strategy, environmental, social and governance matters and financial performance.

But the debate on corporate reporting and <IR> has continued and generate new issues which people must pay attention today (FEE, 2015):

- Future corporate reporting should be flexible and able to adapt to changes.
- The stakeholder audience for corporate reporting will continue to grow, change and diversify in the future.
- Communication of corporate information should be easy to understand for all stakeholders.
- Companies should not produce separate reports for different stakeholder groups;
- Increased interest by wider stakeholder groups in corporate affairs is both enabled and driven by technology.
- Financial statements should evolve to become less detailed and less voluminous.
- Non-financial information reporting is at a much earlier stage of development than financial reporting but gaining prominence in corporate reporting.

- Companies should have the choice to present their non-financial information reporting where it is most relevant.
- Policy makers should be flexible and support innovation to foster change.
- Market-led best practices will emerge to help shape innovation in corporate reporting in the future.
- <IR> is in an experimentation phase and needs to evolve further to fulfill its mission in establishing Integrated Reporting and Thinking within mainstream corporate reporting.

Anyway, in European Union the first legal step toward <IR> Framework implementation could be considered the adoption of Directive 2014/95/EU (Non- Financial Directive – NFID). For better understanding the evolution of <IR> in Europe, can be taken into account the European Union’ legitimacy as standard-setter for <IR> Framework as legal requirements for corporate reporting in Europe. In this regard, Dumitru &Guşe (2017) studied the legitimacy of IIRC as a standard-setter and they provided guidance concerning sources of legitimacy that may be explored.

## 5. INTEGRATED REPORTS IN EUROPE – A STRUCTURAL ANALYSIS

The analysis is based on the data from GRI database from 2010 to 2016 because this is the period that contains information on integrated reports. The evolution of the number of reports from GRI database during the time interval covered by our study shows a growing trend. We appreciate that the year 2016 is not very relevant for the analysis because the data are from April 2017 and we can suppose that many reports referring to 2016 haven’t been published yet. The distribution by geographical area and by years of companies whose annual reports are in the GRI database is presented in Table 4.

**Table 4 Distribution by geographical area and by years of companies whose annual reports are in the GRI database**

Years Region	2010	2011	2012	2013	2014	2015	2016
Africa	116	392	341	343	342	307	149
Asia	671	990	1,227	1,422	1,563	1,735	1,206
Europe	1,047	1,396	1,684	1,835	2,111	2,117	1,263
Latin America & the Caribbean	351	464	554	702	750	836	332
Northern America	291	477	591	640	686	701	396
Oceania	123	159	174	193	197	210	138
Total	2,599	3,878	4,571	5,135	5,649	5,906	3,484

Source: Own processing based on Global Reporting Initiative’s Sustainability Disclosure Database

We notice that most annual reports, in all seven years, are issued by European companies, while the companies from Asia occupy the second place. The follows are the companies from Latin America and the Caribbean, pretty close to the companies from Northern America. The number of reports issued by South African companies is very similar from one year to another probably because the <IR> is mandatory for the listed companies in South Africa.

Our analysis continued for the companies from Europe. We investigated the typology of organizations and we identified the following categories: companies listed on the Stock

Exchange, private companies which are not listed on the Stock Exchange, and other categories. In Table 5 are presented our findings.

**Table 5 Structure by category of European organizations whose annual reports are in the GRI database**

Years Organization type	2011	2012	2013	2014	2015	2016
Listed	658	796	863	1,053	1,105	748
Non-listed	720	862	937	1015	977	503
Other	18	26	35	43	35	12
Total	1,396	1,684	1,835	2,111	2,117	1,263

Source: Own processing based on Global Reporting Initiative's Sustainability Disclosure Database

The results, shown in Table 5, were predictable just for the last time interval analyzed (2014-2016). A study realized by Chersan (2015) shows that the most companies which report according to the requirements issued by the International Integrated Reporting Council belongs to the category of listed on the Stock Exchange. The difference can be explained by the composition of this sample that contains all types of annual reports, not only integrated reports. This analysis do not shows important differences between listed and non-listed companies. We continued by analyzing the evolution of the integration process for the annual reports published by European companies relative to companies size, during the time interval covered by our study. The findings are presented in the tables below (Tables 6 and 7).

**Table 6 Distribution of (self-declared) integrated reports of the European companies**

Years Organization type	2010	2011	2012	2013	2014	2015	2016
Large	101	154	163	135	121	200	98
MNE	24	40	69	53	33	56	31
SME	25	37	35	30	22	24	13
Total	150	231	267	218	176	280	142

Source: Own processing based on Global Reporting Initiative's Sustainability Disclosure Database

**Table 7 Distribution of (self-declared) non-integrated reports of the European companies**

Years Organization type	2010	2011	2012	2013	2014	2015	2016
Large	565	675	754	899	989	810	412
MNE	135	200	253	322	415	377	199
SME	125	175	211	227	263	211	78
Total	825	1050	1218	1448	1667	1398	689

Source: Own processing based on Global Reporting Initiative's Sustainability Disclosure Database

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 50 million EUR or a total of the balance sheet higher than 43 million EUR), seconded by multinationals, followed, in the third position, by small and medium size companies. We choose to indicate the state of the non-integrated reports for the same types of companies to better understand the reality of the reporting process in Europe. Our analysis also indicates a low level of integration of financial and non-financial information in the annual reports of companies, no matter their size. We must

also notice that integration is self-declared and has not been the subject of any independent evaluation. For the purpose of our research, we think could be relevant to find out the trend in integrated reporting at the international level. Our analysis led us to some interesting findings (some of them predictable) as you can see in the Table 8 and in the Figure 2. The values in Table 8 represent the share of integrated reports in total reports published in geographic areas concerned.

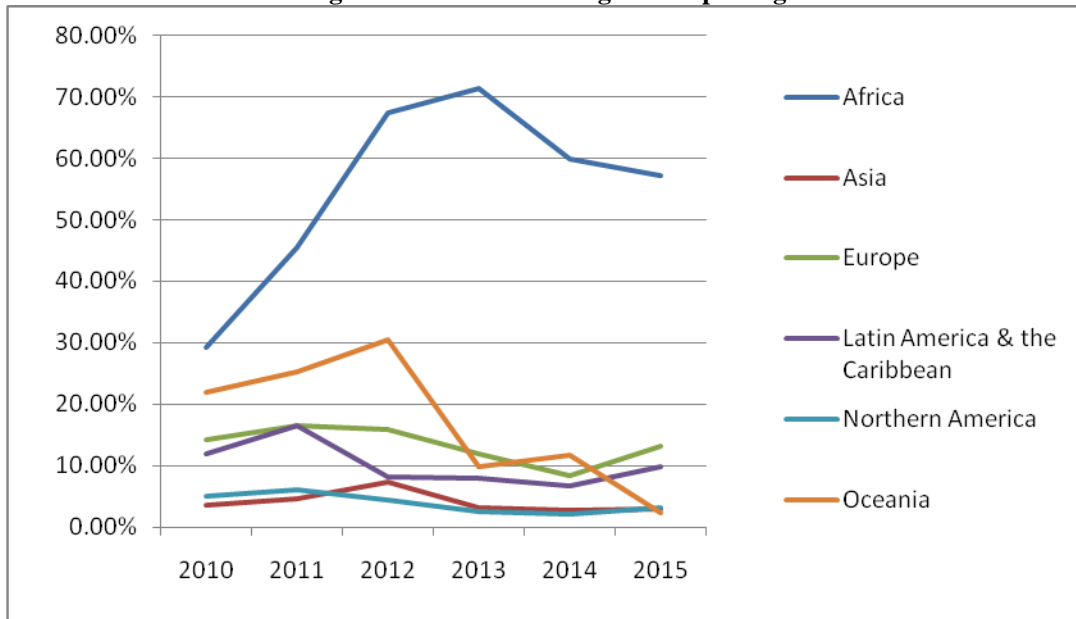
**Table 8 Share of integrated reports in total reports**

Years Region	2010	2011	2012	2013	2014	2015
Africa	29.31%	45.66%	67.45%	71.43%	59.94%	57.33%
Asia	3.58%	4.65%	7.42%	3.23%	2.82%	3.00%
Europe	14.33%	16.55%	15.86%	11.88%	8.34%	13.23%
Latin America & the Caribbean	11.97%	16.59%	8.12%	7.83%	6.67%	9.81%
Northern America	5.15%	6.08%	4.40%	2.66%	2.19%	3.14%
Oceania	21.95%	25.16%	30.46%	9.84%	11.68%	2.38%

Source: Own processing based on Global Reporting Initiative's Sustainability Disclosure Database

The trend in publishing integrated reports is presented in the figure below.

**Figure 2 Evolution in integrated reporting**



Source: Own processing based on Global Reporting Initiative's Sustainability Disclosure Database

As can be seen from Figure 2, the evolution is similar across most geographic areas, with a different situation in Africa, as a result of the obligation for listed companies to publish integrated reports according to the <IR> Framework.

## 6. CONCLUSIONS

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

Second, we didn't notice differences between listed and non-listed European companies with regard to the publication of annual reports in GRI database, but we found there is a low level of integration of financial and non-financial information in the annual reports, no matter size of the company.

Third, it can be observed a relatively constant increasing tendency among firms that declare reports as being integrated, with a focus on large enterprises because they have significant resources.

Fourth, our findings can be considered similar with previous studies because concerning the publication of integrated reports only the legal requirements (as in South Africa) can contribute to an important growth.

Obviously more academic research is necessary to build the substantive knowledge about the various implications of <IR> implementation for people and processes (Perego *et al.*, 2016).

Our research is a small piece in this effort that tries to offer a more holistic picture of the current situation of European country corporate reporting, created by shifting away from financial reporting to integrated reporting. Despite some encouraging findings on integrated reporting across Europe, there is no hope of moving in the near future to imposing mandatory reporting, even <IR> will become the twenty-first century revolution in corporate reporting. Let's hope that for Europe will not remain just an historical fact that the earliest integrated reports have been published by two Danish companies, Novozymes and Novo Nordisk and the growing trend in integrated annual reports will go on.

## References

1. Alexander, D., Blum, V. (2016). Ecological economics: A Luhmannian analysis of integrated reporting. *Ecological Economics*, 129, 241–251.
2. Afrasinei, Mihai-Bogdan, Iuliana Eugenia Georgescu, and Costel Istrate. The Influence Of The Connections Of Romanian Non-Listed Firms To Tax Havens On Their Profitability. *CES Working Papers* 8.4 (2016): 572.
3. Baboukardos, D., Rimmel, G. (2016). Value relevance of accounting information under an integrated reporting approach: A research note. *Journal of Accounting and Public Policy*, 35, 437–452.
4. Cho, S. Y., Lee, C., & Pfeiffer, R. J., Jr. (2013). Corporate social responsibility performance and information asymmetry. *Journal of Accounting and Public Policy*, 32, 71–83.
5. Cheng, M., Green, W.J., Ko, J.C.W., (2015). The impact of strategic relevance and assurance of sustainability indicators on investors' decisions. *AUDITING: A Journal of Practice & Theory*, 34 (1), 131-162.
6. Chersan, I.-C. (2015), Study on Practices and Tendencies in Integrated Reporting, *Audit Financiar*, vol. 13, no. 9(129), 91-101.
7. Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups,
8. Dumay, J., Bernardi, C., Guthrie, J., Demartini, P. (2016) Integrated reporting: A structured literature review. *Accounting Forum*, 40, 166–185.

9. Dumitru, M., Guş, R. G. (2017). The Legitimacy of the International Integrated Reporting Council. *Accounting and Management Information Systems*, Vol. 16, No. 1, 30-58.
10. Eccles, R.G., Serafeim, G. (2013). A tale of two stories: Sustainability and the quarterly earnings call. *Journal of Applied Corporate Finance*, 25(3), 66–77.
11. Eccles, R. G., Krzus, M. P. (2014). *The Integrated Reporting Movement: Meaning, Momentum, Motives, and Materiality*. John Wiley & Sons.
12. Federation of European Accountants – FEE (2011a). European Roundtable on Integrated Reporting. Questions. Brussels, Retrieved from <https://www.accountancyeurope.eu/wp-content/uploads/Questions176201101759.pdf>
13. Federation of European Accountants – FEE (2011b). INFO. Standing for trust and integrity, Retrieved from [https://www.accountancyeurope.eu/wp-content/uploads/News\\_Release\\_IR\\_RT\\_1106171762011261228.pdf](https://www.accountancyeurope.eu/wp-content/uploads/News_Release_IR_RT_1106171762011261228.pdf)
14. Federation of European Accountants – FEE (2011). Key takeaways. FEE event on Integrated Reporting. Retrieved from [https://www.accountancyeurope.eu/wp-content/uploads/Key\\_takeaways\\_FEE\\_event\\_on\\_Integrated\\_Reporting\\_30\\_May\\_2012126201238123.pdf](https://www.accountancyeurope.eu/wp-content/uploads/Key_takeaways_FEE_event_on_Integrated_Reporting_30_May_2012126201238123.pdf)
15. Federation of European Accountants – FEE (2013). INFO. Standing for trust and integrity, Retrieved from [https://www.accountancyeurope.eu/wp-content/uploads/News\\_Release\\_re\\_EC\\_legislative\\_proposal\\_and\\_IIRC\\_Consultation\\_130416.pdf](https://www.accountancyeurope.eu/wp-content/uploads/News_Release_re_EC_legislative_proposal_and_IIRC_Consultation_130416.pdf).
16. Federation of European Accountants – FEE (2015). The Future of Corporate Reporting – creating the dynamics for change. Retrieved from [https://www.accountancyeurope.eu/wp-content/uploads/FEECogitoPaper\\_-\\_TheFutureofCorporateReporting.pdf](https://www.accountancyeurope.eu/wp-content/uploads/FEECogitoPaper_-_TheFutureofCorporateReporting.pdf).
17. Global Reporting Initiative’s Sustainability Disclosure Database. Retrieved from [https://www.globalreporting.org/services/Analysis/Reports\\_List/Pages/default.aspx](https://www.globalreporting.org/services/Analysis/Reports_List/Pages/default.aspx)
18. Investor Responsibility Research Centre Institute (2013). Integrated financial and sustainability reporting in the United States. Retrieved from [https://irrcinstitute.org/wp-content/uploads/2015/09/FINAL\\_Integrated\\_Financial\\_Sustain\\_Reporting\\_April\\_20131.pdf](https://irrcinstitute.org/wp-content/uploads/2015/09/FINAL_Integrated_Financial_Sustain_Reporting_April_20131.pdf)
19. KPMG. (2013). The KPMG survey of corporate responsibility reporting 2013. Retrieved from [http://www.kpmg.com/Global/en/IssuesAndInsights/Articles\\_Publications/corporate-responsibility/Documents/corporate-responsibility-reporting-survey-2013-v2.pdf](http://www.kpmg.com/Global/en/IssuesAndInsights/Articles_Publications/corporate-responsibility/Documents/corporate-responsibility-reporting-survey-2013-v2.pdf)
20. KPMG International (2016). Room for improvement. The KPMG Survey of Business Reporting. Retrieved from <https://home.kpmg.com/xx/en/home/insights/2014/06/kpmg-survey-business-reporting.html>
21. Lee, K.-W, Yeo, G. H.-H. (2016), The association between integrated reporting and firm valuation. *Review of Quantitative Finance and Accounting*, Volume 47, Issue 4, 1221–1250.
22. Melloni, G., Caglio, A., Perego, P. (2017). Saying more with less? Disclosure conciseness, completeness and balance in Integrated Reports. *Journal of Accounting and Public Policy*, 36 (3), 220–238.
23. Middleton, A. (2015). Value relevance of firms’ integral environmental performance: evidence from Russia. *Journal of Accounting and Public Policy*, 34 (2), 204–211.
24. Perego, P., Kennedy, S., Whiteman, G. (2016). A lot of icing but little cake? Taking integrated reporting forward. *Journal of Cleaner Production*, 136 (2016) 53-64.
25. Seele, P. (2016). Digitally unified reporting: how XBRL-based real-time transparency helps in combining integrated sustainability reporting and performance control. *Journal of Cleaner Production*, 136 (2016) 65-77.
26. Simnett, R., Vanstraelen, A., Chua, W. F. (2009). Assurance on sustainability reports: An international comparison. *The Accounting Review*, 84, 937–967.
27. The International Integrated Reporting Council (IIRC). (2011). *Towards integrated reporting: Communicating value in the 21st century*. London: International Integrated Reporting Council. Available at: [http://integratedreporting.org/wp-content/uploads/2011/09/IR-Discussion-Paper-2011\\_spreads.pdf](http://integratedreporting.org/wp-content/uploads/2011/09/IR-Discussion-Paper-2011_spreads.pdf).
28. The International Integrated Reporting Council (IIRC). (2013), *The International <IR> Framework*,



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## **REDESIGNING BANK-CUSTOMER RELATIONSHIPS IN THE ERA OF GLOBALIZATION AND INFORMATION TECHNOLOGY REVOLUTION**

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**Abstract:** *This paper aims to develop a study on the changes brought by globalization and information technology revolution on the relationships between banks and their customers. As more and more of the customers of the banking industry become acquainted with the newest information technologies and value more their time, they demand also electronic acces to banking services, forcing thus the banks to adapt themselves to their needs and to redesign the bank-customer relationships. However, beyond the many advantages for the customers and for the banks brought by the new design of these relationships there are also some disadvantages, especially for the banks, but also for the customers, that need attention. Therefore, while channels as internet banking, mobile banking and, more recently, social media banking seem to be the most likely alternatives for the banks to deliver banking services and products, they still have some limits, keeping still alive the interest for the brick-and-mortar bank branches.*

**Keywords:** *information and communication technology, e-CRM, internet banking, mobile banking, social media banking*

### **INTRODUCTION**

The advances of the information and communication technologies developed during the latest decades, enhancing also the globalization phenomenon, have significant effects on the behaviour of the citizens and companies and, generally, on the entire society. In this regard, the relationships between different parties of the society, including the financial ones, have encountered major changes, while people tend to replace more and more the personal or direct contacts with contacts from the distance, searching to save as many time as possible and being helped by the new means of communication and information. Moreover, while generation X was not so acquainted with computers and found much later the benefits of Internet, laptops, smartphones or social media, the following generations, Y and Z, have grown having the opportunity to use sooner such means of communication and information and to discover their advantages, developing their lifestyle based on such tools and becoming somehow quite dependent on them. Therefore, it appears natural that, while the new generations are replacing in time the previous ones, more people are demanding access from the distance to all kind of products and services, including the ones delivered by banks, and, in the end, are building their relationships with the banks predominantly or even entirely using electronic channels.

At the same time, acknowledging the changes in the demand of its customers and facing not only the competition from the other banks but also from other financial non-banking companies, each bank is forced to redesign its business model by opening new channels of interaction and delivering of products and services, based on the new ICT (information and

communication technologies). Moreover, beyond the issue of surviving competition this new kind of bank-customer relationships, based on modern technologies, opens for the banks a wide area of opportunities which can now reach new customers and sell them faster more products and decrease at the same time their operational costs.

## **NEW ICT PENETRATION AND THE IMPACT ON THE SOCIETY**

The progress of human society was always determined by the fact that in time each individual increases its needs for products and services, but also by the increase of the population in the world. Both these phenomena lead to a general increase of the demand of products and services, implying the need for a significant increase of the production activities, but also the exponential increase of the transactions to be made for fulfilling these demands. Therefore, while time remains the same for each of us, the only possible way for solving the issue of delivering many more products and services to the consumers is to create and use new technologies to make things happen faster and, thus, technology became the most important engine of the progress of the society.

Especially within the third millennium our society proves to evolve under the impact of the rapid development of the information and communication technologies, which solve a lot of time-saving problems whether if we refer to production activities, but mostly if we refer to transactions and delivery of goods and services. However, there is another side of the impact of these technologies which become at the same time the main reason for the increase of the demands of the individuals and companies who found out more rapidly about things that can be useful or desirable for them, leading in the end to the need for new solutions for time-saving and thus, naturally, to a more intensively use of ICT.

The fast changes in the use of information and communication technologies by individuals, almost all of them using the advantages of Internet, can be noticed all over the world. Analysing the usage of communication technologies between 2004 and 2014, we observe that, all over the world, people tend to embrace very rapidly the new technologies. In this regard,

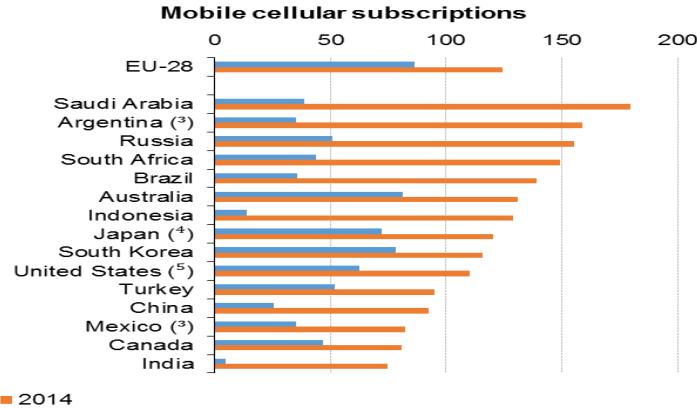
Figure 1 is synthetizing in a short glance, the fact that technologies such as mobile communications became more attractive and very fast adopted by people from different countries.

As Figure 1 shows, while in 2004 the mobile cellular subscriptions per 100 inhabitants were in all analysed countries less than 100, in 2014 they exceeded significantly this number in the greatest majority of these countries. Thus, for 2014 we note that in EU-28 countries, Saudi Arabia, Argentina, Russia, South Africa, Brazil, Australia, Indonesia, Japan, South Korea and United States there are over 100 mobile cellular subscriptions per 100 inhabitants.

Moreover, there must be highlighted the important increases of the mobile cellular subscriptions per 100 inhabitants from countries like Saudi Arabia, Argentina, Russia, and South Africa, with more than 150 such in 2014, compared to less than 50 ones in 2004. Very significant changes in the use of mobile phones are visible also in other countries such as India, Indonesia, Brazil and China, during the time interval between 2004 and 2014. Indonesia show an incredible increase from about 20 mobile cellular subscriptions per 100 inhabitants in 2004 to 130 in 2014, India an increase from 5 such subscriptions in 2004 to over 75 in 2014, while in China the increase was from 25 in 2004 to almost 95 in 2014.



**Figure 1 Mobile cellular subscriptions per 100 inhabitants, in the World, in 2014 compared to 2004**



Source: Eurostat, The EU in the world - research and information society, available at: [http://ec.europa.eu/eurostat/statistics-explained/index.php/The\\_EU\\_in\\_the\\_world\\_-\\_research\\_and\\_information\\_society](http://ec.europa.eu/eurostat/statistics-explained/index.php/The_EU_in_the_world_-_research_and_information_society)

This outstanding evolution of mobile communication was sustained by the appearance of many applications for data transfers and, especially, after the emergence of smartphones, which facilitated accessing or receiving data or information and also sending information, playing thus an important role within the interactions between the consumers and the suppliers of goods and services (Board of Governors of the Federal Reserve System, 2016), including financial ones.

On the other hand, particularly in the last decade, it seems that people, regardless of age, have acknowledged the importance and the benefits of Internet and of the other information and communication technologies for improving their life style. In this regard, data in Table 1 come to confirm this major advance in the usage of Internet, in countries from different parts of the world.

**Table 1 Internet usage and access by individuals aged 15–74, 2004 and 2014 - percentage - % -**

Country	Individuals using internet (% of total)			Fixed broadband subscriptions (per 100 inhabitants)		
	2004	2014	2014/2004	2004	2014	2014/2004
EU-28	47.0	80.0	170	8.2	29.8	363
Argentina	16.0	64.7	403	1.4	15.6	1099
Australia	63.0	84.6	134	5.0	27.7	553
Brazil	19.1	57.6	302	1.7	11.7	680
Canada	66.0	87.1	132	17.0	35.4	208
China	7.3	49.3	675	1.9	14.4	756
India	2.0	18.0	911	0.0	1.2	5873
Indonesia	2.6	17.1	659	0.0	1.2	3103
Japan	62.4	90.6	145	15.4	29.3	190
Mexico	14.1	44.4	315	1.0	10.5	1084
Russia	12.9	70.5	548	0.5	17.5	3745
Saudi Arabia	10.2	63.7	622	0.3	23.4	8114
South Africa	8.4	49.0	582	0.1	3.2	2545
South Korea	72.7	84.3	116	25.5	38.8	152

Turkey	14.6	51.0	350	0.9	11.7	1352
United States	64.8	87.4	135	12.6	31.1	246

Source: Eurostat, The EU in the world - research and information society, available at: [http://ec.europa.eu/eurostat/statistics-explained/index.php/The\\_EU\\_in\\_the\\_world\\_-\\_research\\_and\\_information\\_society](http://ec.europa.eu/eurostat/statistics-explained/index.php/The_EU_in_the_world_-_research_and_information_society)

Data in Table 1 reveal incredible increases in the percentage of individuals using Internet, but also in the number of fixed broadband subscriptions per 100 inhabitants, between 2004 and 2014, in countries all over the world, confirming the rapid and significant penetration of Internet during a single decade. Thus, in 2014, it appears remarkable first the high proportion of Internet users out of the total population, recorded in countries like Japan (90.6%), United States (87.4%), Canada (87.1%), Australia (84.6%), South Korea (84.3%), but also in EU-28 countries (80%). At the same time, we note that, even if other countries were registering proportions of Internet users lower than 80% in 2014, the increases of these proportion between 2004 and 2014 were remarkable. In this regard, we observe an over 9 times increase of Internet Users in India, over 6 times increases in China, Indonesia and Saudi Arabia, over 5 times increases in Russia and South Africa, which reported to the size of the population of these countries means a lot of new users of Internet.

Analysing further data in Table 1 we observe also very fast improvements in the quality of the connections to the Internet, in terms of fixed broadband subscriptions per 100 inhabitants. Thus the highest proportions of fixed broadband subscriptions were registered in 2014 in South Korea (38.8%), Canada (35.4%), United States (31.1%), EU-28 countries (29.8%), Japan (29.3%) and Australia (27.7%). However, we have to note that between 2004 and 2014, the proportion of fixed broadband subscriptions increased incredibly fast in some of the other countries. Thus, these subscriptions increased over 81 times in Saudi Arabia, over 58 times in India and over 30 times in Russia and Indonesia, confirming the rapid growth of the appetite of the individuals for quality access to Internet. Deepening our analysis on the usage of Internet in the European countries we note the fast increasing trend in all these countries between 2007 and till 2016, but also some differences between these countries as shown in Table 2.

**Table 2 Individuals who have ever used the internet - percentage - % -**

Country/Year	2007	2008	2009	2010	2012	2014	2015	2016
EU(28 countries)	62	67	69	73	77	80	83	85
Belgium	71	74	79	81	83	87	87	88
Bulgaria	35	43	47	49	58	63	65	67
Czech Republic	54	67	67	72	79	84	87	87
Denmark	88	88	88	90	94	97	97	98
Germany	77	80	81	83	85	89	90	92
Estonia	68	74	74	78	80	87	91	90
Greece	38	44	47	48	58	67	70	72
Spain	57	61	64	68	73	79	81	83
France	66	74	75	80	85	88	89	90
Italy	43	48	52	56	61	67	70	73
Cyprus	44	46	52	55	64	72	74	77
Luxembourg	80	84	89	92	94	96	98	98
Netherlands	87	89	90	92	94	95	96	95
Austria	72	75	75	77	83	85	87	87

Poland	52	56	61	65	68	72	73	78
Portugal	44	46	50	54	66	70	72	74
Romania	29	33	38	43	52	61	68	70
Finland	83	87	88	89	93	94	94	96
Sweden	85	91	93	93	95	94	94	97
United Kingdom	78	81	85	87	90	94	94	96
Norway	89	92	94	94	96	97	98	98

Source: Eurostat Database

Table 2 shows an increase in the usage of Internet of more than 20% in The European Union, the average usage reaching 85% in 2016, but also in each of the countries in Europe. Almost all countries reported a usage above 70%, but we notice that are some countries, especially from the northern part of Europe in which almost the entire population uses frequently Internet. The penetration of the Internet reached, thus, 98% in Denmark and in Norway, 97% in Sweden, 96% in Finland, but there are also high Internet penetration levels also in other Western European developed countries such as Luxembourg with 98%, United Kingdom with 96%, The Netherlands with 95%, Germany with 92% and France with 90%. On the other side, there are some countries in which the Internet penetration is lower than the European average, such as Bulgaria (67%), Romania (70%), Greece (72%), Italy (73%), Portugal (74%), Cyprus (77%) or Poland (78%).

Because of the multiple advantages of the Internet, the interest of the individuals in using it has grown in the late years not only in terms of its general use, but also for some specific activities that are facilitated by using it. In this regard, a short image on the purposes aimed by the users of Internet from EU-28 countries is synthetized in Table 3.

**Table 3 Internet use purposes – percentage of all individuals in EU28 - percentage - % -**

Purpose/ Year	2007	2009	2011	2013	2015	2016
interaction with public authorities (last 12 months)	n/a	37	41	41	46	48
looking for information about education, training or course offers	19	23	29	31	32	33
doing an online course (of any subject)	3	4	5	6	6	6
sending/receiving e-mails	48	57	62	67	69	71
telephoning or video calls	n/a	17	20	25	29	32
participating in social networks (creating user profile, posting messages or other contributions to Facebook, twitter, etc.)	n/a	n/a	38	43	50	52
participating in social/professional networks	n/a	n/a	40	45	52	n/a
finding information about goods and services	46	52	56	59	61	66
reading/downloading online newspapers/news	21	31	40	48	53	n/a
downloading software	17	22	21	25	23	n/a
Internet banking	25	32	36	42	46	49
travel and accommodation services	31	35	39	38	39	40
selling goods or services	9	10	17	19	19	18
ordering goods or services	30	36	42	47	53	55
job search or sending an application	12	15	17	17	17	n/a
seeking health information	24	33	38	44	46	48

Source: Eurostat Database

Data in Table 3 show that most people use Internet for communication and obtaining information purposes. First of all, we note that between 2007 and 2016, the share of individuals using e-mail communication, raised rapidly from 48% to 71%, while the proportion of those accessing information in the online environment by reading / downloading newspapers / news increased from 21% in 2007 to 52% in 2015. Finding information about goods and services seems to be one of the most frequent point of interest for more and more Internet users, which is confirmed by the increase of proportion of people interested in such data from 46% in 2007 to 66% in 2016. Complementary, ordering goods and services tends to become more and more popular, while the proportion of individuals using Internet for this purpose raised between 2007 and 2016 from 30% to 55%. This increasing interest in finding information and ordering goods creates premises for Internet to become a major channel for promoting products and services, but also for selling and delivering goods and services, even if data show a slower increase in this area, from 9% in 2007 to only 18% in 2016.

At the same time, Table 1 reflects a rapid increase of the interest of the individuals for interacting with public authorities through Internet, from less than 37% to 40% in 2016, and also a significant increase of their active participation in social networks, which reached 52% in 2016, driven especially by the orientation of the generations of low to medium age, towards such interaction. Internet becomes, thus, the major interface facilitating the interaction between all participants to economic and social life, creating new marketing opportunities and contributing to the increase of sales of all kind of products and services, including banking ones. In this regard, we note the remarkable increase in the proportion of Internet banking users from 25% to 49%, between 2007 and 2016.

All previous data confirm a general tendency of people to use more intensely the information and communication technologies in almost all their activities, and leads to significant changes in the relationships between banks and their customers.

## **E-CRM VERSUS TRADITIONAL CRM**

On the background of the increasing competition both between banks, but also with non-bank companies delivering similar financial products and services, customer relationship management (CRM) has become rapidly, since the end of the twentieth century, one of the most important issues for all banks.

CRM is a complex concept and usually is considered to be a way of managing the relationships with customers aiming to improve these relationships, increase customer loyalty and maximize the added value over period of relationship cycle (Martin et al., 2010). It also can be perceived as the overall process of building and maintaining profitable customer relationships by providing customers with superior value and satisfaction (Kotler and Armstrong, 2010).

Beyond the general target of satisfying all clients and obtaining so bigger revenues and profits, different organizations, including banks, can also have another approach on CRM, following the ideas of Parvatiyar and Sheth (2001), who consider CRM as „a comprehensive strategy and process of acquiring, retaining, and partnering with selective customers to create superior value for the company and the customer. It involves the integration of marketing, sales, customer service, and the supply-chain functions of the organisation to achieve greater efficiencies and effectiveness in delivering customer value”.

Regardless of the interpretation, CRM remains a concept focused on the relationships between an organization and its customers, used as a tool for enhancing its strategy for becoming more competitive. It allows gathering detailed information about customers to be used further to adapt the offer to consumers' requirements, to rise the efficiency of marketing and obtain savings of transactional costs and generally in operational costs, leading to an increased profitability.

Even if banks and financial institutions were between the initiators of CRM programs and strategies, they had to adapt these ones, under the impact of the advances of information and communication technologies, leading to an approach of CRM as „a business strategy combined with technology to effectively manage the complete customer life-cycle”(Hobby, 1999, p.29), but also as „...a combination of business process and technology that seeks to understand a company's customers from the perspective of who they are, what they do, and what they are like”(Couldwell, 1998, p.65).

Banks created CRM systems aiming to improve their performance and to get thus a competitive advantage, starting from the idea that these targets are dependent on ensuring the highest possible number of customers and by encouraging them to use more often as many as possible of bank's products and services. This means that banks should be able to attract new customers, but first of all to retain the existing customers, to identify existing and potential customers to whom the bank may sell certain types of products or services which are normally necessary for them. However, besides identifying the kind of products and services needed by the customers, this implies more and more now also to identify the ways in which customers want to obtain such products and services. Complementary, bank's performance and profit depend also by its capability to decrease the costs for delivering products and services to its clients, which is also influenced by the manner in which banks are developing the relationships with their clients.

The traditional CRM system used by banks, based on the use of brick-and-mortar branches on the direct interaction of their own employees with customers, implies high costs and limits the effects of interaction with customers strictly to the geographical area in which customers or bank employees can move, leading to a low impact on profitability. Moreover, gathering and processing higher volumes of data regarding the existing and the potential customers becomes difficult. Therefore, banks need to optimize their relationships with customers and, in this regard, the new information and communication technologies offer them the necessary support both for data processing, but especially for opening alternative channels of interaction with customers.

Integrating multiple channels of interaction with customers, based on the use of new technologies, has become essential today for banks, particularly in the context in which we customers tend to become interested in interacting with their banks more and more from the distance. This change in their customers behaviour is forcing banks to change their CRM strategy, creating a mix of interaction channels with customers, but also brings them advantages regarding the possible interaction with new other clients and the lower costs implied. On the other hand, it becomes a challenge for banks to develop the integrated management of information on each of these customers, in order to obtain a unified image of these clients' profiles.

Many recent studies (Capgemini and EFMA, 2014; European Banking Federation, 2015) are stressing that the customers' preferences and needs are leading banks to integrate all channels

of interaction with their customers, because the latter demand access to a mix of channels in their relationships with banks. Moreover, the need to rationalize the operational costs determines banks to change their strategy towards developing self-service alternatives for customers and towards the use of electronic channels in the relations with them, shaping thus the “so-called” e-CRM.

e-CRM becomes today the basic form in which are developed the relationships with customers, using the advantages of Internet and communication technologies, consisting of emails, web sites, forums, social media etc., in order to create and improve customer relationships. Such technologies enable banks to develop relationships with customers, both in terms of marketing and sales of products and services, but offer also the advantages of low operating costs and very high penetration rate among customers.

Overall, the development of multi-channel customer relationships, based on the latest technologies, is increasingly becoming the main challenge for the global banking system. However, an important issue of this strategy is to adapt bank’s structure, processes and products to the changes in customers’ behaviour and in their options for using one channel or another, without creating any dissatisfaction that might make them leave the bank. Moreover, banks need to integrate adequately the back-office systems with the multiple channels of customer interaction from front-office, so that they would work correlated.

On the other hand, the issues of faster processing the high volumes of bank customers’ data are solved within e-CRM systems by implementing the most advanced information technology consisting in the new instruments of data storage and processing or modern techniques of Data Mining for extracting and structuring the customers’ information. At the same time, technology helps banks also to overcome the major concerns of the customers regarding confidentiality and security, more and more banks implementing advanced security solutions, including Biometric Authentication Tools to combat identity theft and fraud.

Moreover, besides using their own resources, banks tend now to develop partnerships with Fin Tech companies to create such e-CRM systems and to relate with their customers on high technology channels (Capgemini and EFMA, 2017).

Under these circumstances, there is no surprise that banks but also researchers are recognizing the benefits of the new design of bank-customer relationships, based on e-CRM. For instance, a study (Casu et al., 2014) carried out a few years ago on the European banking system indicated that there is an increase in its productivity, due to the use by the European banks of the latest technologies that have enabled them to provide banking services more efficiently. The study also shows that, in the context of European banking market integration, cross-border transfers of technology supported essentially this growth process.

At the same time, beside the benefits of the banks, the new design of bank-customer relationships, has brings important benefits also on the customers reflected in the way they demanded such a change or the way they react to the new CRM architecture, based on multichannel interactions.

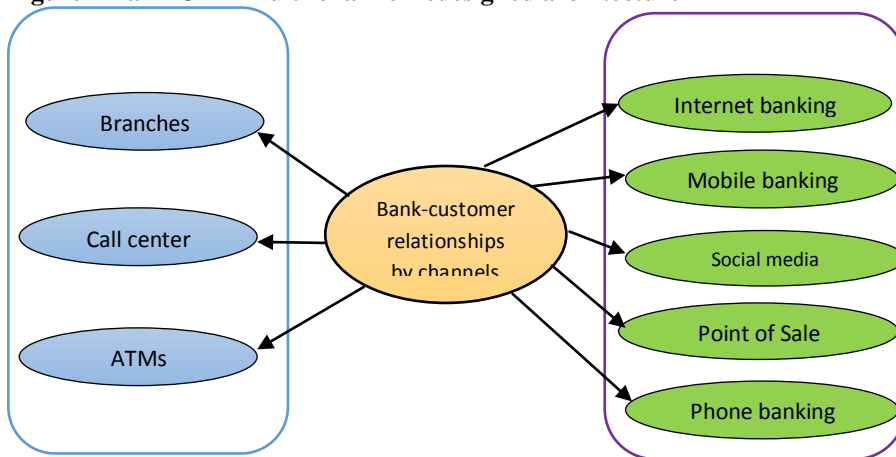
### **Steps towards redesigning banks’ CRM**

The changes in the social and economic environment on the background of the very fast embracement, especially by the new generations, of the most advanced technologies of

information and communication, as well as the sharpening of the competition forced banks to make progressive steps towards redesigning the relationships with their customers. Such steps are also expected to be made further by the banks, while, as a recent report of Ernst and Young (2015) shows that banking industry is more and more influenced by four specific megatrends, consisting in globalization, digital business, demographic shifts and the change of the workforce. Due to these determinants, the report concludes that banks will have to reinvent themselves, to develop new products and more flexible business models.

As consequence of the multiple changes in the society and of the above megatrends, the bank-customer relationships were redesigned by many banks, leading for most of them to creating a multi-channel architecture, as in Figure 2, in which e-CRM tends to become the most important part of banks strategy.

Figure 2 Bank CRM multi-channel redesigned architecture



A study from 2012 of McKinsey Company and European Financial Management & Marketing Association (McKinsey & EFMA, 2012), on a sample of 10 European countries, revealed four types of bank customers, depending on the frequency of the use of bank branches and of the use of digital technologies. Thus, in 2012, there were still almost 47% of the customers, mostly over 40 years, that preferred the contact with their banks by using the branches, but even they were using also remote banking services.

A second category of 8%, mostly over 60 years, customers preferred at that time only the contact with branches or the use of ATMs. On the other hand, 41% of the customers were already using mainly channels as Internet and ATMs and their category had the most rapid increase of all categories. Moreover, only 4% of the customers were using frequently almost all the channels of interaction with their banks, but mostly mobile banking, Internet banking or social media banking, instead of using the bank branches.

Implementing ATMs, Internet or mobile banking, gives banks strategic advantages resulting in the increase of the number of customers and consequently of sales and revenues but also in cost savings. However, such an approach has also the disadvantage of meeting rarely the customers and thus less knowing their needs, leading to a much difficult adaptation of bank offer to demand (Filip, 2015). Under these circumstances, the new social media channels of interaction

with customers can correct this situation, even if they do not substitute entirely the advantages of the branch channel.

Despite of the mentioned disadvantages, especially customers tend to use more intensely the digital channels of interaction with banks, instead of the traditional ones. This behaviour has been also pointed out recently by a survey developed by Accenture on over 9000 individuals (Gera et al., 2015), in 2015, both from some representative mature markets, but also from some emerging ones, as Table 4 is showing below.

**Table 4 Number of monthly interactions with bank by type of channel**

Region/ Channel	Internet Banking	ATM	Mobile banking	Branch	Social media	Call centre	Other digital channel
Total	7	4	3	1	0.8	1	0.2
Mature	8	4	2	1	0.4	0.4	0.2
Emergin g	7	5	4	2	2	1	1
Australia	8	4	3	1	0.8	1	0.2
Brazil	9	6	3	2	1	1	1
Canada	7	4	2	2	0.2	0.7	0.1
China	5	3	3	2	2	1	1
France	10	4	2	1	0.3	0.6	0.1
Germany	8	4	1	1	0.3	0.4	0.3
Indonesi a	6	7	4	2	3	1	1
Italy	7	5	2	1	0.3	0.6	0.1
Spain	9	5	3	2	1	0.6	0.4
UK	8	4	3	1	0.8	1.1	0.1
US	7	2	3	2	0.2	0.6	0.2

Source: Accenture survey, 2015

Data in Table 4 shows clearly that in all countries, individuals were using the branches only once or twice a month and rarely also the Call centre, preferring to use mainly Internet banking (about 7 times a month), the ATMs and the mobile banking, in order to interact with their banks for products and services. Moreover, even launched much later than the other kinds of communication technologies the social media networks appear to gain rapidly an important place within the customers' preferences as means of interaction with banks.

## CONCLUSIONS

The rapid penetration of the modern technologies of information and communication among customers all over the world, but also the increasing competition of the other banks and of the new non-bank financial institutions delivering similar products and services, put a significant pressure on banks to redesign their CRM strategies, especially regarding the ways they interact with their clients. Moreover, while remote bank-customer relationships, based on the new technologies, are bringing important advantages for the banks, consisting in much lower costs implied by these kind of interactions, but also the chance to gain new customers, these things encourage banks to invest more in developing the new channels for delivering their products and services. Therefore, Internet banking, mobile banking and lately also social media



banking services tend to become the most important targets within their general strategy, replacing progressively the traditional channels represented mainly by their branches.

However, the new orientation of banks towards delivering remote banking services is still threatened by the competition of non-bank financial institutions, which operate usually on lower costs and adapt themselves more rapidly to changes in customer behaviour. Banks need also to cope with customers' concerns regarding the confidentiality and security of transactions. At the same time, remote contacts with their customers has also the disadvantage of diminishing banks' capacity to understand clearly the expectations of their customers and, therefore, they need to enhance the communication with their clients on specific platforms such as social media ones.

## References

1. Capgemini and EFMA, 2014. World Retail Banking Report 2014, [online]. Available at: <<https://www.capgemini.com/resources/world-retail-banking-report-2014-from-capgemini-and-efma>>,
2. Capgemini and EFMA, 2017. World Retail Banking Report 2017, [online]. Available at: <<https://www.worldretailbankingreport.com/>>, [Accessed 25 August 2017]
3. Casu, B., Ferrari, A., Girardone, C., Wilson, J., 2014. Integration, Productivity and Technological Spillovers: Evidence for Eurozone Banking Industries, Working Papers in Responsible Banking & Finance, University of St. Andrews, WP14-005
4. Couldwell, C., 1998. A Data Day Battle, *Computing Review* 21, pp. 64–66
5. Ernst&Young, 2015. Global banking outlook 2015. Transforming banking for the next generation, [online], Available at: <<http://www.ey.com/transformingbanking/>>, [Accessed 25 August 2017]
6. European Banking Federation, 2015. The digital transformation of banks and the Digital Single Market, [online], EBF DISCUSSION PAPER 015782, June 2015. Available at: <[http://www.ebf-fbe.eu/wp-content/uploads/2015/06/EBF-Discussion-paper\\_Digital-transformation-of-banks-and-the-DSM\\_June-2015-2.pdf](http://www.ebf-fbe.eu/wp-content/uploads/2015/06/EBF-Discussion-paper_Digital-transformation-of-banks-and-the-DSM_June-2015-2.pdf)>
7. Filip B.F., 2015. Reshaping banking activity by implementing the newest technologies: Evidence from Europe, in Proceedings of the 26th International Business Information Management Association Conference, Innovation Management and Sustainable Economic Competitive Advantage: From Regional Development Sustainability to Global Economic Growth, Madrid, Spain, pp. 1044-1053
8. Gera, P., Wollan, R., Caminiti, F., 2015. Banking Customer 2020: Rising Expectations Point to the Everyday Bank, [online], Accenture, Available at: <[https://www.accenture.com/t20150710T130243\\_\\_w\\_/us\\_en/\\_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub\\_17/Accenture-Banking-Consumer-Pulse.pdf](https://www.accenture.com/t20150710T130243__w_/us_en/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_17/Accenture-Banking-Consumer-Pulse.pdf)>
9. Hobby, J., 1999. Looking after the one who matters. *Accountancy Age* 28, pp. 28–30
10. Kotler, P., Armstrong, G., 2010. Principles of Marketing, 13th edition, Pearson Education, Inc. Upper Saddle River New Jersey USA. ISBN-13:978-0-13-700669-4/10987654321
11. Martin, R., Oliver, S., Jacquelyn, S.T., 2010. Customer Relationship Management and Firm Performance. The Mediating Role of Business Strategy, *Journal of the Academy of Marketing Science* 38, pp. 326-346
12. McKinsey & Comp., Inc., 2012. Digital transformation in 10 building blocks, [online], EFMA and McKinsey & Comp., EFMA Studies & Reports. Available at: <<http://www.efma.com/index.php/resources/studies/index/EN/1/507>> [Accessed 20 August 2016]
13. Parvatiyar, A., Sheth, J., N., 2001. Customer Relationship Management: Emerging Practice, Process, and Discipline, *Journal of Economic and Social Research*, Vol.3, No.2, pp.1-34
14. Board of Governors of the Federal Reserve System, 2016. Consumers and Mobile Financial Services 2014, March 2016. Available at:<[www.federalreserve.gov/publications/default.htm](http://www.federalreserve.gov/publications/default.htm)>



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## **SHIFTING THE TRADITIONAL PARADIGM IN EDUCATION – FROM LOOKING DIGITAL TO BEING DIGITAL**

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**Abstract:** *Over the last decade, technology has reorganized the way we live, the way we communicate and especially the way we learn. The revolutionary breakthroughs in digital technology have deeply changed the traditional educational practice, facilitating the use of modern teaching, learning and evaluation tools. The aim of this paper is to analyse current information with respect to the usage of technologies in education and to answer three main questions, such as (a) What are the contemporary demands for learners and teachers in the 21<sup>st</sup> century? (b) What are the current trends and opportunities in using technology in education? (c) What are the benefits of modern technologies in education? Without fully understanding these issues, it is practically unfeasible to approach any subject related to technologies utilization in education.*

**Keywords:** *Educational Technology, Mobile Learning, Social Media, Gamification, Micro-Learning, Digital Difference*

### **INTRODUCTION**

The rapid development and growth of modern technologies has led to a shift from traditional society to the information society, also known as the knowledge-based society. As a key element of the knowledge-based society, Information and Communication Technology (ICT) has deeply changed all aspects of social organization, including economics, education, health and governance. In fact, the main consequence of the technological revolution consists in changing the needed conditions for information processing and knowledge generation, focusing on the use of information technologies. Simultaneously, with the major changes specific to the knowledge-based society, the perspective on educational practices has benefited from new approaches. Over time, technological transformations have strongly influenced the educational processes, facilitating the transition from the traditional learning and teaching culture to instruments and activities backed by modern means and devices.

The specific instruments for learning have progressively become powerful and extremely widespread. At the same time, barriers in using technology have consistently decreased. Nowadays, the knowledge and information are available in many forms including, but not limited to, e-books, games, websites, videos and Social Media, while the learning landscape comprises of an overwhelming number of tools, from affordable handheld devices and personal

computers, to digital video cameras, interactive whiteboards and a continuously expanding suite of Web 2.0 devices.

Although the majority of educational institutions have already recognized the crucial need for using technology-enhanced learning (TEL) in order to remain relevant on the competitive market and to fulfil learners' needs and wants, just few understand how fast the shift needs to occur, or how the transformation ought to be. The new generation of digital technologies, aimed to improve, rather than replace, the collaborative, cognitive and the physical abilities of users, provides new opportunities in moving the educational practice from "looking digital" to "being digital" - or what we call the "digital difference". The first step towards achieving this goal is, in our view, a review of the main requirements of the 21<sup>st</sup> century, followed by an analysis of the most important aspects related to the existing and further trends of technology usage in education. The correct understanding of this trends will lead to the development and implementation of proper tools upholding the efficiency and effectiveness of education.

## **CONTEMPORARY DEMANDS FOR LEARNERS AND TEACHERS**

Sustaining educational development in the 21<sup>st</sup> century implies new demands on both learners and teachers, meant to build their capacity of using technology to access, examine, and organize information. In 2016, the International Society for Technology in Education (ISTE) updated its National Educational Technology Standards for Students (NETS) in order to better portray the skills required by learners in an increasingly connected, digital world. The ISTE Standards for Students (ISTE, 2017) now emphasize seven qualities and skills needed for students: empowered learner, digital citizen, knowledge constructor, innovative designer, computational thinker, creative communicator, global collaborator.

The Partnership for 21<sup>st</sup> Century Skills (P21, 2017) stated a similar vision in its framework, considering that, in order to be effective in the 21<sup>st</sup> century, learners must develop essential skills, such as problem solving, critical thinking, communication and collaboration, abilities related to information, media and technology. On the other hand, teachers must develop new understanding to capitalize on the learning potential of technology. From the early beginnings of using technology in education, outlining a long-term vision, Means pointed out that technology training should go beyond focusing on the process of acquiring of technical skills, sustaining the instructional strategies required to infuse technological skills into the learning process, affirmation whose correctness is preserved even today (Means, 1994).

Keeping in mind the aspects mentioned above, we can strongly affirm that, in order to sustain learners' development of 21<sup>st</sup> century skills, educational institutions need to create and maintain knowledge-building environments. Learners need education structures and processes aimed to help them develop analytical and critical thinking, teamwork and collaborative skills, the ability to produce, share ideas and learn through the medium of social networks, and ICT literacy.

## **THE STATE OF MODERN EDUCATION: TRENDS AND EMERGING OPPORTUNITIES**

The shift that should be happening in the educational institutions towards technology and online based education and the need for change is still accelerating. Over the last decade, the specialty literature identified and examined diverse trends of technology usage in education. Functioning in a social environment sustained by learning conversation among peers, peers and teachers and other involved parties, today's technology tools support what experts stated over time about the social nature of learning. The notion of social learning has benefited from various approaches of researchers in the field, being associated with the theory of social constructivism since the 1960s. The basic principle of this type of learning is that students learn most effectively when they are engaged in problem solving activities, carefully selected under the close supervision of the instructors (Vygotsky, 1978). Collaboration represents the most important feature of social learning. While instructors facilitate group interactions, learners have the autonomy to select the resources and educational materials they need to gain a better understanding of the problem.

Following the various studies conducted over time, collaborative learning has been found to be more effective than individual learning, amplifying motivation, and significantly contributing to increasing results and achieving positive social outcomes (Slavin, 1995; Johnson, et al., 2000; Snowman, et al., 2009). Adapting to the new digital era, Siemens and Downes have proposed the theory of connectivism, according to which social learning integrates with Social Media technologies (Siemens, 2005; Downes, 2007). Supporting the theory of connectivism, in the world of Social Media proliferation, learning is no longer an internal, individualistic activity. Learners acquire knowledge predominantly through the interchange of information with other subjects, content that often takes the form of analyzes, comments, labels, messages and updates, sometimes called "micro-content".

Social Media opens new opportunities for taking education at a new level. Along with mobile learning, digital gaming, micro-learning and simulations, social networking offers opportunities to transmit concepts in modern ways that would certainly not be possible, effective or efficient through traditional educational processes.

### **MOBILE LEARNING**

The proliferation of mobile devices has changed the way people interact, becoming a necessity in modern society. The revolutionary development of the mobile devices industry and their immense capability to increase the availability and accessibility of materials have resulted in the inevitable emergence of the concept of "mobile learning", often considered a natural extension of e-learning. In 2008, Norris and Soloway stated that the use of mobile devices allows learners to establish their autonomy and take responsibility in the learning process, therefore being able to act to support and enhance student-centered learning environments (Norris & Soloway, 2008). In addition, according to Schrand, learners show higher levels of involvement and acquire a greater degree of knowledge when using interactive technologies (Schrand, 2008).

Other researches on mobile learning have indicated that innovation (Sharples, 2010; Parsons, 2013), inclusion (Attewell, et al., 2009; Traxler, 2010) and transformation (Lindsay,

2015) represent important advantages of using mobile learning. Additionally, taking into account the explosive evolution of mobile devices and the almost unlimited Internet connection, Cook and Santos (Cook & Santos, 2016) highlighted the following features and aspects of mobile learning that are possible both now and in the near future:

- Integrating mobile learning with Social Media tools and applications, facilitating the creation of new practice models based on connection, socialization, learning and teamwork;
- Transforming mobile learning through an increasing focus on content and contexts generated by users/learners.

## **MICRO-LEARNING**

In the expansive field of e-learning tools, micro-learning represents a new direction of development. This responds to the necessity to pay more attention to e-learning tools and methods from an educational point of view and not simply from a technological point of view. Thus, referring to short learning activities through reduced content, micro-learning supports the preference of modern society to have quick access to useful information and content. Recent studies (Kapp, et al., 2015), indicate that short content may increase the retention of information by 20%. Sixteen chapters of educational materials were used to carry out this research and students were divided into three groups, as follows: the first group answered one question after reading each of the sixteen chapters; the second group answered four questions after reading each group of four chapters; the third group received eight questions after each half of the original text. In the second stage of the research, the students held the same test with several options covering the entire course material. The results showed that the first group of students (on which micro-learning was applied) performed 22.2% better than the last group and 8.4% better than the second group. The first group, having the “micro” content and frequent evaluation questions, had better outcomes than both competing groups. Furthermore, another study developed by Jomah et al. (Jomah, et al., 2016), found that micro-learning concepts, based on mobile web learning, lead to a modernized education system, while also providing a higher level of flexibility for learners.

## **SOCIAL LEARNING**

Despite the limited use of Social Media in the academic world, the last few year’s research supports the theory of connectivism, highlighting the benefits of integrating this way of learning into the educational process. For example, Mazer et al. (Mazer, et al., 2009) examined the effects of Facebook’s social networking use by instructors on the perceived credibility of university students. The results revealed that students’ tendency was to attribute higher levels of credibility to instructors who willingly share more information on Facebook compared to the perception of instructors who do not use such platforms. Analyzing the impact of using Social Media in university education, other research results (Larsson & Alterman, 2009; Ertmer, et al., 2011) reported the positive influence of Social Media on the learning process, the use of such platforms determining better performance among students. Junco et al. (Junco, et al., 2011) examined the use of Twitter and blogs, while Novak et al. (Novak, et al., 2012) investigated the use of several types of social environments. All of the above-mentioned research reveals that

Social Media tools play a positive role in enhancing student performance and encourages active learning through collaboration.

## **GAMIFICATION**

The studies developed over time proved that games have the potential to sustain education in a variety of circumstances, starting from primary and secondary schools (Bottino & Ott, 2006; Suh, et al., 2010; Watson, et al., 2011), to higher education institutions (Ebner & Holzinger, 2007; Whitton & Hollins, 2008) and even adult education (Kambouri, et al., 2006). Assuming the use of game-specific design elements, gamification makes the educational process much more dynamic than the traditional one. According to Kapp, this phenomenon is characterized by the use of gaming-based mechanisms with friendly interface and attractive scenario. Thus, participants in educational activities are more attracted, motivated, and better involved in solving problems and exercises (Kapp, 2012). On the other hand, the abstracted reality of a game offers some advantages over real life. The games make it easy to understand the connections between the events. In the educational process, they reduce and simplify the complexity of taught concepts and integrate them into the game world. Thus, learners can more easily identify cause and effect, as times do not separate cause of effect, as is the case in the real world.

## **TRENDS VALIDATION STATISTICS**

The increased accessibility of mobile devices clearly suggests the need to include them in the educational processes. Regarding the number of people who own and use mobile devices, the findings reveal the continued growth of mobile devices usage. According to the eMarketerstatistics (eMarketer, 2017), globally, by the end of 2017 there will be 2.73 billion mobile users with Internet access, accounting for 36.9% of the world's population and 78.9% of all Internet users. In addition, based on a report by Google (Google, 2016), more and more users are only using mobile devices (27% of Internet users), in detriment of desktop computers (16% of Internet users). Moreover, 80% of the users surveyed use a smartphone, while the use of computers accounts only 67%. On the other hand, the large number of social network users highlights the preference of new generations for this environment and the need to develop appropriate learning tools. According to information provided by Statista (Statista, n.d.), in 2017, 71% (2.46 billion) of Internet users worldwide were users of social networks. It is estimated that these figures will increase, reaching the threshold of 3,02 billion in 2021. Moreover, among the social networking users worldwide, over the second quarter of 2017 (June 30, 2017), there were over 2.01 billion monthly active Facebook users, up 17% over the precedent year (Facebook, 2017), the platform being considered the most popular at the moment. The Global Games Market Report released on April 20, 2017, showed that there are approximately 2.2 billion worldwide gamers which are expected to generate \$108.9 billion in game revenue by the end of 2017. This represents an increase of 7.8% from the previous year, which unquestionably highlights the increased preference of the users for this field (Newzoo, 2017). All these recent statistics validate the trends identified and examined in the previous section, strengthening the view that the need for developing appropriate tools to support the efficient use of highly developed digital

technologies in education, in accordance to the users' needs and wants, became a compulsory requirement in the 21<sup>st</sup> century.

## **CONCLUSIONS**

Although developments in the field of educational technology are significant, and we can mention here platforms such as Blackboard Academic Suite, IBM LOTUS Learning Management System Solution, Hyperwave, Ilias, Metacoon, Moodle, social networks have a low degree of integration in formal learning environments. The course management system (CMS) is the most widely used learning technology in traditional higher education. The conventional CMS environment offers limited opportunities to participate in online interactions, such as forums and chats. These interaction activities are typically limited to a particular class or group of learners. Despite the fact that some of the specific Social Media features have begun to be integrated into newer versions of CMS platforms, these functionalities cannot be fully implemented due to security or privacy restrictions. For example, CMS wikis cannot be shared with non-institutional users, and learning portfolios cannot be maintained for long periods of time. Consequently, the degree of connectivity is reduced in the current formal learning environment, given the lack of access to external social opportunities.

In our opinion, the use of Social Media as learning tools, along with the other identified trends, could facilitate the connection of informal learning to formal education. These instruments can connect learners with communities, industry experts, and colleagues around the world. They also facilitate student-student, student-instructor and student-content interactions in multimedia formats. This environment of engagement and creativity allows users to get more involved in learning and encourages them to collaborate on various projects. Thus, technologies that enable students to connect to educational contexts in new ways beyond the traditional classroom environment have the potential to unlock the line between formal and informal learning and could certainly contribute to the improvement of educational processes and learners' development.

## **References**

1. Attewell, J., Savill-Smith, C. & Douch, R., 2009. *The impact of mobile learning : examining what it means for teaching and learning*. London: Learning and Skills Network - LSN.
2. Bottino, R. M. & Ott, M., 2006. Mind Games, Reasoning Skills, and the Primary School Curriculum.. *Learning Media and Technology*, 31(4).
3. Cook, J. & Santos, P., 2016. Three Phases of Mobile Learning State of the Art and Case of Mobile Help Seeking Tool for the Health Care Sector. In: *Mobile Learning Design*. Singapore: Springer, pp. 315-333.
4. Downes, S., 2007. *An introduction to connective knowledge*.. s.l., s.n.
5. Ebner, M. & Holzinger, A., 2007. Successful implementation of user-centered game based learning in higher education: An example from civil engineering.. *Computers and Education*, pp. 873-890.
6. eMarketer, 2017. *Worldwide Internet and Mobile Users: eMarketer's Estimates for 2016–2021*. [Online] Available at: <https://www.emarketer.com/Report/Worldwide-Internet-Mobile-Users-eMarketers-Estimates-20162021/2002038>

7. Ertmer, P. et al., 2011. Students' confidence and perceived value for participating in cross-cultural wiki-based collaborations. *Educational Technology Research and Development*, 58(Special Issue on Motivation and New Media), pp. 213-228.
8. Facebook, 2017. *Facebook Reports Second Quarter 2017 Results*, MENLO PARK, California: s.n.
9. Google, 2016. *Latest mobile trends show how people use their devices*. [Online] Available at: [https://www.thinkwithgoogle.com/advertising-channels/mobile/device-use-marketer-tips/?utm\\_campaign=elearningindustry.com&utm\\_source=%2Fsurprising-mobile-learning-statistics-elearning-professionals-know&utm\\_medium=link](https://www.thinkwithgoogle.com/advertising-channels/mobile/device-use-marketer-tips/?utm_campaign=elearningindustry.com&utm_source=%2Fsurprising-mobile-learning-statistics-elearning-professionals-know&utm_medium=link)
10. ISTE, 2017. *International Society for Technology in Education*. [Online] Available at: <https://www.iste.org/standards/for-students> [Accessed 30 9 2017].
11. Johnson, D. W., Johnson, R. T. & Stanne, M. B., 2000. *Cooperative Learning Methods: A Meta-Analysis*, s.l.: s.n.
12. Jomah, O., Masoud, A. K., Kishore, X. P. & Sagaya, A., 2016. Micro learning: A modernized education system.. *Broad Research in Artificial Intelligence and Neuroscience*, pp. 103-110.
13. Junco, R., Heiberger, G. & Loken, E., 2011. The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27(2), p. 119-132.
14. Kambouri, M., Tomas, S. & Mellar, H., 2006. Playing the literacy game: a case study in adult education. *Learning, Media and Technology*, pp. 395-410.
15. Kapp, F., Proske, A., Narciss, S. & Körndle, H., 2015. Distributing vs. Blocking Learning Questions in a Web-Based Learning Environment. *Journal of Educational Computing Research*, 51(4), pp. 397-416.
16. Kapp, K. M., 2012. *The Gamification of Learning and Instruction - Game-Based Methods and Strategies for Training and Education*. New York: Pfeiffer.
17. Larusson, J. & Alterman, R., 2009. Wikis to support the collaborative part of collaborative learning. *International Journal of Computer-Supported Collaborative Learning*, 4(4), pp. 371-402.
18. Lindsay, L., 2015. Transformation of teacher practice using mobile technology with one-to-one classes: M-learning pedagogical approaches. *British Journal of Educational Technology*.
19. Mazer, J. P., Murphy, R. E. & Simonds, C. J., 2009. The effects of teacher self-disclosure via Facebook on teacher credibility. *Learning, Media & Technology*, 34(2), pp. 175-183.
20. Means, B., 1994. Introduction: Using technology to advance educational goals. In: B. Means, ed. *Technology and education reform: The reality behind the promise*. San Francisco: Jossey-Bass, p. 265.
21. Newzoo, 2017. *THE GLOBAL GAMES MARKET WILL REACH \$108.9 BILLION IN 2017 WITH MOBILE TAKING 42%* [Online] Available at: <https://newzoo.com/insights/articles/the-global-games-market-will-reach-108-9-billion-in-2017-with-mobile-taking-42/> [Accessed 26 9 2017].
22. Norris, C. & Soloway, E., 2008. *Handheld computers bring K12 classrooms into the 21st century*. [Online] Available at: <https://www.districtadministration.com/article/handhelds-getting-mobile>
23. Novak, E., Razzouk, R. & Johnson, E., 2012. The educational use of social annotation tools in higher education: a literature review.. *Internet High. Educ*, 15(1), pp. 39-49.
24. P21, 2017. *The Partnership for 21st Century Skills*. [Online] Available at: <http://www.p21.org/> [Accessed 30 9 2017].
25. Parsons, D., 2013. *Innovations in Mobile Educational Technologies and Applications*. s.l.:IGI Global.
26. Schrand, T., 2008. Tapping into Active Learning and Multiple Intelligences with Interactive Multimedia: A Low-Threshold Classroom Approach. *College Teaching*, pp. 78-84.
27. Sharples, M., 2010. *Innovation in mlearning: An international perspective*.. [Online] Available at: <http://mlearn.bnu.edu.cn/source/Innovation%20in%20Mobile%20Learning-An%20International%20Perspective.pdf>
28. Siemens, G., 2005. *Connectivism: A Learning Theory for the Digital Age*, s.l.: s.n.
29. Slavin, R. E., 1995. *Cooperative Learning: Theory, Research and Practice (2nd Edition)*. Boston: Pearson.
30. Snowman, J., McCown, R. & Biehler, F., 2009. *Psychology applied to teaching*. Boston: Houghton Mifflin Co..
31. Statista, n.d. *Number of social media users worldwide from 2010 to 2021 (in billions)*. [Online] Available at: <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/> [Accessed 12 August 2017].



32. Suh, S., Kim, S. & Kim, N., 2010. Effectiveness of MMORPG-based Instruction in Elementary English. *Journal of Computer Assisted Learning*, 26(5), pp. 370-378.
33. Traxler, J., 2010. Will student devices deliver innovation, inclusion, and transformation?. *Journal of the Research Center for Educational Technology*, pp. 3-15.
34. Vygotsky, L. S., 1978. *Mind in Society: Development of Higher Psychological Processes*. s.l.:Harvard University Press.
35. Watson, W., Mong, C. & Harris, C., 2011. A Case Study of the In-class Use of a Video Game for. *Computers and Education*, 56(2), pp. 466-474.
36. Whitton, N. & Hollins, P., 2008. Collaborative Virtual Gaming Worlds in Higher Education. *Research in Learning Technology*, pp. 221-229.



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# THE IMPACT OF SECURITY AND DATA PRIVACY IN THE INTERNET OF THINGS APPLICATIONS

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**Abstract:** *In recent years, the world of networks has been marked by the emergence of a new technology called the Internet of Things, which aims to create new values through the exchange of information and knowledge between people and objects. This technology is different from its predecessors (Traditional Internet, Mobile Internet, Sensor Network, etc.), focusing in particular on ubiquitous service models, heterogeneous network architectures and universal access for people, things, objects and processes. Innovations and future research on IoT applications and services are driven by the high potential for market and profit. However, IoT proposes new areas to study vulnerability in system security and more difficult confidentiality issues. Today's industry and government organizations underline cybersecurity and privacy as top IT priorities. Online threats are presented by both individuals and groups organized with the intent to commit commercial theft, disturbance actions and invasion of systems for activist and espionage purposes.*

**Keywords:** *Internet of Things, security, data privacy*

## 1. INTRODUCTION

Internet of Things (abv. IoT) represents a useful and fascinating world where physical devices used in our everyday life are connected to the Internet. Within the Internet of Things sensors and communications devices are integrated into physical objects for facilitating the communication between objects or between objects and other devices like cloud servers, computers, smartphones, tablets. According to the Cisco Internet Business Solutions Group (IBSG), IoT represents that period of time where more “objects” were connected to the Internet than people (Evans, 2011).

The term “Internet of Things” was first used by Kevin Ashton in 1999 at MITi to illustrate the connecting power of RFIDii tags, used in supply chains, to the Internet in order to control stocks of goods without the need for human intervention (Ashton, 2009). In the current context, the Internet of Things refers to the devices that have an advanced degree of connectivity to systems and services that interact with each other and cover a wide range of protocols, areas and applications. We can bring into discussion a large number of applicability areas, including energy, transport, buildings, house, health, cities, sales, agriculture and others. We can think about of an autonomous home future. He will automatically start the TV on a favorite channel or ambient music when the owner’s smartphone has left the car or walks in the door of the house. He will be connected to the Internet all the time and communicate with the automated home system. It can also initiate some certain protocols, such as opening doors and lighting bulbs. Or we can use a fitness bracelet to measure heart rate and temperature and then communicate with the automated home system to create a perfect room temperature depending on the obtained

information. The collected information can be shared with different stakeholders and used to improve business intelligence.

Thanks to this technology our life is improved a lot and makes it easier for us to carry out everyday tasks. But it also comes with less good parts, including the invisibility of the data collection. The privacy of Internet of Things users could easily be sacrificed (Fink, et al., 2015). When we use the application/service automatically we expect from the service providers to deliver tailored services based on collected information from our used application, protect our information from unauthorized access and not share those data with 3rd parties (Sun, et al., 2014). The existence and use of IoT applications creates challenges for the security of the entire IoT ecosystem, from reasons related to the extension of the “Internet” through the traditional network (Internet, cellular data network, sensor network), the network connection of the objects due to the fact that every object will be connected to the Internet, the communication between objects. Gartner placed security at the top of its list of top 10 IoT technologies for 2017 and 2018, saying “IoT security will be complicated by the fact that many ‘things’ use simple processors and operating systems that may not support sophisticated security approaches” (David, 2016). We should pay more attention to the research issues for confidentiality, authenticity, and integrity of data in the IOT.

## **2. SECURITY AND PRIVACY CONSIDERATIONS**

As we rely on connected devices to make our lives better and easier, we need to take in fact a very important aspect, namely security. Security is defined as a set of mechanisms used to protect sensitive data from cyberattacks and to guarantee the confidentiality, integrity, and authenticity of data. All the participants from the IoT ecosystem must take the responsibility for the security of the data, devices and offered services by implementing and respecting the best practices (Sarah, 2017).

### ***2.1. Security Architecture***

Before going to the discussion about the impact of security in IoT systems, we must first understand and analyze the IoT security architecture. The architecture is divided into four layers, including the application layer, support layer, network layer, and perception layer (see Figure 1). In some systems, the processing layer is represented by the network support technologies, such as middleware, computing, network processing (Zhao & Ge, 2013).

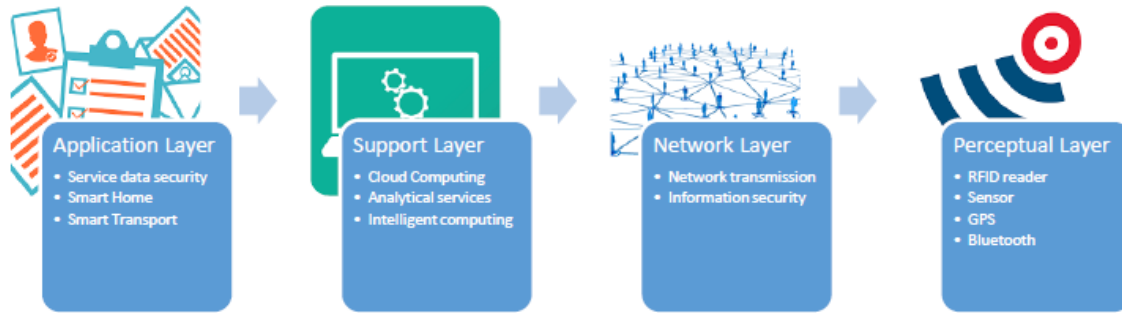


Figure 1 IoT Security Architecture

IoT must ensure the security of all layers. In order to analyze and describe the security issues of IoT, according to the data transmission in the Internet of things we will start to describe the architecture from the lowest level, perceptual layer.

#### A. Perceptual layer

All the information from the physical world is collected through the Perceptual layer using physical devices that have integrated sensors, RFID tags, GPS and other equipment. The collected data contains information regarding object properties, environmental conditions, and others. Sensors represent the key factor in this layer, used to capture data and transform the physical world into a digital world.

□ *Security features:* The perceptual layers are very simple with small storage capacity and they have a small power related to computer. For this reason, on the one hand, it is very hard to create a security system and set up security protection, on the other hand, issues regarding the communications and the impossibility to apply a public key encryption algorithm appear. Data obtained from sensors need protection for integrity, authenticity, and confidentiality.

□ *Security requirements:* At this node, the authentication is used to ensure the confidentiality of information transmission between layers and to prevent illegal layer access. In this way, the encryption process of data becomes necessary.

#### B. Network layer

Initial processing of information taken from the perceptual layer is made on the network layer along with reliable transmission of information, classification of information and polymerization. The information transmission relies on this layer on several basic networks that are essential for the information exchange that is made between devices, networks as the internet, wireless, satellites, mobile communication, network infrastructure and communication protocols.

□ *Security features:* The protection security mechanism at this layer is very important for the Internet of Things. Even if the core network is relatively safe, attacks like Man-In-the-Middle, counterfeit, junk mail and computer virus still causes damages and cannot be ignored, because a large number of data sending cause congestion.

□ *Security requirements:* Mechanisms for identity authentication (to prevent illegal nodes), data confidentiality and integrality are used to ensure security at this node. A particular attack that is very severe for the IoT and represents a problem that must be resolved in this layer is the distributed denial of service (DDoS).

*C. Support layer*

After the information passed through the network layer, will be taken over by the support layer whose purpose is to offer a wide range of intelligent computing powers, organizing them using network grid and cloud computing and to create a reliable platform to support the application layer. It plays the role of combining application layer upward and network layer downward. The application layer is the topmost and terminal level.

□ *Security features:* The recognize of malicious information represent a challenge for this layer, due to fact that the support layer is working with mass data processing and intelligent decisions.

□ *Security requirements:* This layer need to work with a variety of application security architecture such as cloud computing and secure multiparty computation, almost all of the strong encryption algorithm and encryption protocol, stronger system security technology, and anti-virus.

*D. Application layer*

The fourth layer is application layer. According to the needs of the users, that can access the IoT at this point by using the TV, personal computer, laptop, tablet or mobile device this layer deliver personalized services (Ding, et al., 2011).

□ *Security features:* Security needs can be different depending on the environment application and because of the fact that data sharing represents the main characteristic of this layer, it may appear issues related to confidentiality, access control, and information disclosure (Geng, et al., 2010).

□ *Security requirements:* The security problem from application layer can be solved by protecting the user’s privacy, using authentication and key agreement. Also, the management of all the password and device should be done in a proper way.

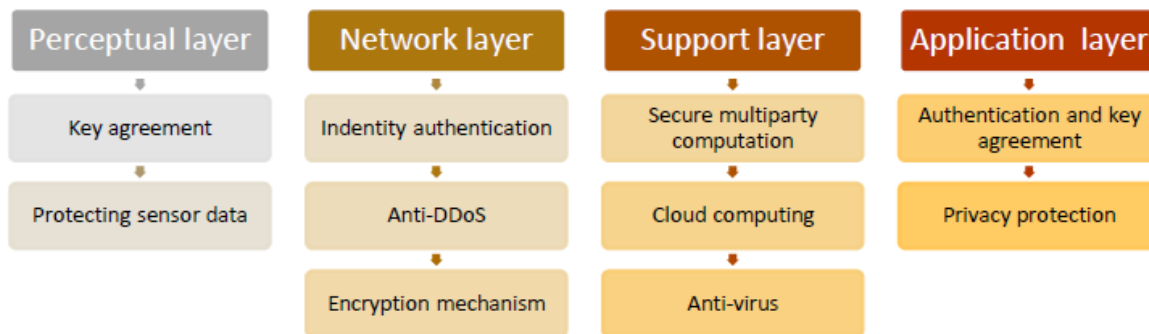


Figure 2 Security requirements for security architecture

## 2.2. Security services

Therefore, in the security architecture of the process of information transmission, all due consideration must be given to the guarantee of confidentiality, integrity, privacy, authenticity and instantaneity of data and information, which mainly refers to the security of telecommunication network and corresponds to the security of transmission hierarchy in the IoT (Li, 2012).

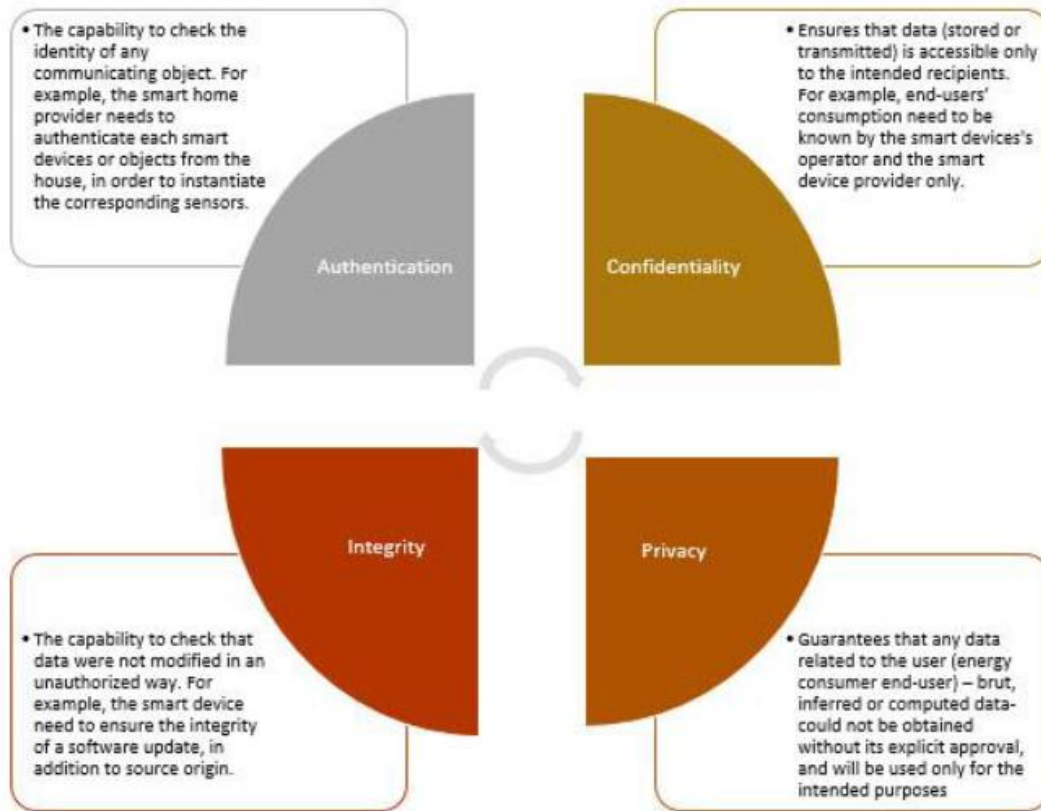


Figure 3 Security services for the IoT

In the presented context, the confidentiality represent a set of rules that limits the access to information, integrity been assured of the fact that the data are accurate and reliable, privacy been the guarantee that users are taking in account their sensitive data and authentication is the guarantee for reliable access to information by the authorized persons. Of all the requirements described above, I believe that confidentiality it should take precedence over the other services as it is a means of protecting information that is carried out by any means between two parties.

## 2.3 Privacy challenges

Some of the IoT devices are developed in order to create, collect or share data. Therefore, those data cannot be considered “personal data” and they have no impact on confidentiality or consumer’s privacy, unrelated to data protection and privacy laws. For example, data refers to

physical state of the machines, metrics regarding the state of network or internal diagnostic (Victor , 2017). The majority of the Internet of Things services involves the creation, distribution and use of personal data about or related to individual consumers and can have impact on consumer's privacy, being related to general data protection and privacy laws. For example, create analysis regarding the individual's state of health or consumer profile based on their shopping habits and favorite supermarkets.

All the stakeholders from the IoT ecosystem have an obligation to respect individuals' privacy and keep personally identifiable or privacy-invasive information secure. A major challenge for the Internet of Things providers is caused by the multiple and often inconsistent laws related to privacy and data protection, laws that can be applied different depending on industry sector, services and implied data types in different countries. For example, a smart vehicle that travels in different countries, therefore the associated data transfers may be governed by each country that the car passes, using different legal jurisdictions. The data obtained from the sensors available in the car, that are used to track the location of the can be used to infer a number of insights about the frequent and favorite places, the driver's lifestyle or hobbies, that can be considered as private information about the user. Also, these insights obtained through 'on-board diagnostics' sensors might be shared with insurance companies who might use those information to impose a higher premium and therefore discriminate against the driver without their knowledge.

Another challenge is represented by the fact that the most data protection laws require companies collecting consumers' data to get the affected consumer's (also known as the 'data subject') consent before processing certain categories of 'personal data' – such as health related data. Most laws are defining the 'personal data' as being any information that relates to an 'identified' or 'identifiable' living, natural person (Gib, 2017). Since, we observe that more and more devices are connected to the Internet and the number of devices is growing (Rob, 2017), the more and more data about individuals will be collected and analyzed and possibly impact their privacy, without necessarily being considered 'personal' by law. It can be obtained detailed user profiles by combining the massive data volumes, big data, cloud storage and predictive analytics.

### **3. ANALYZING THE SECURITY REQUIREMENTS OF MEDICAL APPLICATIONS**

In this example, we study an end-point device, a Wearable Heart Rate Monitor that's a simple device used to measure and record the user's heart rate, in order to provide some indications for better device securing. The device was developed with the intent that the end user will track their pulse data throughout the day, storing it in both the application and the back-end database. The intention is to allow users to review their heart rate over time to track their overall health. Users can watch their health improve or worsen over time, depending on whether they are maintaining a healthy life style. This allows the users to incentivize themselves by evaluating both positive and negative trends in their WHRM data. Data can also be used by partners in order to use these metrics to identify whether a consumer is more or less likely to have a health-related event, such as a heart attack or a stroke.

### 3.1 Device overview – Wearable Heart Rate Monitor



Figure 4 illustrates a simple hardware design of the Wearable Heart Rate Monitor (WHRM) and its basic components (Mark, 2017).



Figure 4 Wearable Heart Rate Monitor (WHRM)

The Heart Rate Monitor device is composed of standard components for a simple wireless device:

- A Bluetooth Low Energy (BLE) transceiver - provide essentially drop-in wireless connectivity;
- Microcontroller (MCU) enabled for BLE - analyses the data emitted from the sensor and chooses what data should be sent over the BLE transceiver;
- An ambient light photo sensor - used to capture pulse rate data.

In this example, we use a coin cell battery to facilitate the transmission of data between devices, from WHRM to tablet, laptop, or smartphone.



### 3.2 Service overview

From a service perspective, the application available on the smartphone, laptop or tablet to push metrics from the endpoint up to a back-end service over any available network connection. The back-end service for the application simply associates the device owner with the metrics being captured and stores them in a database local to the application server. The data can be visualized using the mobile application or by using a browser to go on the service's website. On the service provider's websites the users can view and use the captured metrics to perform more actions.

This is a very simple and common service model with no custom or unnecessary complexities (Figure 5).

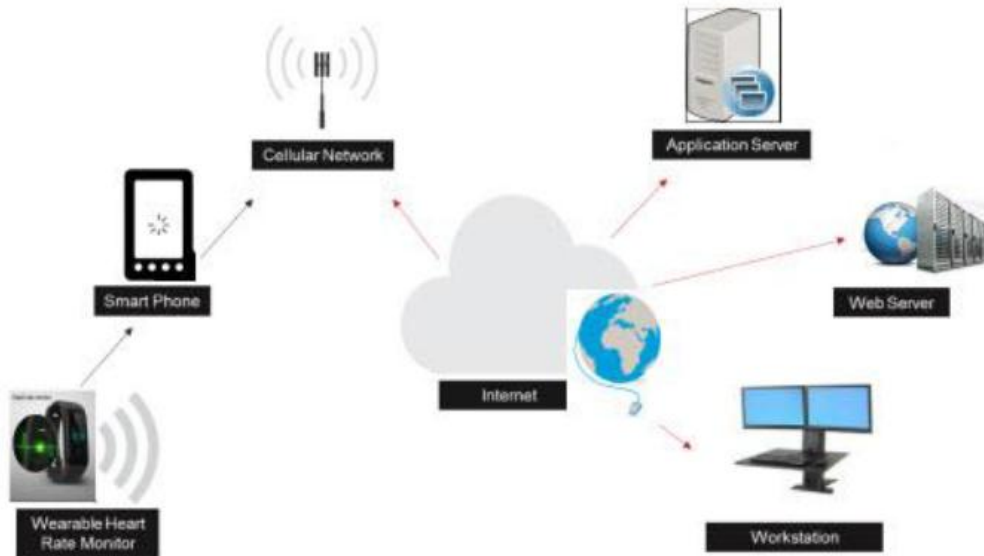


Figure 5 Back-end Service Data Flow

### 3.3 Security Model

As I see, the most relevant issues that may appear to the product and service can be observe from both perspectives, service and product.

From a product perspective, the issues are related to:

- Cloning;
- Product impersonation;
- Service impersonation;
- Ensuring privacy.

From a service perspective, the issues are related to:

- Cloning;
- Hacked services;
- Identifying anomalous endpoint behavior;
- Limiting compromise;
- Reducing data loss;

- Reducing exploitation;
- Managing user privacy;
- Improving availability.

Considering the fact that the end-point has very little functionality, we can deploy minimal security on the endpoint for both application security and communication. Since the endpoint application is flashed on a single device, as long as the device firmware is locked, there is no real threat of attack against the endpoint within the given use case. Since privacy represent an issue, we must consider at least a personalized PSK version of a Trusted Computing Base (TCB)iii. This would ensure that encryption tokens were unique to each endpoint, so that one compromised endpoint cannot compromise all endpoints. If the personalized (unique) keys were encoded into the locked microcontroller, it would be reasonable to believe that this use case were adequately secured from the threat of cloning, impersonation, and privacy issues.

From a server infrastructure perspective, the things are different because we need to ensure that:

- There must be a front-end security that diminishing the effects of an Denial of Service attack;
- Must be exercised controls to limit the traffic to or from services;
- Duties from the service layers must be well delimited;
- Create secured database with Personalized PSK tokens;
- Define security measures in the service operating system;
- Define the metrics to evaluate anomalous endpoint behavior.

The system can be more secured if we take in account the exposed considerations, and may bring some simple and cost-effective changes on endpoint, ensuring the technology without changing the architecture. Privacy is ensured by granting each endpoint unique cryptographic tokens.

#### 4. CONCLUSIONS

In order to benefit from the huge potential of connected IoT devices, the need for a strict and reliable approach to security is essential. Internet of Things is the next step towards a globally and pervasive connection to any communication and computation enabled objects/devices, regardless their access technology, available resources and location. Security is the main concern for the IoT along with the data privacy because the implementation of IoT on a global scale affects billions of people and devices. In this paper, we briefly reviewed the main security issues and challenges for the Internet of Things and I also described a smart device in order to provide some indications about securing an end-point device.

#### References

1. Ashton, K., 2009. *That 'Internet of Things' Thing*. [Online] Available at: <http://www.rfidjournal.com/articles/view?4986> [Accessed 30 08 2017].
2. David, O., 2016. *Gartner Identifies the Top 10 Internet of Things Technologies for 2017 and 2018*. [Online] Available at: <https://www.iotcentral.io/blog/gartner-identifies-the-top-10-internet-of-things-technologies-for>

3. Ding, C., Yang, L. & Wu, M., 2011. Security architecture and key technologies for IoT/CPS. *ZTE Technology Journal*, 17(1).
4. Evans, D., 2011. *The Internet of Things: How the Next Evolution of the Internet Is Changing Everything*, s.l.: Cisco Internet Business Solutions Group (IBSG).
5. Fink, G. A., Zarzhitsky, D. V., Carroll, T. E. & Farquhar, E. D., 2015. Security and privacy grand challenges for the internet of things. In *Collaboration Technologies and Systems (CTS). International Conference on*, p. 27–34.
6. Geng, Y. et al., 2010. Security Characteristic and Technology in the Internet of Things. *Journal of Nanjing University of Posts and Telecommunications (Natural Science)*, 30(4).
7. Gib, S., 2017. *Upcoming IoT regulations and laws: How to survive and stay compliant*. [Online] Available at: <http://www.ioti.com/security/upcoming-iot-regulations-and-laws-how-survive-and-stay-compliant> [Accessed 20 10 2017].
8. Li, L., 2012. Study on security architecture in the Internet of Things.. *Measurement, Information and Control (MIC), 2012 International Conference on*, Volume 1, pp. 374-377.
9. Mark, V., 2017. *Wearables Technology Components*. [Online] Available at: <https://www.digikey.com/en/product-highlight/p/panasonic/wearable-technology> [Accessed 15 10 2017].
10. Rob, E., 2017. *8.4 Billion Connected "Things" Will Be in Use in 2017, Up 31 Percent From 2016*. [Online] Available at: <https://www.gartner.com/newsroom/id/3598917> [Accessed 02 09 2017].
11. Sarah, K., 2017. *9 IoT Security Threats To Watch*. [Online] Available at: <http://www.crn.com/slideshows/internet-of-things/300089496/black-hat-2017-9-iot-security-threats-to-watch.htm/pgno/0/2> [Accessed 30 09 2017].
12. Sun, G., Huang, S., Yang, Y. & Wang, Z., 2014. A privacy protection policy combined with privacy homomorphism in the Internet of Things. *Computer Communication and Networks (ICCCN), 2014 23rd International Conference on*, 4-7 08, pp. 1-6.
13. Victor , T., 2017. *Internet of Things future forecasts: focus on IoT security*. [Online] Available at: <https://www.i-scoop.eu/internet-of-things-guide/iot-security-forecasts/> [Accessed 10 10 2017].
14. Zhao, K. & Ge, L., 2013. A survey on the internet of things security. *Proceedings - 9th International Conference on Computational Intelligence and Security, CIS 2013*, 14 12, pp. 663-667.



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## **AN ASSESSMENT OF DISTANCE LEARNING EDUCATION PLATFORM OPTIONS AND OPPORTUNITY**

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**Abstract:** *Distance learning in Romania is organized by combining different forms of distance interaction and communication (designed and developed using an e-learning predefined platform) but also face-to-face meetings and tutorial sessions. Danubius University implemented in 2009 such a system based on Sakai e-Learning platform. To evaluate the quality and opportunity level regarding the usage of the e-learning platform and the specific methods and tools, the distance learning department developed a quiz for the students. The content of this questionnaire, based on which the performance assessment is made, approach the flexibility in offering the e-learning support, the communication possibilities and the time saving. All the University's students enrolled in distance learning programs were subjects no matter their degree level or domain. The results of this assessment are managerial tools and decision instruments for future development of the distance learning methods adopted by the university but also for new modules added to the e-learning platform.*

**Keywords:** *distance learning, Sakai, e-learning platform*

**JEL Classification:** *D83*

### **INTRODUCTION**

Distance education has experienced lately an impressive evolution, becoming more and more a flexible type of educational category "available to anyone at anytime and at any place" (Subic, A& Maconachie, 2004); more, this system turns into one of the most important global business, following the development of another element, that of internationalization of the educational process. Also, techniques and methodologies providing distance learning services have developed lately, now existing various LMS platforms in open or paid versions (Subic, A&Maconachie, D., 2004). In addition, an increasingly number of students choose to work during their studies, thereby determining them to choose more flexible version of distance learning than on the conventional form, specific to standard education. Among the advantages of distance learning can also find the flexibility, timesaving orienting and learning resources in multiple environments.

In this sense, the greatest challenge that universities encounter during their effort to provide distance education is to use approaches and technologies particularly suited to educational context, which is attractive to students and to become effective. Thus, the quality of distance learning programs offered by universities is an important factor in attracting students

from other regions/countries and, of course, in the consistent involvement of these students in learning through the computer.

## **DISTANCE LEARNING: STATE OF THE ART**

Starting with 2008-2011, distance education knows a new stage concretized in MOOCs (Massive Open Online Courses), which is a form of providing university education to anyone with access to a computer connected to the Internet (Kurzman, P, 2013). Education providers offering online courses to students (EdX, Coursera, Udacity, etc.) in partnership with educational institutions worldwide are in continuous transformation, adaptation and expansion, and the number of courses they provides follow the same trend. Thus, if in 2013 EdX offered 94 courses from 29 institutions, Coursera offered 325 courses and Udacity offered 26 courses, in January 2016 EdX provide 820 courses, Coursera 1580 courses, while Udacity exceeded 120 courses, according to some sources.

The alternatives to this system began to materialize, so, in 2012 was launched DOCC (Distributed Open Collaborative Courses) which allows to change the theme and courses organization based on the students intervention and, then SPOC (Self-Paced Online Course), which enhance students flexibility in terms of the learning start, the rhythmicity of the study, etc. In Romania, distance learning system is restricted by certain regulations governing at the national level the organization of this kind university education. So, even if distance learning is based on electronic means of communication, enabling communication with anyone, anyhow, anywhere, some activities remain closely linked to the presence of students in the university campus. Flexible learning technologies used in distance learning programs can be different, but it matters a lot the manner in which they are used to facilitate communication and interacting with the student for it to be able to acquire specific skills and concepts appropriate to the graduated program. A list of the references in alphabetical order should be given at the end of the paper using Times New Roman, 10 pts., normal, alignment justify, upper and lower case.

## **RESEARCH METHODOLOGY AND RESULTS**

Danubius University of Galati chose Sakai platform (<https://sakaiproject.org/about>) as the learning management system and it seems to be the only university in Romania using this system, although the Sakai community includes over 360 educational institutions worldwide, including Stanford University, Université de Poitiers, Columbia University, Bradley University, Duke University, University of Notre Dame, The University of North Carolina, etc.

Sakai platform (“Danubius Online”) offers to university students several types of instruments/facilities:

- Tools to support learning through individual study and a flexible tutorial;
- Access to educational resources
- Tools for testing the acquired knowledge;
- The possibility of transmission the projects during the semester to the teachers
- The possibility to discover grades obtained from ongoing evaluation or final evaluation;
- Tools for bidirectional communication (with teachers or peers year) such as: chat, messaging, and forums

- Notification system directly via email account
- The possibility of participating in videoconferences
- Providing information on tutorial activities schedule, exam scheduling, etc.

Also Danubius Online supports teachers, researchers and administrative staff, offering them, among other things:

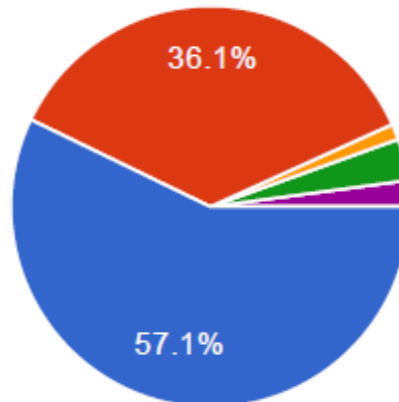
- The opportunity to open and develop sites;
- Tools for project management, resources distribution, tactical or strategic planning activities, and collaborative activities development;
- Tools for organizing teaching and research

To assess the way in which students appreciate the Sakai platform used by Danubius University we have created a questionnaire structured on three evaluation areas of the e-learning platform performance, namely: flexibility, communication and efficient organization. The collected data were analyzed and the results have led to expressing our conclusions.

According to the data, 41.6% of students who participated in the survey are enrolled in the Faculty of Law, 40.8% in the Faculty of Economics and 17.6% are enrolled the Faculty of Communications and International Relations. Regarding academic year, we find that 45% of respondents are in the first year, 29% are in the second year, 19.7% belong to the third year, and for the fourth year (only for the Faculty of Law) are 6.3% of students. Regarding the evaluation of flexibility generated by the use of the platform, the questionnaire contained three questions.

For the first question students had to answer if it considers that using the e-learning platform leads to improving the way in which they work with teachers. Student responses are leading to the conclusion that they estimate as positive the learning environment based on Sakai tools, since 93.2% of respondents appreciate this in very great extent or largely according to the figure below.

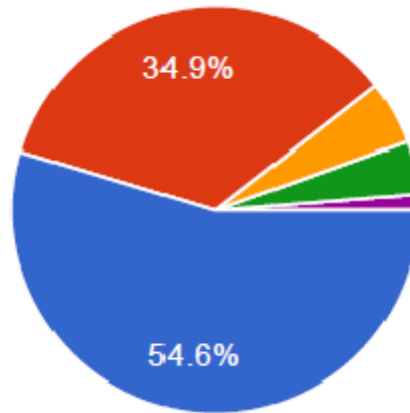
**Figure 1 Appreciation of the learning environment based on Sakai**



*Very good 57.1%; Good 36.1%; No answer 1.3%; Satisfactory 3.4%; Unsatisfactory 2.1%*

Also, regarding the flexibility of the tutorial support that e-learning platform allows you, 89.5% of respondents believe that students can even submit self-evaluation tests during the semester.

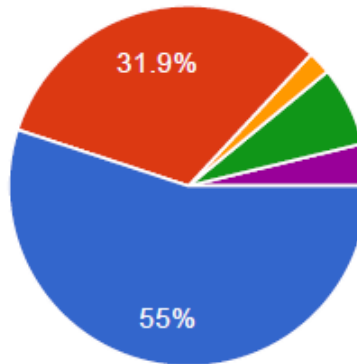
**Figure 2 Flexible tutorial Support**



*Very good 54.6%; Good 34.9%; No answer 5%; Satisfactory 4.2%; Unsatisfactory 1.3%*

Another aspect analyzed refers to how the Sakai platform can provide two-way communication in distance learning programs between students or between students and teachers, so, according to the questionnaire, 86.55% of participants responded that students can communicate more easily with tools provided by e-learning platform.

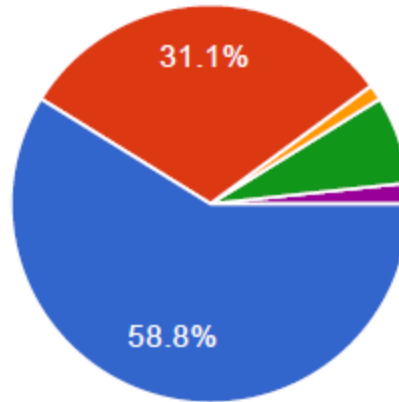
**Figure 3 Facilitating two-way communication**



*Very good 55%; Good 31.9%; No answer 2.1%; Satisfactory 7.1%; Unsatisfactory 3.8%*

And 98.9% of the students receive information about their meetings with professors through the e-learning platform.

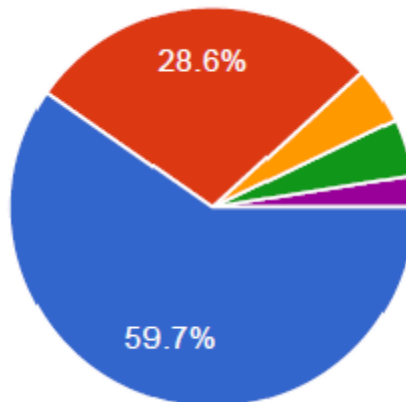
**Figure 4 Getting useful informations**



*Very good 58.8%; Good 31.1%; No answer 1.3%; Satisfactory 7.1%; Unsatisfactory 1.7%*

Also, using the e-learning platform, 88.3% of respondents feel they can submit questions at any time to the teacher.

**Figure 5 Continuous interactions between student and professor**

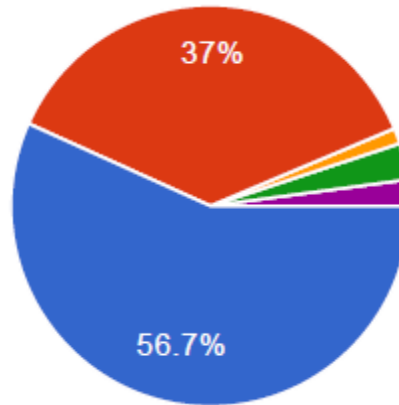


*Very good 59.7%; Good 28.6%; No answer 4.6%; Satisfactory 4.6%; Unsatisfactory 2.5%*

From the perspective of more efficient activities management and saving time, we see that saving time is one of the most important factors in choosing a distance learning program. Thus, 93.7% of students responded that the e-learning platform is a single point of access to the information required in the learning process.



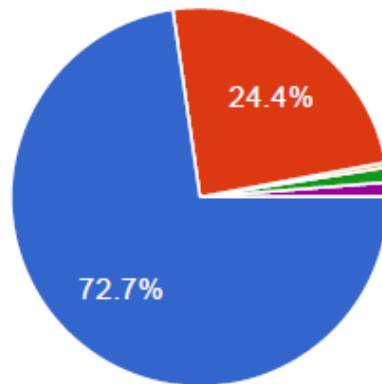
**Figure 6 Time management and time saving**



Very good 56.7%; Good 37%; No answer 1.3%; Satisfactory 2.9%; Unsatisfactory 2.1%

While 97.1 of students believe that the use of the platform enables better management of time, regardless of the location. Thus, distance learning, mediated by the e-learning platform allows the student to save time (by decreasing/eliminating distances to/from the university, obtaining the necessary information faster, etc.).

**Figure 7 Time management**



Very good 72.7%; Good 24.4%; No answer 0.4%; Satisfactory 1.3%; Unsatisfactory 1.3%

## References

1. Bussakorn Cheawjindakarn, Praweenya Suwannatthachote, Anuchai Theeraroungchaisri, (2012), Critical Success Factors for Online Distance
2. Learning in Higher Education: A Review of the Literature, Creative Education 2012. Vol.3, Supplement, 61-66
3. Chen, DeRen;Guo, WenYing, (20015) Distance Learning in China, International Journal of Distance Education Technologies; Oct-Dec 2005; 3, 4; ProQuest Central, pg. 1-5.

4. Hoskins, B (2013) Is Distance Learning Transformational?, *The Journal of Continuing Higher Education*, 61:1, 62-63.
5. Kurzman, P.A. (2013) The Evolution of Distance Learning and Online Education, *Journal of Teaching in Social Work*, 33:4-5, 331-338
6. Subic, A & Maconachie, D (2004) Flexible learning technologies and distance education: teaching and learning perspective , *European Journal of Engineering Education*, 29:1, 27-40



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## **THE NEXUS BETWEEN INTERNAL AUDIT INDEPENDENCE AND FIRM PERFORMANCE OF LARGE FIRMS: THE CASE OF ROMANIA AND POLAND**

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**Abstract:** *The influence of internal auditors on firm's performance represents an ongoing debate between scholars and practitioners, academics and regulators, managers and auditors. This study examines whether the audit characteristic such as internal auditors independence has an influence on firm performance. We use a series of linear regression estimations in order to test the influence of internal auditor's independence on firm performance for a sample of large companies from Romania and Poland. Overall, our results indicate, that an independent internal audit committee has a beneficial influence on company performance in listed and unlisted companies. Thus increasing the independence of the internal audit committee can lead to a higher resource management of the company, which is reflected in an increase in the overall performance. A more independent internal audit committee can lead to a higher performance in the companies from Romania and Poland.*

**Keywords:** *Internal Audit, Firm performance*

### **INTRODUCTION**

Internal Audit provides an independent and objective opinion to the management of an entity in terms of maintaining acceptable risk levels and provides recommendations regarding the activity of an entity conducting increased organizational performance. Internal audit is an objective and independent assessment of activity in an entity organized as a service. Functions, scope and objectives of internal audit determines its place and role. Internal audit depends and varies according to organization structure, management requirements of the organization and organization size. There are multiple definitions of audit but they all lead to a common idea, namely that the audit is the activity of analysis of property and financial documents, conducted by an independent, specialized and authorized to formulate an opinion just the reality, the financial statements providing financial context of the organization interviewed (Toma, 2011).

This study examines whether the audit characteristic such as independence defined as independent auditors in the audit committee have an influence on firm performance. The study contributes in extending the existent literature by revealing specific channels through which the independence of internal audit improves firm performance of large listed and unlisted companies. We believe that, by studying the influence of the internal auditor on firm performance in both listed and unlisted companies in Poland and Romania is important due to the specific characteristics of the institutional environment and accounting and reporting standards of both private and public companies. The remainder of this paper is organized as follows: Section 2 reviews the literature. Section 3 describes data and preliminary analysis. Section 4 describes the methodology used. Section 5 presents the results. Section six conclusions.

## **LITERATURE REVIEW**

The Institute of Internal Auditors (2017) in the International standards for the professional practice of internal auditing (standards) imply that the internal audit activity and committee must be independent and thus the internal auditors must be objective in performing their work. There are several studies that examine the internal audit characteristics, especially the audit committee's existence and audit committee composition. Fama and Jensen (1983) found that independent audit committee directors can view the internal audit work as a mean in enhancing their reputational capital and can exacerbate the damage for the director if a financial misstatement arises while the director serves the audit committee.

Menon and Williams (1994) found that the independence of the internal audit committee is unlikely to outcome effectiveness unless the committee is also active. Abbott and Parker (1999) found that the independence and activity of the internal audit committee are more likely to engage higher quality for the external auditors; this higher quality is defined as the likelihood of identifying and reporting the financial misstatements (De Angelo, 1981). Thus, an active and independent audit committee is associated with a higher likelihood in identifying and reporting the financial misstatements. (Abbott, et al. 2000) found that the presence of the audit committee that is active and independent is associated with a higher likelihood in identifying and reporting the financial misstatements and preventing fraud. Independent audit committee conducts to greater quality in monitoring financial statements thus increasing the performance (Kamarudina, et al. 2012). An independent audit committee contributes to stronger earnings informativeness, Woidtke and Yeh, (2013), the case of East Asian firms). Furthermore, the audit composition in the case of the East Asian firms, has more significant impact on firms with concentrated cash flow ownership than others. Owens-Jackson Robinson, and Shelton, (2009) analyzed the audit committee meetings and their independence and found that there is a negative relationship between them and the probability of fraudulent financial reporting. The likelihood of fraudulent financial reporting is negatively related to audit committee independence, number of audit committee meetings and managerial ownership and positively related to firm size and firm growth opportunities and the likelihood of fraudulent financial reporting given a totally independent audit committee is inversely related to the level of managerial ownership and the number of audit committee meetings

The independence and financial knowledge of the audit committee in Malaysia helps preventing the non-compliance of continuous financial disclosure thus preventing being reprimanded (Khamsi, et al. 2015). The association between audit committee, audit quality and discretionary accruals showed that audit committee and audit quality reduce manipulation of accounts, Nuraddeen and Hasnah, (2015). Based on the existent literature regarding the relationship between internal audit and firm performance we derived the following hypothesis:

*H.1. Independent internal auditors have a positive influence on firm`s performance.*

## DATA AND PRELIMINARY ANALYSIS

One of the main objectives of our analysis is to test the influence of an independent internal auditor on firm performance, thus we use a sample of 21 large companies from Romania and Poland from a ten years period (2004-2013). Our main filter in criteria was that the company was considered to be a large company according to the European Commission definitions and the company should have at least ten years of data in Orbis database. In order to determine the relationship between independent internal audit an company`s performance we used the following variables as presented in table 1.

In determining influence of internal audit independence on firm performance we use return on assets (ROA) as dependent variable, consistent with other studies that tacked in consideration this variable as a measurement of firm performance such as (Brick *et al.*2006); (Cheng, 2008); Jackling and Johl, (2009). ROA is considered the actual firm performance (Ponnu, 2008). We use return on assets (ROA) calculated by dividing earnings before interest and taxes depreciation (EBIDA) to total assets in order to remove the bias of country specific fiscal policies, and return on equity ROE calculated by dividing earnings before interest and taxes depreciation toshareholders funds. We employ additional firm control variables such as: *Current ratio (CR)* representing current assets divided by current liabilities, *Solvency ratio (SRA)* is calculated by dividing the sum of net income plus depreciation to the sum of short-term liabilities and long-term liabilities, *Liquidity ratio (LR)* calculated by dividing the difference between current assets and stock to current liabilities, *Net assets turnover (NAT)* is calculated by dividing sales to total fixed assets, *Gearing (GEA)* is calculated by dividing he sum of long-term debt, short-term debt to total assets and *Cash flow-operating revenue (CFOR)* calculated by dividing cash-flow to operating revenue.

**Table 1 Variables definition**

Variable	Description	Data source
<i>Dependent variable</i>		
ROA	Return on assets calculated by dividing EBITDA to total assets (%)	Orbis
ROE	Return on equity calculated by dividing EBITDA to shareholders funds (%)	Orbis
<i>Internal audit characteristics</i>		
AI	Dummy variable equal to 1 if there is an independent internal audit committee and 0 if not.	Hand- collected data
<i>Firm characteristics</i>		
EBITDA	Earnings before interest and taxes depreciation	Orbis

CR	Current ratio (%)	Orbis
SRA	Solvency ratio (Asset based) (%)	Orbis
LR	Liquidity ratio (%)	Orbis
NAT	Net assets turnover (x)	Orbis
GEA	Gearing (%)	Orbis
CFOR	Cash flow / Operating revenue (%)	Orbis

Source: Authors definition

As table no 2 suggest our data is an unbalanced panel data, and on average 49.17% of our companies have independent internal audit committee. This high degree of

**Table 2 Descriptive Statistics**

	ROA	ROE	AI	EBITD		SRA	LR	NAT	GEA	CFOR
				A	CR					
Mean	0.0916	0.2351	7	292165.	1.506	40.992	0.868	3.316	58.753	5.8940
Median	0.0891	0.2290	0	33814.4	0	48.620	0	0	37.706	6.1960
Maximum	0.5650	3.0864	0	3239424	3	99.945	0	5	0	96.3930
Minimum	-	-	0.000	-45210.7	0	78.929	0	0	0.0000	82.9900
Std. Dev.	0.1344	0.6049	3	529323	9	30.491	1	0	73.263	19.6239
Skewness	0.4422	4.2988	2	2.3342	7	1.3038	1	1	2.8864	-0.9778
Kurtosis	8.7935	49.305	1	9.3756	0	4.9775	7	8	12.965	9.9008
Observations	157	157	181	155	179	175	179	166	130	171

Source: Authors calculation

An initial analysis testing of the influence of independent internal auditors on firm performance is done via the correlation matrix presented in the table 3.

**Table 3 Correlation matrix**

	ROA	ROE	AI	EBITD		SRA	LR	NAT	GEA	CFO R
				A	CR					
ROA	1									
ROE	0.5773*	1								
AI	0.1866*	0.0820	1							
EBITD A	0.5623*	0.1910	0.1301*	1						
CR	0.2921*	0.0558	-0.0015	0.0489	1					
SRA	0.5152*	-0.0391	0.2653*	0.3707**	0.4288*	1				
LR	0.5596*	0.1860	0.1949*	0.2211**	0.6054*	0.5909**	1			

	*		*		*					
NAT	-0.2132	0.0078	-0.1683	0.2902**	-0.1092	0.6272**	-0.1719	1		
		0.2255*						0.2613*		
GEA	-0.3031	*	-0.0523	-0.1966*	0.1936*	-0.5951	0.2716**	*	1	
	0.5814*									
CFOR	*	0.3336*	0.2117*	0.4105**	0.0009*	0.3301**	0.3004**	0.2723*	0.2956*	1

Note: \*\* Correlation is significant at 1% and \* at 5%  
 Source: Authors calculation

Correlation Matrix (similar to a covariance matrix where the columns are standardized), presented in Table no. 3 describes the correlation between the variables analyzed. As we can see, between variables, we have both positive and negative correlation, perfectly normal, due to the significance of each analyzed variable. The correlation matrix suggests that there is a weak but statistically significant relationship between company performance proxied by ROA and independent internal auditor while we could not find a similar link in regards to the performance depicted by ROE indicator.

## METHODOLOGY

In testing the relationship between firm performance and independent internal auditors committees, we will use a two-step approach. In the first part of the analysis, we will use the Principal Components Analysis in order to select the most suitable determinants of firm performance of large companies from Poland and Romania. In the second step, we will use a series of linear regression estimation in order to test the actual influence of independent internal auditor on firm performance.

The methodology in our analysis is composed of two distinct steps:

- *The Principal Components Analysis methodology;*
- *Linear Regression Estimation- an Ordinary Least Square model (OLS estimation)*

The Principal Components Analysis (PCA), also known as Hotelling transformation or Karhunen-Loeve transformation is a technique factorial analysis; where the purpose is to reduce the number of variables initially used, taking into account a small number of representative variables. The goal of PCA is to get a small number of linear combinations (the main components) from a set of variables that retain as much information as possible from the initial variables.

In our analysis we will use the OLS estimation to estimate the influence of the internal auditors independence on firm`s performance as in formula (1):

$$ROA_{i,t} = \alpha_i + \beta_1 AI + \gamma_{i,t} FC + \varepsilon_i \quad (1)$$

Where:

*i*-is the firm and *t*-is the time;

*ROA<sub>i,t</sub>* – is company performance indicator proxied by the return on assets;

*α<sub>i</sub>* – is the firm specific intercept;

$\beta_1 AI$  – depicts the internal auditors independence, dummy variable that equals 1 when the internal auditors are independent

$\gamma_{i,t} FC$  – are the firm`s specific characteristics such as: Earnings before interest and taxes depreciation; Current ratio; Solvency ratio (Asset based); Liquidity ratio; Net assets turnover; Gearing and Cash flow / Operating revenue.

$\varepsilon_i$  – represents the standard error.

A full description of all the variables of our analysis can be found in Table 1. In all of our estimations, we will use Hubert-Whites Heteroscedasticity-consistent estimators.

### EMPIRICAL RESULTS

The Total Variance Explained Table presented in Table no.4 provides the first information specific to the factorial analysis. Using the Principal Components Analysis (PCA) method, a number of eight main components, the so-called factors, were generated. As we can see in table 4, four factors meet the selection criterion (own values > = 1).

**Table 4 Results of Principal Components Analysis**

Principal Components Analysis													
Sample (adjusted): 1 179													
Included observations: 107 after adjustments													
Balanced sample (listwise missing value deletion)													
Computed using: Ordinary correlations													
Extracting 12 of 12 possible components													
Eigenvalues: (Sum = 12, Average = 1)													
Number	Value	Difference	Proportion	Cumulative Value	Cumulative Proportion								
1	4.130770	1.948647	0.2951	4.130770	0.2951								
2	1.856997	0.302520	0.1326	8.169889	0.5836								
3	1.554476	0.237306	0.1110	9.724365	0.6946								
4	1.317170	0.546891	0.0941	11.04154	0.7887								
5	0.770279	0.113843	0.0550	11.81181	0.8437								
6	0.656436	0.191079	0.0469	12.46825	0.8906								
7	0.465357	0.132072	0.0332	12.93361	0.9238								
8	0.293067	0.103317	0.0209	13.55996	0.9686								
9	0.189750	0.032509	0.0136	13.74971	0.9821								
10	0.157240	0.083852	0.0112	13.90695	0.9934								
11	0.073388	0.053726	0.0052	13.98034	0.9986								
12	0.019663	---	0.0014	14.00000	1.0000								
Variable	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9	PC 10	PC 11	PC 12	PC 13
CFOR	0.24	0.18	0.35	-0.25	-0.03	0.51	0.05	-0.03	0.02	0.13	0.05	-0.01	0.00
CR	0.08	0.37	-0.25	0.21	0.23	-0.05	0.51	-0.38	-0.04	0.01	-0.05	-0.01	0.00
EBITDA	0.38	-0.14	0.17	-0.10	0.08	-0.01	0.13	0.03	-0.60	-0.26	0.16	0.04	0.00
GEA	-0.17	-0.20	0.36	0.62	0.19	0.20	0.03	0.35	-0.19	0.33	0.02	-0.01	0.00
AI	0.17	0.05	-0.08	0.13	-0.01	0.47	0.43	0.03	0.27	-0.13	0.00	0.20	0.00



LR	0.20	0.43	-0.08	0.05	0.37	0.13	-0.45	0.39	0.17	-0.40	0.06	0.04	0.00
NAT	-0.24	-0.12	0.14	-0.57	0.49	0.07	0.05	-0.04	0.20	0.33	0.09	0.05	0.00
ROA	0.28	0.33	0.34	-0.20	-0.09	-0.08	0.09	0.07	-0.27	0.22	-0.19	-0.07	0.00
ROE	0.08	0.16	0.61	0.13	-0.30	-0.31	-0.05	-0.22	0.44	-0.12	0.08	0.06	0.00
SRA	0.38	-0.32	-0.04	0.01	0.06	0.00	-0.01	0.05	0.22	0.05	-0.40	-0.13	0.71
SF	0.32	0.29	-0.30	0.11	-0.11	-0.14	-0.13	0.15	0.09	0.66	0.22	0.03	0.00
ST	0.12	0.04	0.18	0.14	0.60	-0.45	0.10	-0.08	0.03	-0.02	-0.02	-0.01	0.00
TA	0.34	-0.38	-0.04	0.03	0.04	-0.04	-0.01	-0.12	0.14	0.00	0.65	0.26	0.00

Source: Authors calculation

The Sums of Squared Loadings columns provide the values for their own values (Total column), the variance explained (column% of Variance) and the cumulative variance (Column %), in the context of the initial solution, before rotation. The variance explained by each factor is distribute as follows: first factor, 0.2951 and second factor, 0.1326, the third factor 0.1110 and the fourth factor 0.0941. All four factors explain 0.6328 of the value of the variance analyzed. The Rotation Sums of Squared Loadings columns show the values for the factors, but after applying the rotation procedure. In the context of the same and the total variants (75.414%), one can see a redistribution of the variance explained by each factor, as follows: the first factor 62.090% and the second factor, 13.324%. As can be seen in table no.4, by the rotation method, the first factor loses the saturation level in favor of the second factor. We took into account, after the PCA a number of 10representative variables and conducted our OLS regression presented in table no 5.

**Table 5 Results of Ordinary Least Square model**

Dependent Variable: ROA

Method: Least Squares

Sample (adjusted): 1 179

Included observations: 107 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	-0.048281	0.020298	-2.378536	0.0194
<i>CFOR</i>	0.000736	0.000299	2.461586	0.0156
<i>CR</i>	-0.000807	0.003994	-0.202118	0.8403
<i>EBITDA</i>	1.01E-07	1.19E-08	8.445939	0.0000
<i>GEA</i>	-0.000135	6.82E-05	-1.973043	0.0514
<i>LR</i>	0.014626	0.009004	1.624321	0.1076
<i>NAT</i>	0.005437	0.001473	3.691915	0.0004
<i>ROE</i>	0.165228	0.017612	9.381391	0.0000
<i>AI</i>	0.018991	0.011329	1.676371	0.0970
<i>SRA</i>	0.001964	0.000394	4.980023	0.0000
R-squared	0.853052	Mean dependent var		0.119324
Adjusted R-squared	0.836037	S.D. dependent var		0.093557
S.E. of regression	0.037883	Akaike info criterion		-3.603266
Sum squared resid	0.136339	Schwarz criterion		-3.303510

Source: Authors calculation

The results of our estimation from table no. 5 indicate that the independence of the internal audit committee has a positive sign and statistically significant on return on assets dependent variable. Our results are consistent with other studies such as (Abbott, *et al.*2000); (Kamarudina, *et al.*2012) and Woidtke and Yeh, (2013) in which the presence of independent internal audit committee leads to a higher financial disclosure, a higher likelihood in identifying and reporting the financial misstatements and increasing overall the company's performance. We can imply that companies that have an independent internal audit committee have an increased performance reflected by ROA with 0.018991 than the companies that do not have independent internal audit committee. Thus our hypothesis: H.1. Independent internal auditors have a positive influence on firm's performance was confirmed at a 0.1 level.

## **CONCLUSIONS**

The aim of this paper was to determine if independent audit committee could improve the performance of a company via advising and control of the manager actions. We used a series of linear regression estimation to test the influence of independent auditors of company performance in a sample of large companies from Poland and Romania over the period 2004-2013.

Our results indicate that independent auditors can increase performance of companies via better monitoring and control. Our results are similar to other studies such as (Kamarudina, *et al.*2012) who argues that independent audit committee conducts to greater quality in monitoring financial statements thus increasing the performance of an entity. In addition, our results reveal that the presence of the audit committee as an active and independent is associated with a higher likelihood in identifying and reporting the financial misstatements and preventing fraud, conducting to higher performance. Furthermore, our results are consistent with Woidtke and Yeh (2013) who argues that an independent audit committee contributes to stronger earnings informativeness.

It is important that the companies take in consideration in their corporate governance system the independence of the internal audit committee. We consider that increased independence of the internal audit committee can lead to a higher resource management of the company, which increases the overall performance. Moreover, an independent internal auditor committee contributes to higher financial disclosure and avoids conflict of interests between management parties and shareholders.

## **References**

1. Abbott, L.J. and Parker S., 1999. Audit committee characteristics and auditor selection, *Auditing: A Journal of Practice and Theory*, forthcoming.
2. Abbott L.J, Park, Y. Parker, S. , 2000. The effects of audit committee activity and independence on corporate fraud, *Managerial Finance*, Vol. 26 Issue: 11, pp.55-68, <https://doi.org/10.1108/03074350010766990>.
3. Brick, I. E., Palmon, O., Wald, J. K., 2006. CEO Compensation, Director Compensation and Firm Performance: Evidence from Cronyism. *Journal of Corporate Finance* 12, 403-423.
4. Cheng, S., 2008. Time to Revamp Insider Boards. *National Real Estate Investor*, 45-72.

5. DeAngelo, L. 1981, Auditor independence, low-balling and disclosure regulation, *Journal of Accounting and Economics* 1: pp.113-127.
6. Fama, E. and M. Jensen. 1983. Agency problems and residual claims. *Journal of Law and Economics* 26(2): pp.327-349.
7. IIA., The Institute of Internal Auditors. Retrieved 2017, retrieved from [www.iaa.org.uk](http://www.iaa.org.uk): <https://www.iaa.org.uk/resources/global-guidance/revised-standards-2017/>.
8. Jackling, B., Johl, S., 2009. Board Structure and Firm Performance: Evidence from India's Top Companies. *Corporate Governance: An International Review* 17(4), 492-509.
9. Kamarudin K.A., Ismaila W.A.W., Samsuddina M.E., 2012. The Influence of CEO Duality on the Relationship between Audit Committee Independence and Earnings Quality", *Procedia - Social and Behavioral Sciences* 65, pp. 919 -924.
10. Khamsi C.A, Sarina O., Memiyanty A.R., 2015, Independence and Financial Knowledge on Audit Committee with Non-compliance of Financial Disclosure: A Study of Listed Companies Issued with Public Reprimand in Malaysia, *Procedia - Social and Behavioral Sciences* 172, pp. 754-761
11. Menon, K., and J.D. Williams. 1994. The use of audit committees for monitoring. *Journal of Accounting and Public Policy* 13 (Spring): pp.121-139.
12. Nuraddeen U. M. Hasnah K., 2015, Impact of Audit Committee and Audit Quality on Preventing Earnings Management in the Pre- and Post- Nigerian Corporate Governance Code 2011, *Procedia - Social and Behavioral Sciences* 172, pp. 651 – 657.
13. Owens-Jackson, L., Robinson, D., & Shelton, S. W. 2009. The Association Between Audit Committee Characteristics, the Contracting Process and Fraudulent Financial Reporting.", *American Journal of Business*, 24(1), pp. 57-66.
14. Ponnu, C. H., 2008. Corporate governance structures and the performance of Malaysian public listed companies. *International Review of Business Research Papers* 4(2), 217-230.
15. Toma L., 2011, "Auditul financiar modern", Ed. Univ. „Al.I. Cuza”, Iași,, p.47.
16. Woidtke T., Yeh Y-H., 2013, The role of the audit committee and the informativeness of accounting earnings in East Asia, *Pacific-Basin Finance Journal*, 23, pp. 1-24.



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## **LABOUR MARKET FLEXIBILITY AND EFFICIENT USE OF TALENT. IMPACT STUDY FOR CEE COUNTRIES**

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**Abstract:** *To increase the competitiveness and efficiency of companies in a market who change its structure every day, the role of human resource become one of the most influence factor. The main aim of our paper is to analyze the relationship between the labor market flexibility and the efficient use of talent, through the indicators as cooperation in labor-employer relations, hiring and firing practices, flexibility of wage determination, redundancy costs, pay and productivity, reliance on professional management and women in labor force, ratio to men. The indicators describe labor market flexibility and efficiency use of talents across states from Central and Eastern European countries. The data are set for the period 2007-2015. Our research shows that are the most efficient labor market regimes in enhancing competitiveness.*

**Keywords:** *labor market relations, efficiency, competitiveness*

**JEL Classification:** *E020, J500, J850*

### **INTRODUCTION**

The contribution of human resources to economic competitiveness is influenced by the size and skills and the flexibility of the labor market. When human resource is heavily under evaluated, it is harmful for cultivating of core firms competitiveness (Yao & Cui, 2010). On the other hand, labor market flexibility in very important in managing hiring and firing practices, and implicitly, business competitiveness. A flexible environment allow to shift workers from one activity to another at a low cost level and, allow for wage fluctuations without much social disruption (Swab, 2010). This paper aims analyzing the major constraints on competitiveness in terms of cooperation in labor-employer relations, hiring and firing practices, flexibility of wage determination, redundancy costs, pay and productivity, reliance on professional management and women in labor force, ratio to men within Eastern and Central European member states between 2007 and 2015.

Starting with 2007, Labor market efficiency represent one of the twelve pillars of Global Competitiveness Index. The methodology for calculating the labor market efficiency has changed over time. In 2007 a number of 12 variables were used in calculating labor market efficiency aggregate indicator, namely: Cooperation in labor-employer relations, Flexibility of wage determination, Nonwage labour costs, Rigidity of Employment, Hiring and firing practices,

Firing Costs (known as Redundancy Cost from 2010 onwards), Extent and effect of taxation (Effect of taxation on incentives to work from 2014), Total Tax Rate, Pay and productivity, Reliance on professional management, Brain drain, Female participation in the labor force. From 2010-2011 onwards Total Tax rate was not registered as variable in measuring Labor Market Flexibility, neither Nonwage labour cost, from 2009-2010 and Rigidity of Employment, from 2012-2013. Starting with 2013-2014 and 2014-2015 reports, the Brain Drain component was replaced by other two components “Country capacity to retain talent” and “Country capacity to attract talent”. The above variables were grouped into two categories, the ones that are related to labor market flexibility and the ones that describe the efficiency of using human factors (Table 1).

**Table 1 Labour market efficiency, 2007-2015**

Component	Type of data (1-7 Likert scale questions or calculation)	Scale	Source
<b>A. Flexibility</b>			
Cooperation in labor-employer relations	In your country, how would you characterize labor-employer relations?	[1 = generally confrontational; 7 = generally cooperative]	World Economic Forum (WEF), Executive Opinion Survey
Flexibility of wage determination	In your country, how are wages generally set?	[1 = by a centralized bargaining process; 7 = by each individual company]	WEF, Executive Opinion Survey
*Nonwage labour costs	<i>Calculation</i>	<i>Estimate of social security payment<sup>15</sup> and payroll taxes associated with hiring an employee in a fiscal year, expressed as a percentage of the worker's salary in that fiscal year</i>	<i>World Bank, Doing Business.</i>
**Rigidity of Employment	<i>Hard Data</i>	<i>Rigidity of Employment Index on a 0 (best)-to-100</i>	<i>The World Bank, Doing Business</i>
Hiring and firing practices	In your country, how would you characterize the hiring and firing of workers?	[1 = heavily impeded by regulations; 7 = extremely flexible]	WEF, Executive Opinion Survey
Redundancy costs	<i>Calculation</i>	<i>In weeks of salary (Estimates the cost of advance notice requirements, severance payments, and penalties due when terminating a redundant worker, expressed in weekly wages.)</i>	<i>World Bank, Doing Business, WEF Forum's calculations</i>
Effect of taxation on incentives to work	In your country, to what extent do taxes reduce the incentive to work?	[1 = significantly reduce the incentive to work; 7 = do not reduce incentive to work at all]	WEF, Executive Opinion Survey

<sup>15</sup>retirement fund, sickness, maternity and health insurance, workplace injury, family allowance, and other obligatory contributions

*** <i>Total Tax Rate</i>	<i>Calculation</i>	<i>Combination of profit tax (per cent of profits), labour tax and contributions (per cent of profits), and other taxes (per cent of profits)</i>	<i>The World Bank, Doing Business.</i>
**** <i>Firing Costs – (Redundancy Cost from 2010 onwards)</i>	<i>Calculation</i>	<i>Cost of advance notice requirements, severance payments and penalties due to a terminated worker, expressed in weekly wages</i>	<i>The World Bank, Doing Business</i>
<b>B. Efficient use of talent</b>			
Pay and productivity	In your country, to what extent is pay related to worker productivity?	[1 = not related to worker productivity; 7 = strongly related to worker productivity]	WEF, Executive Opinion Survey
Reliance on professional management	In your country, who holds senior management positions?	[1 = usually relatives or friends without regard to merit; 7 = mostly professional managers chosen for merit and qualifications]	WEF, Executive Opinion Survey
Country capacity to retain talent	Does your country retain talented people?	[1 = the best and brightest leave to pursue opportunities in other countries; 7 = the best and brightest stay and pursue opportunities in the country]	WEF, Executive Opinion Survey For more details, refer to Chapter 1.3 of this Report
Country capacity to attract talent	Does your country attract talented people from abroad?	[1 = not at all; 7 = attracts the best and brightest from around the world]	WEF, Executive Opinion Survey
***** <i>Brain drain</i>	<i>Does your country retain and attract talented people?</i>	<i>[1 = no, the best and brightest normally leave to pursue opportunities in other countries; 7 =, there are many opportunities for talented people within the country)</i>	<i>Executive Opinion Survey, WEF</i>
Female participation in the labor force	<i>Calculation</i>	Ratio of women to men in the labor force	International Labour Organization, national sources

\* In 2007-2008, 2008-2009, the Labor market efficiency was calculated based on 13 variables, including Nonwage labour cost which was removed afterwards.

\*\* In 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012 reports included Rigidity of Employment, as additional variable in measuring Labor Market Flexibility. The values were evaluated on a 0 (best)-to-100 scale.

\*\*\* In 2007-2008, 2008-2009, 2009-2010 reports included an additional variable in measuring labor market flexibility: Total Tax rate.

\*\*\*\*This indicator is reported as Redundancy Cost from 2010 onwards. In 2009-2010, reference is made to the worker profile with 20 years of tenure. From 2011 onwards, reference is made to the workers profile with 1, 5, and 10 years of tenure.

\*\*\*\*\*In 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013 reports the two components “Country capacity to retain talent” and “Country capacity to attract talent” were grouped into one variable titled “Brain drain”.

Source: Based on the Global Competitiveness Reports from 2007-2008 until 2014-2015.

Due to different methodologies used in analyzing labor market efficiency, our research will encapsulate only the variables that are subject to whole reference period. The analyzed

countries are the Central and Eastern European Member countries, namely: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia.

## 2. LABOR MARKET RELATIONS IN CENTRAL AND EASTERN EUROPE

In table 2 are described all the variables used in our analysis: Cooperation in labor-employer relations, Hiring and firing practices, Flexibility of wage determination, Redundancy costs, Pay and productivity, Reliance on professional management and Women in labor force, ratio to men.

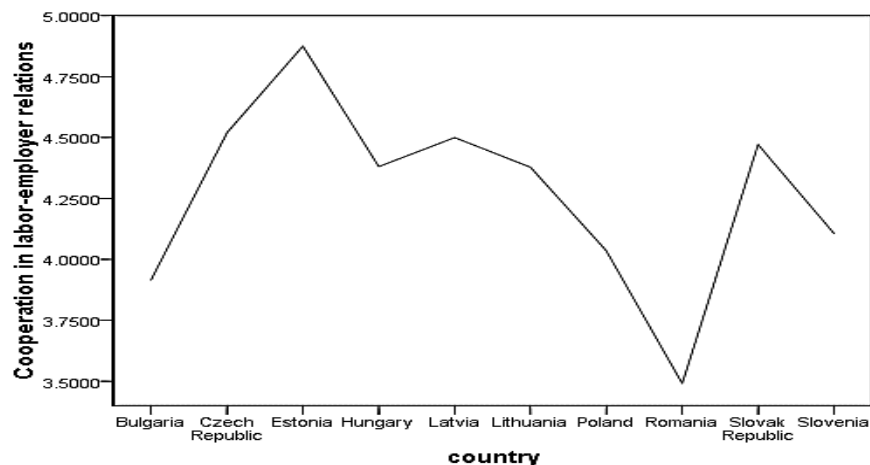
**Table 2 Labor market relations in ECE, 2007-2015**

	Minimum	Maximum	Mean	Std. Deviation
Cooperation in labor-employer relations	3.1695	5.1723	4.267328	.4396404
Hiring and firing practices	2.2892	4.9488	3.647700	.5699465
Flexibility of wage determination	3.8429	6.2320	5.383565	.5616473
Redundancy costs	3.0000	40.0000	19.486843	10.6023962
Pay and productivity	3.4856	5.4520	4.467819	.4365938
Reliance on professional management	3.2741	5.5023	4.452163	.5674145
Women in labor force, ratio to men	.7801	.9490	.852812	.0490288

Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015

The type of collective work relationships is an important mechanism that influence labor market productivity and competitiveness. In the literature, many specialists (Sala-i-Martin & Artadi, 2004, Ostoj, 2015) have found that a work relationship characterized by *cooperation* positively influences productivity, while a conflictual one generates a disadvantageous business environment which may lead to an endangered output.

**Figure 1 Cooperation in labor-employer relations in ECE, 2007-2015 (mean)**



Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015

In countries with high values for cooperation usually are dominated by the sense of joint responsibility for the entrepreneurship’s performance and of the need of employees’ participation in decision-making process and labor organization (Ostoj, 2015). This scenario brings on front two important postulates: first, employers consider that labor innovativeness is significant and, second, employees’ participation in decision-making process brings business profits. As a consequences, an efficient communication between involved parties leads to an enhanced productivity. Moreover, any rapid changes in the management can be solved very quickly through an efficient cooperation between parties. On the other hand, confrontational collective work relationships are characterized by lower productivity, strike threatens and higher associated costs (Sala-i-Martin & Artadi, 2004, Ostoj, 2015).

In the above figure (Figure 1), cooperation in labor-employer relations mean, for 2007-2015 period, is calculated using the following question: In your country, how would you characterize labor-employer relations?. The responders’ attributes values using a 7 points Likert scale, where ”1” represents generally confrontational relationships and ”7”, generally cooperative ones. An overall picture reveals that in Bulgaria and Romania respondents consider that the labor relations are characterized by a low cooperation environment while in, Czech Republic, Estonia and Slovak Republic the situation is reversed.

Table 2 reveals that in 2007, the smallest values were registered in countries like Romania (3.33), Bulgaria (3.97) and Poland (4.02). The highest values were recorded in Hungary (5.06) and Slovak Republic (5.17). In 2008, a notable improvement was registered by Estonia (5.06) which advanced two position since 2007, occupying the first position within ECE countries.

**Table 2 Country change and associated values for cooperation in labor-employer relations in ECE, 2007-2015**

<i>Country</i>	2007	<i>Country</i>	2009	<i>Country</i>	2011	<i>Country</i>	2013	<i>Country</i>	2015
RO	3.33	RO	3.65	RO	3.58	RO	3.17	RO	3.73
BG	3.97	BG	3.82	BG	3.85	SI	3.86	SI	3.74
PL	4.02	PL	3.86	PL	4.08	BG	3.94	BG	3.90
SI	4.35	LV	4.30	H	4.10	PL	4.01	SK	3.96
LT	4.49	H	4.39	LV	4.26	SK	4.04	PL	4.01
CZ	4.74	SI	4.49	SI	4.29	H	4.10	LT	4.12
LV	4.77	LT	4.55	LT	4.38	LT	4.30	H	4.29
EE	4.92	CZ	4.63	CZ	4.55	LV	4.31	CZ	4.52
H	5.07	SK	4.81	EE	4.55	CZ	4.37	LV	4.82
SK	5.17	EE	4.84	SK	4.79	EE	4.84	EE	4.92

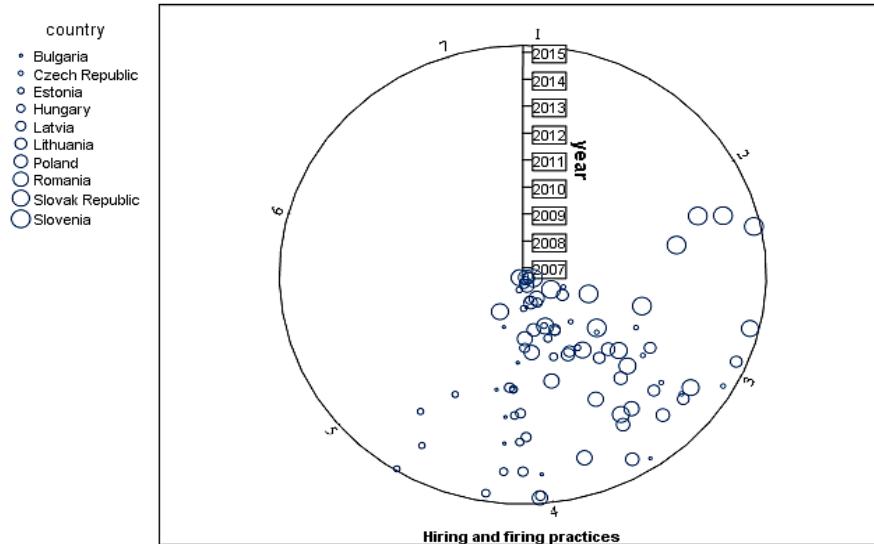
*Source: Authors' representation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015*

From 2009 until 2010, some small rank changes were registered only in the case of Latvia (increase of 1.02% value for cooperation, 1 rank higher), Hungary (decrease of 1.04% value, one rank lower), Slovak Republic (increase of 0.98% in value, 1 rank higher) and Estonia (1.02% decrease in value, 1 rank lower). In 2012, the majority of the ECE countries register small decreases (around 1%) in comparison with the previous year. Only Bulgaria, Slovak Republic, Latvia and Estonia have a small increase in people’s perceived cooperation in labor-



employer relations. In 2013 and 2014, Romania, Slovak Republic and Slovenia occupied the last positions although small values improvements were registered for the first two countries. In 2015, Bulgaria replaces Slovak Republic as one of the third countries with the lowest values for perceived cooperation in labor-employer relations. Estonia registered the highest values not only in 2015 but also in previous years (except 2007 and 2010) (Table 2).

**Figure 2 Hiring and firing practices in ECE, 2007-2015**

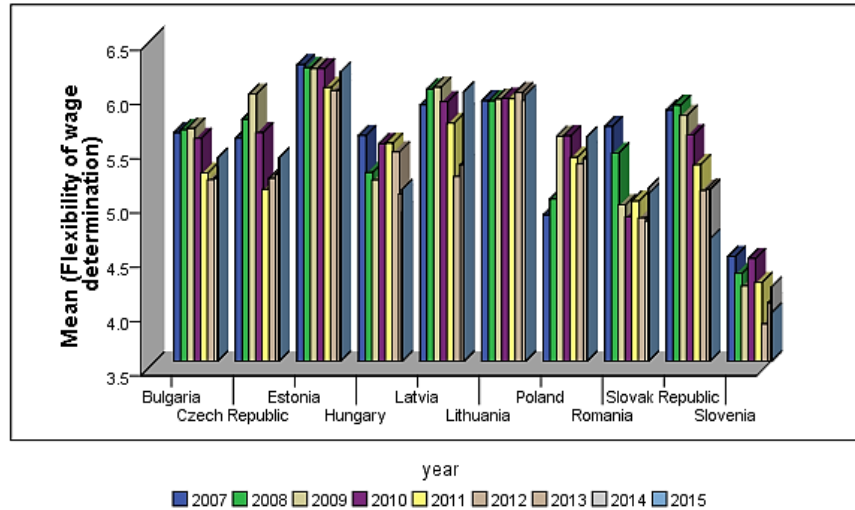


Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015

„Hiring and firing practices” are illustrated using the following survey question: In your country, how would you characterize the hiring and firing of workers?. The respondents can assign values from 1 to 7, where “1” represents hiring and firing practices heavily impeded by regulations and “7”, very flexible operations. Hiring and firing practices reveal the presence of regulations within working relations, that can shape employer’s freedom in determine the number of employees. For instance, such restriction may be related to the necessity of explaining each dismissal or noticing trade unions or other forms of leading employee representation about future labor contract termination. The existence of such regulations slows down the matching process between entrepreneurs needs and labor market supply, and on the long run it may lower productivity (Ostoj, 2015).

In 2007, Slovenia (2.81), Lithuania (3.13), Czech Republic (3.19) and Romania (3.31) were considered to have the most rigid hiring and firing practices. From the ECE countries only Latvia, Bulgaria, Estonia and Slovak Republic register values greater than 4 and higher flexibility in hiring and firing workers. In contrast with 2007, Bulgaria (-0.13%), Lithuania (-0.05%), Poland (-0.09%), Slovak Republic (-0.41%) and Slovenia (-0.13%) register in 2015, a small decrease regarding people perception on hiring and firing flexibility practices. In 2015 a slightly increase were registered only in Czech Republic (0.01%), Estonia (0.11%), Hungary (0.08%), Latvia (0.02%), and Romania (0.22%) (Figure 2).

Figure 3 Flexibility of wage determination in ECE, 2007-2015



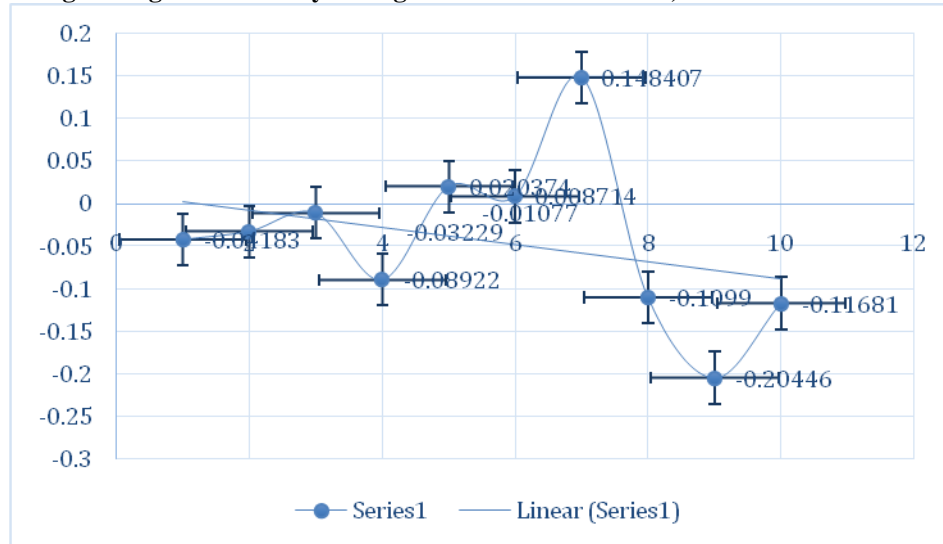
Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015

„Flexibility of wage determination” is set up using the following survey question: “In your country, how are generally wages set?”. The responders’ answers are situated between 1 and 7, where “1” represents centralized bargaining process setting and “7”, wage determination by individual company. Flexibility of wage determination strongly applies to the level of wage bargaining centralization. Collective Bargaining Centralization represents important assets in association of wage setting with economic and labor market performance measures (Bercu&Vodă, 2017). Decentralized negotiations are associated with higher levels of wage flexibility and more efficiency of the usage of labor factor. For instance in a flexible environment, negotiations or renegotiations are much easier to reach, and employees are aware of their salary standards. However, the degree of wage flexibility depends on the behavior of wage setters. For example, the ability of bargaining and parties willingness to compromise in order to reach an agreement are also important factors that influence wage determination.

Moreover, the flexibility of wages depends on the relations of labour and organised business. If unions are strong and powerful than wages are less likely to be flexible. In 2007, the values associated with the flexibility of wage determination were under 5 for Poland (4.84) and Slovenia (4.46) and above 6, only for Estonia (6.23). Values between 5 and 6 were registered in Bulgaria (5.60), Czech Republic (5.55), Hungary (5.57), Latvia (5.86), Lithuania (5.89), Romania (5.66) and, Slovak Republic (5.81) (Figure 3).

Figure 4 shows the percentage change in the flexibility of wages determination from 2007-2015. The higher increase was registered in Poland (0.14%), followed by Lithuania (0.008%) and Latvia (0.02%). In all Central and Eastern European Countries the leading employee is represented by unions, except the cases of Poland and Slovakia where the division of tasks is between trade unions and works councils in setting terms of employment. Nowadays, the Central-Eastern system is characterized by the existence of 1 up to 6 union confederations and, in some cases, by individual unions marked with significant autonomy and impact.

**Figure 4 Percentage change in Flexibility of wage determination in ECE, 2007 and 2015**

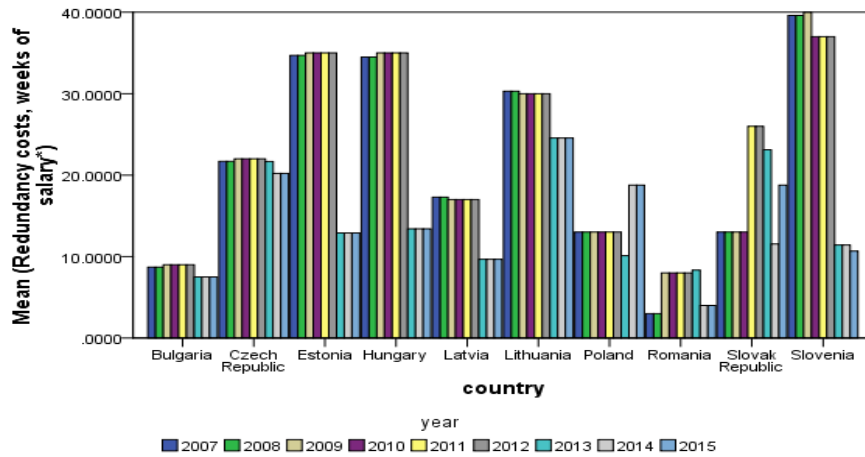


Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 and 2014-2015

According to the World Economic Forum (2015), the *redundancy costs* represent the estimates the cost of advance notice requirements, severance payments, and penalties due when terminating a redundant worker. The amount of benefits associated with the redundancy costs is calculated in proportion to the working time and expressed in weekly wages. Redundancy costs are paid directly by the employer and are not included in the unemployment benefit system.

Holzmann et al (2011) found an important relationship between national income and redundancy arrangements. The authors found that in low income countries the redundancy costs decreases with the income level. Betcherman (2013), Calmfors and Holmlund (2000) identify that high redundancy costs reduce employer incentives to introduce new technology, therefore dampening production factors' productivity. Ostoj (2015) found that high redundancy costs may hold back the employment of workers. According to the author, „the higher they are, the more limited the employer is in his decisions about matching the number and structure of employment in a firm with the needs that are required by the market. He then refrains from dismissals, but makes decision about hiring new personnel very cautiously” (Ostoj, 2015, p.86).

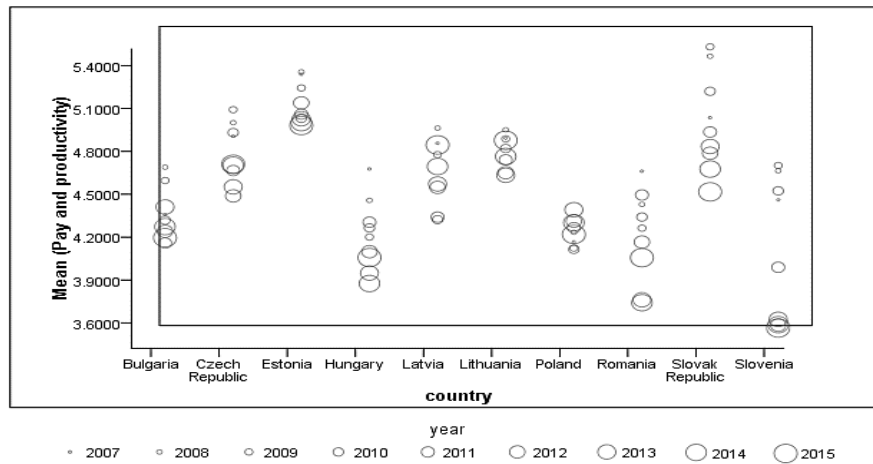
Figure 5 Redundancy costs in ECE, 2007-2015



Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015

In 2007, World Economic Forms estimates that the cost associated with making a worker redundant were of 8.7 weeks of salary for Bulgaria, 21.7 for Czech Republic, 34.7 for Estonia, 34.5 for Hungary, 17.3 for Latvia, 30.3 for Lithuania, 13 for Poland, 3 for Romania, 13 for Slovak Republic and 39.6 for Slovenia In 2010, a small reduction (2.6 weeks) of the firing of redundant workers costs was register in Slovenia while Romania and Italy increase them from 3 to 8 weeks of salary, respectively from 1.7 to 11 for the last country. Starting with 2013 major decreases were register in Hungary (-61%) and Estonia (-62%). In 2015, the estimates for the cost associated with making a worker redundant were of 7.5 weeks of salary for Bulgaria, 20.2 for Czech Republic, 12.9 for Estonia, 13.4 for Hungary, 9.6 for Latvia, 24.5 for Lithuania, 18.7 for Poland, 4 for Romania, 18.77 for Slovak Republic and 10.6 for Slovenia. In comparison with 2007, the major increase of redundancy costs were register in Poland, followed by Slovak Republic.

Figure 6 Pay and Productivity in ECE, 2007-2015



Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015

Pay and productivity is measured using the following question: In your country, to what extent is pay related to worker productivity? The respondents answers were evaluated based on a 7 Likert scale (1=not related to worker productivity and 7= strongly related to worker productivity). For the ECE countries the responders' answers ranged from 4.27 up to 5.2 in 2007 and from 3.97 up to 4.90 in 2015. „Pay and productivity” links pay to employee or company performance. Several studies (Fernie&Metcalf, 1999; Lavy, 2002) foster the widespread belief that incentive pay can raise productivity growth and augment profitability. For instance, Fernie and Metcalf (1999) analyzed the situation of 413 British jokers which some were employed on fixed retainers, while others were offered prizes for winning races. The results display large incentive effects- those facing prizes supply were making much more effort. Lavy (2002) find similar results but among Israeli teachers. The analysis reveal significant improvement in teacher performance due to the introduction of group bonuses

Table 3 Perceived change in Pay and Productivity, in ECE

	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015
Bulgaria	0.078	-0.020	-0.061	-0.038	0.020	0.041	-0.032	-0.018
Czech Republic	0.020	0.018	-0.032	-0.055	-0.039	0.014	0.034	0.001
Estonia	0.003	-0.021	-0.041	0.006	0.016	-0.022	-0.005	-0.004
Hungary	-0.048	-0.059	0.016	0.010	-0.049	-0.037	-0.019	0.048
Latvia	0.022	-0.038	-0.097	0.004	0.049	0.005	0.027	0.033
Lithuania	0.012	-0.013	-0.014	-0.017	-0.019	-0.004	0.029	0.024
Poland	0.017	-0.027	-0.002	0.038	0.011	0.019	-0.021	-0.020
Romania	-0.051	-0.038	0.019	0.036	-0.074	-0.099	-0.006	0.086
Slovak Republic	0.087	0.012	-0.057	-0.055	-0.030	0.010	-0.033	-0.035

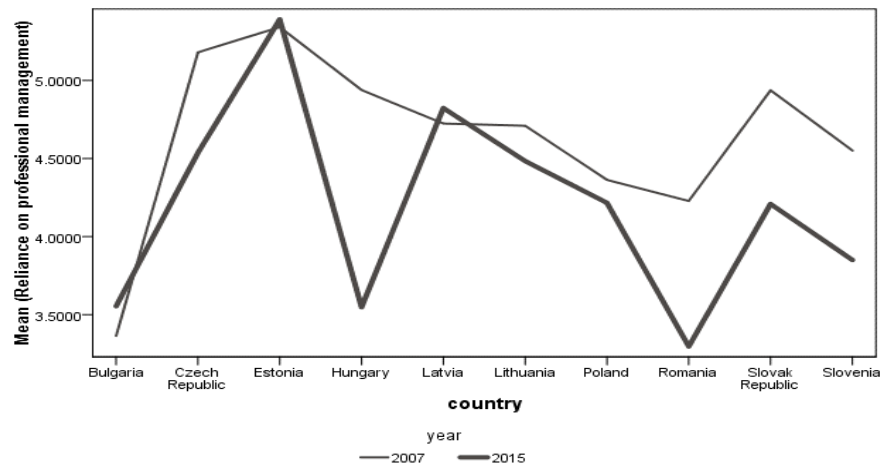
Slovenia | 0.046      0.008      -0.038      -0.120      -0.103      0.012      -0.011      -0.007

Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015

Hoffer and Spiecker (2011) analysis encapsulate the importance of unit labor costs as an important determinant of competitiveness. The authors stated that „in the Euro zone, balanced trade involves that member states wages grow in line with national productivity in addition with the communally agreed inflation rate. Apart from that, countries with relative higher growth in unit labor costs will systematically lose market share and experience trade deficits. The case for a coordinated wage policy to avoid imbalances, beggar thy neighbour policies and a waste of potential growth is overwhelming: it is alarming that it has been ignored for so long. Those who let unit labour costs rise too fast are equally responsible for the explosion of imbalances after the abolition of the exchange rate mechanism as those who gained market shares through wage restraint” (Hoffer & Spiecker, 2011, p.2).

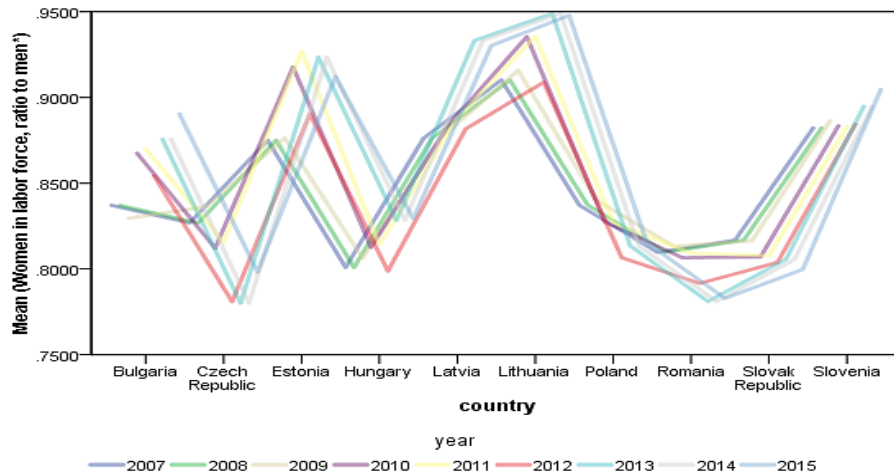
Figure 6 clearly shows the relationship between salaries and productivity for 10 European countries for the years 2007-2015. In the medium and long-term, the connection between productivity growth and wage increase may help achieve higher employment levels and reduce the competitiveness gap between economies especially hit by the recession (Meager & Speckesser, 2011, p.4). In other words such *wage moderation* can be achieved through institutional reforms targeted to facilitate the wages growth at a lower rate than productivity. In the above analysis in some European countries, the relationship between pay and productivity shows a declining rank (Table 3). Restrictive labor regulations and high tax rates remain the most problematic factors for doing business according to the Executive Opinion Survey.

Figure 7 Reliance on professional management in ECE, 2007-2015



Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015

**Figure 8 Female participation in labor force, ratio to men in ECE, 2007-2015**



Source: Authors' calculation based on the Global Competitiveness Reports from 2007-2008 until 2014-2015

„Reliance on professional management” is an indicator that is measured on a scale of 1 to 7, using the following survey question: “In your country, who holds senior management positions?. On the scale, 1=“usually relatives or friends without regard to merit”, while 7 = “mostly professional managers chosen for merit and qualifications” (World Economic Forum, 2015, p.69). The most competitive economies according to GCI, Czech Republic and Estonia occupy also the first two position in the reliance on professional management indicator. Similar, in 2015 from the ECE countries, Hungary, Slovak Republic, Romania and Bulgaria and Slovenia register the lowest values at both competitiveness and reliance on professional management (Figure 7).

“Female participation in the labor force” indicate the economic consequences of unfair women participation in job resource for instance, it is one of the manifestations of discrimination (Ostoj, 2015, p. 88). Different studies reveal that inclusiveness and diversity of perspectives improve decision-making about resource allocation (Chamlou, 2004). Not only the different perspectives that women brings in the decision making process but also the significant investment in women’s education are important factors that need to be taken into consideration. Very low level of female participation in the labor force mean that the country is not capturing a large part of the return on its investment (Chamlou, 2004).

Also, cross country data shows that increase participation of women in the labor force may contribute to achieve higher levels of per capita income, and implicitly, to faster economic growth. In most ECE countries the ratio of women to men in the labor force have increase in 2015, in comparison with 2007, expect the cases of Czech Republic, Poland, Romania and Slovak Republic where the values decrease up to 2-3 % (Figure 8).

### 3. CONCLUSIONS

The paper analyze the relationship between labor market and economy competitiveness showing the role of human resource to economic competitiveness and the flexibility of labor market and the efficiency of using talents in countries form Eastern and Central Europe, namely: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and Slovenia between 2007 and 2015. The methodology used is based on transversal and comparative approach using the uni/multivariate analysis and statistical modeling. Our research is based on the variables that are subject for the whole period analyzed. The main results reveal differences between the analyzed countries for each indicator used. The high values for *cooperation* indicator reflect a low cooperation in countries like Romania and Bulgaria and a strong cooperation in Czech Republic, Estonia and Slovak Republic. These means that in some countries exists a strong correlation between joint responsibilities, entrepreneurship's performance and the need of employees to participate in decision making process, until in other countries the level is very low. The *hiring and firing practices* are correlated with the pressure of regulation within working relations, determined by the employer's freedom to hire and fire people, taking account by the rules of collective contract or the rules established with employees representatives. States like Slovenia, Lithuania, Czech Republic and Romania have a rigid system of hiring and firing practices, until Latvia, Bulgaria, Estonia and Slovak Republic are more flexible. The indicator *flexibility of wage determination* determines the system used by the countries in establishing the level of salaries and the entire process of negotiation with unions or employees representatives. The results show that ECE countries an important assets is Collective Bargaining Centralization which reflect the wage-settings and its impact on labor market performance measures. Considering the *redundancy costs*, the ECE countries reveal the employers are limited to decide the number and the structure of the employment. Related, the *pay and productivity* of employees shows a decline rank due to the labor regulation and high tax. The indicator considering the *competitiveness and reliance of professional management* reflect a discrepancy between countries like Czech Republic, Romania and Estonia, where are registered high values, and countries like Hungary, Slovak Republic, Romania, Bulgaria and Slovenia, where the levels are low. These are direct correlated with the used of managerial practices in choosing the best managers based on performance and merit systems.

The role of human resource to economic competitiveness is an important indicator that reflects the capacity of states of taking the public policies in order to use and maintain the market flexibility, to increase work performance and to use the brains to create values and to be more innovative. The analyze reflect different patterns for the ECE countries, due to different policies and decisions applied.

### References

1. Bercu, A. M. & Vodă, A. I. (2017). Labor Relations: Contemporary Issues in Human Resource Management. In Mura, L. (ed.) *Issues of Human Resource Management*. Rijeka: InTech, pp. Ch. 08, DOI: 10.5772/intechopen.68625.



2. Betcherman, G. (2013). Labor Market Institutions: A Review of the Literature. *Background Paper for the World Development Report*.
3. Calmfors, L., & Holmlund, B. (2000). Unemployment and economic growth: a partial survey. *Swedish Economic Policy Review*, 7(1), 107-154.
4. Chamblou, N. (2004). Gender and Development in the Middle East and North Africa. *The World Bank, briefing prepared for the Woodrow Wilson Center*, 30.
5. Dutta, S., & Mia, I. (2010). The global information technology report 2009–2010. In *World Economic Forum and INSEAD, SRO-Kundig Geneva, Switzerland*.
6. Fernie, S. & Metcalf D., (1999). It's Not What You Pay it's the Way that You Pay it and that's What Gets Results: Jockeys' Pay and Performance. *Labour*, 13(2), 385-411.
7. Hoffer, F., & Spiecker, F. (2011). Change or Lose Europe: ILO Global Job Crisis Observatory, Geneva: International Labour Office. Retrieved from [http://www.ilo.org/public/libdoc/jobcrisis/download/story108\\_change\\_europe.pdf](http://www.ilo.org/public/libdoc/jobcrisis/download/story108_change_europe.pdf).
8. Holzmann, R., Pouget Y., Vodopivec M. & Weber M. (2011). Severance Pay Programs around the World: History, Rationale, Status, and Reforms. World Bank. *Social Protection Discussion Paper 1111*. Washington, DC.
9. Klaus, S., & Xavier, S. (2010). The Global Competitiveness Report 2011–2012. In *World Economic Forum, Geneva, Switzerland*.
10. Lavy, V. (2002). Evaluating the effect of Teachers' Performance Incentives on Pupils' achievement. *Journal of Political Economy*, 110(6), 1283-1317
11. Meager, N., & Speckesser, S. (2011). Wages, productivity and employment: A review of theory and international data. *EEO Thematic Report, European Employment Observatory*, 73.
12. Ostoj, I. (2015). Labor market efficiency as one of the pillars of the global competitiveness of an economy- conclusions for the labor market regimes of the EU countries. *Journal of Economics & Management*, 20, 80.
13. Porter, M. E., Schwab, K., & Sala-i-Martin, X. (Eds.). (2007). *The global competitiveness report 2007-2008* (pp. 3-50). New York: Palgrave Macmillan.
14. Sala-i-Martin X., & Artadi E.V. (2004). *The Global Competitiveness Index*. The Global Competitiveness Report 2004-2005. The World Economic Forum, Geneva.
15. Sala-i-Martin, X. A. V. I. E. R., Bilbao-Osorio, B., Blanke, J., Crotti, R., Hanouz, M. D., Geiger, T., & Ko, C. (2012). The global competitiveness index 2012–2013: Strengthening recovery by raising productivity. *The Global Competitiveness Report 2012–2013*, 49-68.
16. Sala-i-Martin, X., Bilbao-Osorio, B., Blanke, J., Hanouz, M. D., Geiger, T., & Ko, C. (2013). The Global Competitiveness Index 2013–2014: sustaining growth, building resilience. *The Global Competitiveness Report, 2014*, 3-52.
17. Sala-i-Martin, X., Dervis, K., Hausmann, R., Bascuñán, H. D. F. L., & Pangestu, H. D. M. E. (2010). The Global Competitiveness Report 2010–2011: Highlights. In *World Economic Forum*.
18. Schwab, K. (2011). Sala-i-Martin X. The Global Competitiveness Report 2014-2015. In *World Economic Forum*. URL: [http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2014-15.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf).
19. Schwab, K., & Porter, M. (2008). The global competitiveness report 2008–2009. World Economic Forum.



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***LAW***



## **EXCEEDING SERVICE DUTIES BY THE PUBLIC SERVANT. CONSEQUENCES. ASPECTS OF JUDICIAL PRACTICE**

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**Abstract:** *This paper aims to analyze the legal consequences of exceeding the job duties of a public servant during their exercise. Given that there are many situations in the practice where public officials, during the working hours, perform other activities than those in the job description or even personal activities, we consider that the present approach is of interest for both the academic environment and legal practitioners. Thus, we will analyze the implications of exceeding the service duties in terms of the legislation in force both in the criminal and in the disciplinary liability context of public servant. The unpredictable character, ascertained by the Constitutional Court of Romania, of the constitutive elements of the offense of abuse of service has determined anticorruption prosecutors to initiate a criminal investigation and to prosecute civil servants for such activities. Although we admit that civil servants have to exercise their duties with the utmost diligence, we consider that exceeding the service duties or carrying out personal activities, during the working hours, cannot have criminal connotations and can be classified as disciplinary offense at most. In the following, starting from a situation encountered in the recent jurisprudence of Romania, we will try to argue with examples from the judicial practice what are the consequences of exceeding the service duties by the public servant, but especially why this misconduct cannot have criminal connotations.*

**Keywords:** *public servant, abuse of office, disciplinary offense technology, anticorruption*

Due to the controversies in the jurisprudence, on the sanctioning of public officials, who undertake activities during work hours not provided in the job description, a clear delimitation is needed between the situations in which we find ourselves in the presence of the abuse of service as provided by the Criminal Code in Title V "Corruption and Service Offenses" or the situations where exceeding the attributions is a disciplinary offense. In court practice, some courts had divergent views on the framing of a crime as a crime of abuse of service, or on the contrary they excluded it from the criminal sphere, considering that the overrun of the job attributions through the execution of some activities not included in the job description represents a disciplinary offense. However, the doctrine is unanimous in considering that in order to be in the presence of a crime of abuse in service, the material element must be committed in the exercise of "service duties which must be understood as all that falls upon a clerk according to the rules governing that service or who are inherent to that service." (Udroiu, 2014, p.376).

As we can see, in the absence of the premise of the offense represented by the existence of the service duties stipulated in the job description, the deed cannot be sanctioned according to art. 297 of the Penal Code, but it is a disciplinary offense. Referring to the opinion of the judges of rights and freedoms of the Bucharest Tribunal and Court of Appeal - Criminal Section, we focus on the cases in which the DNA conducted the criminal prosecution for abuse of office, claiming that the activity during the service, which is not contained in the job sheet, constitutes abuse of office. In front of the court were invoked defenses in which the offenses committed by a

civil servant in the exercise of the service duties that are not part of the job description were excluded from the scope of the criminal offense and they are not in themselves crimes.

In the above analysis, DNA prosecutors accused defendant G.N. with the fact that during January-April 2015, intentionally, he led H.L.M. and A.S., civil servants to perform their duties in a defective way by performing the surveillance of the person named S.A., with the consequence of prejudicing the legal interests of the local police and of obtaining undue non-patrimonial benefit. The defense invoked, in respect of the crime of incitement to abuse of service, whether the clerk obtained for himself or for another undue advantage, that from the statements of witnesses VV, BS, AF, BN, CI, in the criminal prosecution file, and from their job descriptions resulted that the surveillance of activities are not within their service duties. Considering that the surveillance activities are not part of the service attributions nor of A.S. and H.L. (investigated in non-custodial manner) and local policemen (against whom no charges have been made), it is obvious that G.N. cannot be accused of committing the offense of instigation to abuse of office, this being also the unanimous practice of the courts in the country, according to which the performed act must enter the official's duties, otherwise the criminal liability is excluded.

In this context, it results that the subject of the analysis does not meet the constitutive elements of the offense provided and punished by art.13<sup>2</sup> of the Law no.78/2000 related to art.297 C.pen. Thus, if we admit the prosecutor's hypothesis, it would mean that any activity performed during a service by a civil servant, distinct from the service duties provided in the job description, should be legally framed as abuse of service, which is absurd and would send in derision the very notion of a crime of service. Including if the civil servants used the assets of the employing unit, these facts would not attract criminal liability, but a disciplinary and possibly patrimonial responsibility. Moreover, according to article 77 par.1 of the Law no.188/1999 r2 "the violation by the civil servants of the duties corresponding to their public function and of the norms of professional and civic conduct stipulated by the law constitutes disciplinary offense and attracts their disciplinary liability. According to par. 2 of the same law, the following acts constitute disciplinary misconduct: the violation of the legal provisions regarding the duties, incompatibilities, conflicts of interests and prohibitions established by law for civil servants ". The courts from Bucharest, Tribunal and the Court of Appeal have ruled that there is no crime of abuse in the service, bearing in mind that the imputed facts may at most be classified as disciplinary misconduct.

In the first instance, the Bucharest Tribunal, in case file no.15792/3/2015, by the ruling of the meeting of the Council Chamber dated 01.05.2015 stated that "for the existence of the offense, having regard to the provisions of art. 297 par. 1 of the Penal Code, it is necessary to perform an act in a defective manner. The term act used in the expression of art.297 par.1 C. pen, for the designation of action or inaction as a material element of the objective side, must be understood as being the operation to be performed by a civil servant or a clerk in the exercise of his duties. A civil servant or a clerk is in the exercise of his/her duties when he/she carries out activities related to his/her duties (those contained in the job sheet), and when he/she fulfills certain provisions received from hierarchical heads and given under legal conditions. Therefore, in order to appreciate in a probationary manner whether the defendants H. and A. participated in committing a crime of abuse of service in the form of the author, it is necessary to establish with certainty the attributions they have, which could be demonstrated only by attaching a job

description to the case file. Only in the hypothesis that such a document will demonstrate that, by the nature of the service duties, in the exercise of these duties, the two defendants had access to the database containing the personal data accessed, they could be reminded of the commission of an act of meeting the constituent elements of the abuse of service. In the case of the offense provided by art.13 ind.2 of Law no.78/2000, it is an aggravating variant of the offense provided by art. 297 C. pen, it is necessary to observe an immediate consequence of violating the rights or legitimate interests of a person. It is therefore necessary to retain an injury to a value protected by the law, the main passive subject of the offense being represented by the state as the holder of the social value, being also responsible for the good functioning of public bodies and institutions, of institutions or other legal persons of public interest. Therefore, not a crime against the person (blackmail, violation of private life), but a crime of service, assimilated to a corruption offense, to establish the existence of such an injury at the level of the institutions in which the defendants were incumbent”.

Court of Appeal Bucharest - Criminal Section, by Ruling no.542/C, The sitting of the council chamber on May 8, 2015, in the contestation formulated, stated that "for the existence of the offence, having regard to the provisions of art.297 par.1 of the Penal Code it is necessary to conduct an activity in an improper manner. Therefore, to assess in terms of evidence if the defendants H. and A. participated in the commission of an offense of abuse of office in the form of authorship is necessary to establish with certainty the powers that they have, something that could be demonstrated by attaching the job description to the case file. Only in the event that such a document will demonstrate that by the nature of the duties, in the exercise of these powers, the two defendants had access to the database, will be used against them as they committed an act of such nature to meet the elements of the offense of abuse of office.

In the case of the offense provided by art.13 ind.2 of the Law no.78/2000, this being an aggravated form of the offense prescribed by art.297 of the Penal Code, is required to retain a track consisting immediate harm to the legitimate rights or interests of a person. It is therefore necessary to retain an injury to the value protected by law, the passive subject of the crime being the State as holder of social value, which is also responsible for the proper functioning of the organs and institutions, or other legal entities of public interest. Therefore, not being a crime against the person (blackmail, violation of private life), but a crime of service, assimilated to a corruption offense, it is necessary to establish the existence of such an injury at the level of the institutions in which the defendants were active". With regard to the crime of instigation of abuse of office, if the civil servant has obtained for himself or for another an undue advantage, the deed stipulated and sanctioned by art.47 of the Criminal Code referred to in art.13 ind.2 of the Law no.78/2000 with reference to art.297 of C. pen, the judge of rights and freedoms finds that they are not outlined, nonetheless proven the constitutive elements of the crime of abuse of office. Thus, the crime of abuse of service - according to the law that criminalizes it, art.297 par.1 C. pen - is the act of a civil servant who, in the exercise of his or her duties, does not perform an act or fails to do so and thereby causes injury or damage to the rights or legitimate interests of a natural or legal person ".

Therefore, in the present situation, we consider the Bucharest Court's solution to be correct, which, in the Ruling of the council chamber of 30.05.2015, noted "for the existence of the offense it is necessary to perform an act - that falls within the civil servants duties - improperly. The public servant is in the exercise of his/her duties when carrying out activities

related to his/her job (those contained in the job sheet), as well as when he performs certain activities ordered by the hierarchical chiefs and given according to the law. Or, the pursuit of S.A.M. and implicitly of the persons with whom she met - an activity allegedly instigated by GN, it is obvious (as it appears from the job descriptions attached by the prosecutor to the case file) that it does not fall into the job duties of civil servants involved in its oversight activity". In fact, even in the prosecutor's report it is expressly stated "no article of the Local Police Law no.155/2010 nor any of the attributions mentioned in the local police officers' records do not foresee the possibility of carrying out operative surveillance of persons". Therefore, there is no means of proof that the use of logistics, financial and human resources of state institutions for the personal interest of the defendant was done in the exercise of service duties, so that the instigation cannot target the offense of abuse of office but possibly another, provided by the criminal code in art.300, namely the instigation of usurpation of the function ("the act of a public servant who, during the service, performs an act which does not fall within his duties, if by such act one of the consequences provided in Article 297 of the Penal Code are caused"), crime for which in the case file there are solid evidence.

The doctrine is unanimous in appreciating that "the action or inaction of the perpetrator refers to an act, to an assignment of service. In other words, the action or inaction by which the material element of the offense is carried out must be committed by the perpetrator in the exercise of his/her attributions, representing a violation thereof (Toader, 2002, p.269). For the purposes of art.297 of the Penal Code, the term "act" means the operation to be performed by a civil servant in the performance of his duties. Therefore, the material element is accomplished by actions or inactions. By means of actions, in the form of a variant, the basic form the active subject within the service duties fulfills an act in a defective manner, and by inaction, the same active subject does not fulfill an act causing damage or the violation of the rights or legitimate interests of a natural or legal persons (Dungan, n.d., p.16).

The expression "does not fulfill an act" means the activity by which the civil servant omits, does not carry out an act to be performed according to the duties of the service, thus an act "falling" in his task of realization, and by the expression "fulfills an act in a defective manner" means that the civil servant, while performing the act that falls within his job duties, that fulfillment is imperfect, inappropriate, defective. The action or inaction of a civil servant refers to an act that is not fulfilled or is being misconduct in the performance of his or her duties (Dungan, n.d., p.17). The abusive act (omissive or commissive) must be carried out in the exercise of the civil servants' duties or of another official, that is, on the occasion or during the exercise of the service. Abuse in service cannot be done outside the framework of the service. As a rule, activities related to service duties take place at the place where the act is to be performed and during the legal hours of service (Matei Basarab, 2008, p.572).

Broadly speaking, "abuse of office" means the illegal, inappropriate attitude of a civil servant or any other official who deliberately violates his or her responsibilities or duties, either by failing to do so or by abusing them, committed during or on the occasion of the exercise of the service, a violation that violates the legal interests of a person. Therefore, an official or civil servant is in the exercise of his or her duties when carrying out activities related to his job duties, both those contained in the job sheet and when he fulfills certain provisions received from senior hierarchical heads given under legal conditions (Boroi, 2006, p.299).



In this respect, it is also the majority jurisprudence of the Bucharest Tribunal, the Constanta Court of Appeal - criminal section and the Suceava Court of Appeal - criminal section. Thus, the Bucharest Tribunal stated that "the term" act "in the content of the offense of abuse of service should be understood as the operation that must be performed by the civil servant in the exercise of his/her attributions of service, which must be understood as all that falls within the responsibility of a clerk according to the rules governing that service or which are inherent in that service". The opinion of the judge of rights and freedoms of the Bucharest Tribunal, expressed in the case submitted to the analysis, is in line with the jurisprudence of the Constanta Court of Appeal, which stated that: "In the case, it was certain that the defendant did not have to perform, in his capacity of deputy mayor of the locality, no operation related to the activity carried out in the wind farm, which would have been related to the installation of machinery, administration or functioning, activity that could be influenced by faulty or non-performing the operation. In fact, the defendant, although knowing that he does not have any service duties in relation to the wind farm activity, tried to intimidate what the workers should have felt, determined by his capacity as deputy mayor, through excess power, violent physical circumstances, cause the interruption of the activity of the respective company, a situation that cannot be equated neither with the faulty fulfillment nor with the failure to fulfill an act that must be performed by the civil servant or clerk in the exercise of his duties. The necessity to perform the act of illicit acts in the exercise of the service duties in order to be in the presence of a crime of abuse of service results from the special legal object of this crime, which is represented by the social relations regarding the good functioning of the public unit or other legal entities where the clerk carries out his activity, to the proper conduct and performance of the service activity, which implies the honest and fair execution of the duties (Decizia penala nr.47, 2012).

The same opinion was also expressed by Suceava Court of Appeal: "According to the post, the defendant G.I. was included in the City Hall of Suceava County, as cadastre referent. From the content of the job attributions, it did not result that he had the obligation to submit the minutes of the possession and the documents necessary for the issue of the titles of ownership to the County Land Commission, these attributions belonging to the secretary of the Local Land Commission. Since the case did not result in the defendant performing his duties in the performance of his duties, he did not perform an act or did it in defective manner, it was correctly assumed that the constitutive elements of the crime of abuse of service are not met under the objective aspect" (Decizia nr.549, 2007). These jurisprudential opinions were also expressed in penal cases before the entry into force of the new Criminal Code, stating: "the unjustified refusal of the police to return the driving license as ordered by a court decision constitutes the offense of abuse of service against the interests of individuals" (Decizia nr.45, 1997).

We observe that the jurisprudence of the Bucharest Court of Appeal is constant in stating that: "the act of the defendants (deputy mayor and secretary of the mayoralty of a commune, respectively) to issue to a person, in the absence of a decision of the commission for the application of the Law no.18/1991 - the only entity authorized to decide in this regard - a certificate that falsely confirms the cancellation of the report on the possession of the injured party on a land, the certificate that the beneficiary submitted to the court, having gained cause in a process of servitude, constitutes not only the offense of intellectual falsification (Article 289 of

the Penal Code), but also the offense of abuse of service against the interests of persons (Article 246 C. Pen. ) in concurrence" (Decizia nr.1088, 1988).

In this respect, the Supreme Court of Justice pointed out that: "by committing the offenses of intellectual falsification by the defendant as a clerk in the exercise of his duties, the content of which is characterized, according to art. 289 of the Penal Code, as a functionary of the active subject and committing the forgery in the exercise of attributions, can no longer respect the offense of abuse of service provided by art. 248, whose active subject is also a clerk, and the objective side is characterized by the defective fulfillment of his/her attributions, traits contained in the content of the forgery. As such, the provisions of art. 248 of the Penal Code are not incidents in question, neither in the conditions of the real concurrence nor in those of the ideal concurrence of crimes" (Decizia nr.1019, 1996). Thus, we observe that in accordance with the unanimous opinion expressed by the doctrine, the term "act" is used by a lawmaker in the sense of the operation that the perpetrator has to perform based on his responsibilities. (Dongoroz, 1971, p. 81) Correlatively, by failing to fulfill an "act" is meant the failure of the perpetrator to perform the operation he was about to perform, and by "failing to perform an act" it is understood to perform an operation other than what was to be done (Octavian & Tudorel, 1999, p.337).

Consequently, the omission or action of the perpetrator, in order to achieve the material element of the offense, must be performed in the exercise of his/her duties. The public servant or any other official is in the exercise of his/her duties when performing activities related to his/her duties. Usually, these activities take place at the place where the act is to be performed and during the hours related to the service. Finally, failure to perform an act or the defective performance of an act by a civil servant or by any other official in the exercise of his/her duties must result in the injustice of a person's legal interests. "Damage to a person's legal interests" means the violation of the interests of the person, who are protected by law. The scope of these interests is extremely wide; it includes all those possibilities of manifestation of the person, in accordance with the general interests of society, which the law recognizes and guarantees them. However, abusive exercise of service duties may, in certain circumstances, not only harm the legal interests of a natural person but also constitute a significant disturbance to the goodwill of an organ or state institution or other entity those provided in art.145 of the Penal Code or damage to their patrimony (Octavian & Tudorel, 1999, pp. 340-341).

Thus, the abuse of service through the constraint of some rights has alternative content, which can be achieved, in terms of the material element, either by the action of restraining the use or exercise of the rights of a citizen, either by the creation of inferiority based on nationality, race, sex or religion. In the first way of realizing the material element of the offense, the perpetrator, without any legal justification, prevents a citizen from using the rights he or she exercises in their entirety. In the second way, the perpetrator creates for the citizen, without any legal justification, a better situation than that of the other citizens. (...) Of course, this presupposes, in each case, the determination of the scope of the attributions service of the one who is charged with committing the offense.

## CONCLUSIONS

Although in practice it happens frequently, exceeding service duties by civil servants instead of being regarded as a disciplinary offense is often seen by law practitioners as the crime of abuse of office in many cases both in court and in prosecution by the Anticorruption National Division. Prosecutors regard the exceeding of the attributions as the offense of abuse of service in the conditions in which an order of the superior has been executed by the public servant subordinated. However, we consider that if the civil servant does not denounce the superior and does not file a complaint against him at the Prosecutor's Office according to art. 267 of the Penal Code, he commits the offense of omission of the complaint consisting in the act of a civil servant "who, knowing the act of criminal law in connection with the service in which he performs his duties, fails to immediately notify the competent criminal authorities".

In the context in which the official executes the superior order and is not liable as author by the criminal prosecution bodies, one cannot even hold the hierarchical superior responsible for committing the crime of instigation to abuse of service. What happens if both the hierarchical superior and the subordinate, civil servants, are investigated and sent to trial for committing the offense of abuse of office, in the form of the author and instigation, criminal participation, consisting in exceeding job duties?

In this situation, we appreciate that, being attributions that do not enter the job description, the subordinate, civil servant could be accused of committing the offense provided by art. 267 of the Penal Code and also of committing a disciplinary misconduct. As far as the hierarchical superior is concerned, he/she must be accused of committing the offense of abuse in the service by failing to fulfill his/her duties, thereby causing harm to the interests of a natural or legal person. In conclusion, regarding the hierarchical superior, we cannot discuss about "exceeding service duties" because according to the job description he has the duty to delegate tasks and to give mandatory orders to subordinates.

## References

1. Decizia penala nr. 47 (2012) Curtea de Apel Constanta.
2. Dongoroz, e. a., 1971. *Explicatii teoretice ale Codului penal roman, partea speciala*. Bucharest: Academia Romana.
3. Dungan, P., n.d. *Abuzul in serviciu in noul Cod penal*
4. Incheierea nr. 542/C (2015) Curtea de Apel Bucuresti.
5. Matei Basarab, e. a., 2008. *Codul penal comentat. Partea speciala*. Bucharest: Hamangiu.
6. Toader, T., 2002. *Drept penal. Partea speciala*. Bucharest: All Beck.
7. Udroi, M., 2014. *Drept penal. Partea Speciala. Noul Cod penal*. Bucharest: C.H.Beck.



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## **NON TAX AGREEMENT AND ROMANIAN REGULATION**

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**Abstract:** *The specific agreements that were signed by the Romanian government for regulating the taxation policy when international aspects are involved are the main issues of analysis in this paper. The Vienna Convention on Diplomatic Relations, the Vienna Convention on Consular Relations, the North Atlantic Treaty Organization agreement and other European treaties and agreements are some of the reviewed agreements, but the investigation is not necessarily linked to a specific tax issue. When a specific tax issue is particularly mentioned, the paper raises some question at first sight. The taxation of subjects of law involved in international activities represents a key issue in international relations. Although the research is specific to domestic cases, the paper presents the theoretic background that applies to every member state that has signed the agreements in question. The position of these agreements in the hierarchy of the sources of law is explained.*

**Keywords:** *taxation, exemption, tax provisions, diplomatic relations*

**JEL Classification:** *taxation, exemption, tax provisions, diplomatic relations*

### **INTRODUCTION**

Although the present article might seem specific to a certain country, in this case Romania, most of the provisions that are applied by the Romanian tax system are similar to the ones in other countries. Most of the treaties that are discussed in this article are treaties that are at their core politically and thus at first look would not have any influence in tax provisions of the countries engaging in them. At a closer look, all the treaties have a certain effect on the tax system of the signing countries. The most frequent case is the taxation of individuals that are taking part in the implementation of the treaty but there are also other issues that have to be treated with precision. In the article we have decided to study each type of treaty separately and study its effect on the Romanian tax system.

### **TAX PROVISIONS OF THE VIENNA CONVENTION ON DIPLOMATIC RELATIONS AND THE VIENNA CONVENTION ON CONSULAR RELATIONS**

The premises of consular offices enjoy, from a tax point of view, the same privileged status as the premises of the foreign missions (United Nations, 2005a, Vienna Convention on Consular Relations, (pp.13-14). Retrieved at [http://untreaty.un.org/ilc/texts/instruments/english/conventions/9\\_2\\_1963.pdf](http://untreaty.un.org/ilc/texts/instruments/english/conventions/9_2_1963.pdf)). The Vienna Convention on Consular Relations (further noted as VCCR) comprise provisions concerning tax and levies exempt for consular premises, and, for lack of treaty rules the tax exemption for the premise of consular offices used in the public interest of a foreign sovereign state has been acknowledged by the courts in certain states.

The taxes consulates levy for specific private services (for the performance of notarization, succession assignments for visa granting and passport issuing, etc.), are tax exempt

in compliance with consular regulations, the respective taxes belonging to the sender sovereign state. That is why, in compliance with the general principles of international law, these funds cannot be burdened with taxes or levies with national or local character; this rule is laid down in the VCCR as well (United Nations, 2005, Art. 39).

The VCCR usually establish personal tax exemption in the benefit of consular officers; for lack of conventional provisions, the residence state's laws and regulations often regulate the matter, by granting the personal tax exemption based on reciprocity. The VCCR provides for the direct tax exemption from which consular officers, employees and their families benefit (United Nations, 2005, Art. 49). Tax exemption does not apply to the following: excises that are normally incorporated in the price of merchandise and services, taxes paid for public services (water, electricity, gas, etc.), taxes related to private real estate, as well as taxes on the revenue from commercial or industrial activities or the liberal professions, as well as activities performed by consular officers on their own behalf, and not within their consular duties.

Where customs duties are concerned, it is expressly permitted in state practice, as it is substantiated in the national legislation and bilateral conventions, that consular positions are exempt from customs duties for all imported items meant for official use.

The legal foundation for this exemption lies in the idea that the assets belonging to the sending state, meant for the public use of this state, are covered by jurisdictional immunity with respect to the residence state. If the consular office enjoys customs duties exemption for all assets meant for official use, the office staff (consular officers and employees) has a different status. International practice acknowledges two concepts: the first ascertains that consular officers are entitled to tax exemption solely for the assets they bring to the residence state in due time since they are instated in the second permits the customs duties exemption for all items destined to the officer's personal use and those of the members in his family that he lives with, regardless of their import date. The personal luggage of the consular officers and the members of their families that they live with are free of customs control, under the same conditions applicable to diplomats. The principle of reciprocity is the guideline for tax exemption status through internal laws and regulations, by lack of certain treaty rules. Other privileges and immunities, such as exemption from alien registration and residence permits, exemption from work permits, exemption from social security liabilities, are granted to consular officers under certain conditions set out in the VCCR.

After having described the essential features of the privileged status of consuls, their duties to the residence state should be specified, duties that make possible all consular activities. With no prejudice to their privileges and immunities, the consular officers and employees and the other persons enjoying the same, have – as do diplomats – the duty to abide by the laws and regulations of the residence state: at the same time they are not allowed to interfere in the internal affairs of that state.

The consular premises must be used for consular activities; their use in a manner that is incompatible to these activities is forbidden (United Nations, 2005, Vienna Convention on Diplomatic Relations, Retrieved at [http://untreaty.un.org/ilc/texts/instruments/english/conventions/9\\_1\\_1961.pdf](http://untreaty.un.org/ilc/texts/instruments/english/conventions/9_1_1961.pdf)). Art. 35 VCCR) that was ratified by Romania through the Decree no. 566 of 8 July 1968. It is specified that the legal institutions that have their origin in unwritten law, as revealed in the way the majority of the articles are applied in practice in Romania. Where the innovations put in place by the convention are concerned with respect to diplomatic law,

most of them were either suggested by the socialist countries or embraced by the same. The diplomatic privileges constitute a special treatment owed to diplomatic agents; their contents refer to the benefit from certain facilities determined by special services and it is expressed in the granting by the residence state of certain exceptional facilities that have a mainly positive content, not necessarily involving a special activity on behalf of the beneficiaries.

Article 34 VCDR provides that “The diplomatic agent is exempt of any personal or actual taxes and levies, may they be national, regional and communal, except for:”

- excises that by their nature are normally incorporated in the price of merchandise and services;
- levies and taxes on private real estate located in the receiving state, except for the situation when the diplomat is the holder of the assets on behalf of the sending state, for the purposes of the mission;
- the succession rights granted by the receiving state, subject to the provisions of paragraph 4, Article 39 [1];
- levies and taxes on private income that originated in the receiving state and the capital taxes on investments made in commercial ventures located in the receiving state;
- levies and taxes on remuneration for actually provided services;
- registration rights, record office, mortgage and stamp regarding real estate assets, subject to the provisions of Article 23 [2].

According to the Romanian Law, diplomatic agents, administrative and technical staff, consular officers, consular employees and service staff, together with members of their families forming part of their household (spouses and dependent minor children not gainfully employed in Romania) should be exempt from all dues and taxes, personal or real, national, regional or municipal, except:

- ▶ indirect taxes of a kind which are normally incorporated into the price of goods or services;
- ▶ dues and taxes on private immovable property situated in the territory of the receiving state, ...
- ▶ estate, succession or inheritance duties levied by the receiving state, ... ;
- ▶ dues and taxes on private income having its source in the receiving state and capital taxes on investments made in commercial [or financial] undertakings in the receiving state;

VAT is an indirect tax incorporated in the price of goods and services. Therefore, VAT on the purchase of property and services intended to meet the requirements of foreign agents posted to Romania could not be refunded in Romania. However, as a courtesy, certain purchases of property or products on the domestic market may be exempted from duty and taxation under certain conditions:

- personal vehicles of agents holding a residence permit
- products subject to quotas such as liquor, tobacco and fuels are the subject of annual quotas allocated to Missions within the limits set by the Ministry of Foreign Affairs and the Ministry of Economy, and Ministry of Finance.

Save as otherwise provided in international tax agreements that may impose compliance with certain conditions or rule differently, members of diplomatic or consular missions who are not Romanian nationals or permanent residents are deemed to be resident in the sending state. Their official remuneration is not taxable in Romania. Honorary consular officers are relieved from income tax only for the allowances they receive to cover expenses incurred in the exercise of their functions.

Property tax is payable by the owner of the premises. Only the official residence of heads of diplomatic and consular missions, which is part of the official premises, is relieved from the payment of property tax. Other properties are not exempt from property tax. Dues and taxes levied for specific services rendered such as road sweeping, connection to the sewer network, refuse collection, and airport tax (included in the price of the plane ticket), must always be paid.

## **FISCAL EXEMPTIONS RELATING TO PREMISES AND RESIDENCES**

1. Lands and buildings situated in the territory of the receiving state which are owned by the sending state or are leased by it for the requirements of a consular establishment, or as residences for the consular officers or consular employees, shall be exempt from all taxes and charges in the receiving state, with the exception of charges for special services rendered.
2. The exemptions referred to in the above paragraph of this Article shall not apply if, under the law of the receiving state, such taxes and charges are payable by the person who contracted with the sending state or with the person acting on its behalf.

Tax provisions of the Convention on the Privileges and Immunities of the United Nations and of other international (bilateral and multilateral) agreements concluded by your country and (more or less) copied from this Convention. Romania has entered into a series of multilateral conventions. The agreement of 14 October 2005 (hereinafter: the 2005 Agreement) between the Romanian Government and the Latin Union concerning the set-up of a Latin Union office in Bucharest and the privileges and immunities of the Latin Union Office on the Romanian territory, published in the Official Gazette of 23 May 2006 (Official Gazette 444/2006) based on the Convention of the Latin Union creation, adopted in Madrid on 15 May 1954, that Romania adhered to by the State Council Decree no. 421 of December 5, 1979, considering that the parties agreed, by the VIII Congress of the Latin Union that took place in Paris in 1986, to set up a Latin Union office in Romania, the following were agreed upon: “the assets provided to the office for its official mission shall be free of direct taxes in compliance with the Romanian legislation in force; nevertheless, the exempt does not address to the taxes perceived for the payment of provisioned services. The purchase or rent by the Latin Union of the building spaces necessary for the official mission of the office is exempt of registration taxes, the real estate advertising tax, rent tax and any other similar taxes. The Latin Union benefits from the exemption with deduction right of the value added tax for the assets deliveries and service performance in its favour. The return of the value added tax shall be made in compliance with the procedure provisioned by the Romanian legislation for accredited international intergovernmental organizations in Romania.” This type of immunity is not found in any other treaty concluded by Romania.

Taxation of individuals, setting up Romanian law after an international treaty

International treaties become part of Romanian legislation upon the consent of the Romanian State to become party to the treaty. The consent may be expressed under the following procedures: ratification, approval, adhesion, or acceptance. According to the Law No. 590/2003 on treaties, the provisions of the treaty ratified by Romania prevail over the domestic law and are binding for all Romanian authorities as well as for all Romanian legal entities and individuals. Furthermore, the domestic provisions cannot be invoked for justifying failure to apply the provisions of a treaty, which is in force in Romania. The provisions of an international

treaty cannot be modified or revoked by internal regulations subsequent to the date of the treaty's entry into force but only according to its provisions or the approval of the parties involved. According to the Constitution of Romania, when the provisions of an international treaty are contrary to the Constitution, the mentioned treaty will not be ratified by the Romanian authorities until the appropriate amendments of the Constitution's provisions have been made. The Romanian Fiscal Code provides that, in the cases in which the withholding tax rate applicable under domestic law for income derived by a non-resident/foreign legal entity in/from Romania is different than the tax rate set out under the double tax treaty, the most favourable rate between the two tax rates will apply.

According to the Romanian Fiscal Code, the definition of resident contains an exception: a resident natural person does not include a foreign citizen with diplomatic or consular status in Romania, a foreign citizen who is an official or employee of an international and intergovernmental organization that is accredited in Romania, a foreign citizen who is an official or employee of a foreign state in Romania and members of the family of such foreign citizens. According to Art. 42 of the Romanian Fiscal Code "For purposes of the income tax, the following income is not taxable: income received by members of diplomatic missions or consular offices for and incomes received by officials of international bodies and organizations from activities carried out in Romania in their official capacity, on the condition that the position of the official is confirmed by the Ministry of Foreign Affairs; income received by foreign citizens for consulting activities carried out in Romania in accordance with agreements of non-reimbursable financing entered into by Romania with other states, with international bodies and nongovernmental organizations. Income received by foreign citizens from activities carried out in Romania in the capacity of press correspondents, on the condition that reciprocal treatment is granted to Romanian citizens for incomes from such activities and on the condition that the position of such persons is confirmed by the Ministry of Foreign

## **TAX PROVISIONS OF STATUS OF FORCES AGREEMENTS**

The NATO SOFA is a multilateral agreement that has applicability among all the member countries of NATO. As of June 2007, 26 countries, including the United States, have either ratified the agreement or acceded to it by their accession into NATO. Additionally, another 24 countries are subject to the NATO SOFA through their participation in the NATO Partnership for Peace (PfP) program. The program consists of bilateral cooperation between individual countries and NATO in order to increase stability, diminish threats to peace and build strengthened security relationships. The individual countries that participate in the PfP agree to adhere to the terms of the NATO SOFA. On 30 October 2001 Romania signed the Agreement between Romania and USA regarding the Status of US Armed Forces in Romania.

According to Article X, the United States forces and its contractors, identified in Article XXI, are not subject to direct or indirect taxation in respect of matters falling exclusively within the scope of their official or contract activities or in respect of property devoted to such activities. Deliveries made and services rendered by the force or such contractors to members of the force or civilian component and dependents must also be regarded as such activities. With respect to the value added tax (VAT), exemptions apply to articles and services acquired by the United States contractors in Romania solely for the purpose of supporting the United States



forces may not be subject to any form of income or profits tax by the Government of Romania or its political subdivision.

Vehicles, vessels and aircraft owned or operated by or for the United States forces may not be subject to the payment of landing or port fees, pilotage charges, navigation, overflight, or parking charges or light or harbour dues, or any other charges in connection with carrying out missions related to its operations or with the use of state owned or operated facilities in Romania; however, the United States must pay reasonable charges for services requested and received. The provisions of Romanian laws and regulations pertaining to the withholding of payment of income taxes and social security contribution are not applicable to United State citizens and non-Romanian employees of the United States forces or United States contractors exclusively serving the force in Romania.

The personal tax exemptions are defined in Article XI. With respect to Articles X and XI of the NATO SOFA, and in accordance with Article X of this agreement, members of the force, or of the civilian component are not liable to pay any tax or similar charges, including the value added tax, in Romania on the ownership, possessions, use, transfer amongst themselves, or transfer, in connection with death, of their tangible movable property imported into Romania or acquired there for their own personal use. Motor vehicles owned by a member of the force, or civilian component or a dependent are exempt from Romanian circulation taxes, registration or license fees, and similar charges. The exemption from taxes or income provided by Article X NATO SOFA also applies to income received by members of the force or civilian component or dependents from employment with the organizations referred to Article I, paragraph 1, and Article XVII of this agreement, and to income derived from sources outside Romania.

According to the agreement, with reference to Article XI NATO SOFA, the importation of equipment supplies, provisions, and other goods into Romania by the United States forces or by United States contractors for or on behalf of US forces is exempt from duties. The United States forces are liable for the payment of charges for services performed by the Romanian Government or any political subdivision thereof only when such services have been requested and received. Equipment, supplies, provisions and other goods are exempt from any tax or other charges, which would otherwise be assessed upon such property after its importation or acquisition by the United States forces. The exportation from Romania by the United States forces of the equipment, supplies provisions, and other goods referred to above are exempt from all types of Romanian tax under terms and conditions, including payment of taxes, imposed by authorities of Romania. The exemptions provided above also apply to services, equipment, supplies, provisions, and other property imported or acquired in the Romanian domestic market by or on behalf of the United States forces for use by a contractor executing a contract for such forces. The United States forces must cooperate fully with the appropriate Romanian authorities to prevent abuse of these privileges. Deposit of the certificate provided for in Article XI, paragraph 4 NATO SOFA will be accepted in lieu of the customs inspections by Romanian authorities of the items imported or exported by or for the United State forces under the provisions of the agreement.

The members of the US force or civilian component and their dependents may import their personal effects, furniture, private motor vehicles and other good intended for their personal or domestic use or consumption free of duty during their assignment in Romania. The property referred to above and other goods acquired free of taxes and duties may not be sold or otherwise

transferred to persons in Romania not entitled to import such property duty free, unless such transfer is agreed upon by the appropriate Romanian authorities. This provision does not apply to gifts to charity. Members of the force, or civilian component and their dependents may freely transfer such property amongst themselves and to or from the force, and such transfers are free of tax or duty. The US forces are responsible for maintaining records, which will be accepted as proof by Romanian authorities of these transfers of tax of duty-free merchandise. The Romanian authorities must accept copies of duly filed police reports as proof that duty-free property of members of the force or civilian component or dependents has been stolen, which shall relieve the individuals of any liability for payment of the tax or duty.

Members of the force or civilian component and their dependents may re-export, free of exit duties or charges, any goods imported by them into Romania or acquired by them during their period of duty in Romania. The Romanian authorities will honour the registration and licensing by United States military and civilian authorities of motor vehicles and trailers of the force, or members of the force, or the civilian component or dependents. Upon the request of United States military authorities, the Romanian authorities will issue license plates, without charge, which are indistinguishable from those issued to the Romanian population at large. The United States military authorities must provide for the safety of motor vehicles and trailers registered and licensed by them or used by the force in Romania, and must cooperate with the Romanian authorities to safeguard the environment.

According to the agreement, Romania must take all appropriate measures to ensure the smooth and rapid clearing of imports and exports of forces, members of the force, the civilian component and dependents by Romanian customs authorities. Customs inspections under the agreement will be carried out in the facilities in accordance with procedure mutually agreed between the appropriate Romanian authorities and the United States forces. Any inspection by Romanian customs authorities of incoming or outgoing personal property of members of the force or civilian component or dependents must be conducted when the property is delivered to or picked up from the individual's residence. United States military authorities must establish the necessary customs controls at facilities where United States forces are located to prevent abuses of the rights granted under the NATO SOFA and the agreement. United States military authorities and Romanian authorities will cooperate in the investigation of any alleged offenses involving customs violations.

According to the Agreement between Romania and NATO, the Organization shall have the same exemption or relief from taxes and rates, other than taxes on the importation of goods, as is accorded to a foreign sovereign power. The Organization is granted exemption from taxes on the importation of goods directly imported by the Organization for its official use in Romania or for exportation, or on the importation of any publication of the Organization directly imported by it, such exemption to be subject to compliance with such conditions as the Minister responsible for finance may prescribe for the protection of the revenue. Except in so far as in any particular case any privilege or immunity is waived by the Government of the member which they represent, every person designated by a member of the Organization to be its principal permanent representative to the Organization in Romania and such members of his official staff resident in Romania as may be agreed between the parties.

The representatives of the Organization enjoy the like immunity from suit and legal process, the same inviolability of residence and the same exemption or relief from taxes as is

accorded to a diplomatic representative accredited to Romania. Where the incidence of any form of taxation depends upon residence, any representative to whom this paragraph applies must not be deemed to be resident in Romania during any period when he is present in Romania for the discharge of his duties. Where the incidence of any form of taxation depends upon residence, official clerical staff to which this paragraph applies, if accompanying such a representative as aforesaid, must not be deemed to be resident in Romania during any period when they are present in Romania for the discharge of their duties.

## **TAX PROVISIONS OF CULTURAL EXCHANGE AGREEMENTS**

The OECD Model Tax Convention does not include an article dealing specifically with visiting teachers and researchers. The reason why some tax treaties have a separate article that provides a tax exemption in the state of source (“state of visit”) for such individuals is to stimulate the cross-flow of academics, not so much to allocate taxing rights between the contracting states. In Articles 20 and 21 of the agreements regarding the avoidance of double taxation concluded by Romania, this income class is a stand-alone class with regard to taxation. Accordingly, a person who is a resident of a contracting state, temporarily visiting the other contracting state, at the invitation of the authorities of that state, or of a university or another educational institution acknowledged by the contracting state, for the purpose of teaching or carrying out research at a university or other educational institution in that state, is exempt from tax in the first-mentioned state on any remuneration for such teaching or research for a period not exceeding two years from the date of his visit to that state for that purpose. These provisions do not apply to income resulting from research, if such research is not carried out for the public interest, but mainly for the benefit of private individuals. Consequently, income drawn by a teacher or researcher of a contracting state who carries out such activities over a limited period of time in the other contracting state may only be taxed in the state of residence. In this sense, most tax treaties concluded by Romania stipulate the tax exemption of income obtained from teaching or research in the state in which such activity is carried out (the host state), the exemption being granted for a period not exceeding two years.

To qualify for the exemption in the state of visit, the individual must be resident in the other contracting state immediately before making the visit. One issue is whether the exemption applies only to an individual who remains resident in his home state or becomes a resident of the state of visit during the period of the visit or whether the exemption also applies to an individual resident in neither of the two states. The latter view implies that the article is not subject to the restriction in Art. 1 (Persons covered) of the OECD Model in the absence of express wording to the contrary and is supported by the fact that the OECD Model itself contains provisions, such as Art. 24(1), that extend treaty benefits to a third-state resident. The visit must be at the invitation of a university, college, school or other similar educational institution that is recognized by the competent authority in the state of visit. In the absence of a treaty definition, the word “invitation” takes its ordinary meaning in the state applying the treaty. The visit must be solely for purposes of teaching or research or both at an educational institution. Because of the word “solely”, it is not clear whether an academic who concurrently takes up an advisory or consultancy engagement for a government or private organization or statutory board would lose the exemption altogether. Such work is likely to complement and relate closely to his teaching or

research, and this is particularly so if taking up such work is an expectation of the educational institution that engaged him. The individual's remuneration for teaching or research is considered to remain eligible for the exemption, but the income derived separately from the advisory or consultancy work is not exempt under the teachers and researchers article because the work is not performed at an educational institution. As a practical matter, although this is not strictly necessary from the wording, the educational institution would be the payer of the remuneration, and the teaching or research or both would be conducted for (and not only at) the institution as well. A separate paragraph is usually included in the teachers and researchers article which provides that income from research will not be exempt in the state of visit if the research is undertaken, not for the public interest, but primarily for the private benefit of a specified person. The public or public interest will be analysed from case to case. Generally, the teachers and researchers article does not require that the source of the payment be outside the state in which the teaching or research is done.

## **PROTOCOL OF THE PRIVILEGES AND IMMUNITIES OF THE EUROPEAN UNION**

The structures of the institutions of the European Union as a supranational organization created on the basis of the Treaty establishing the European Union enjoys privileges and immunities vis-à-vis the EU Member States. In this context the term 'privileges' means that national legislation is either not applicable to the European Union or is differently applicable. Thus, the European Union is partially exempt from national laws. In contrast to this, 'immunities' (immunity from jurisdiction and enforcement) do not affect the applicability of national law but its enforcement. National authorities and national courts are prevented from enforcing it by means of constraint. Such privileges and immunities are not unusual in public international and Community law. All international and supranational organizations enjoy privileges and immunities vis-à-vis their member states in order to enable them to perform their tasks independently and impartially. If an international organization were subject to national law, a member state (in particular the host state) could exert undue influence on the organisation's activities. Privileges and immunities are granted on the basis of public international or Community law. They are usually laid down in the organization's statute and/or in the headquarters agreement between the international organization and its host state.

The legal basis of the privileges and immunities granted to the European Union is Article 291 EC. The provision reads as follows: 'The Community shall enjoy in the territories of the Member States such privileges and immunities as are necessary for the performance of its tasks, under the conditions laid down in the Protocol of 8 April 1965 on the privileges and immunities of the European Communities. The same shall apply to the European Central Bank, the European Monetary Institute, and the European Investment Bank. That provision is reiterated by Article 40 of the Statute of the European System of Central Banks and of the European Central Bank (hereinafter: 'ESCB Statute') which provides that 'The ECB shall enjoy in the territories of the Member States such privileges and immunities as are necessary for the performance of its tasks.'

These general provisions are implemented by the Protocol on the privileges and immunities of the European Communities of 8 April 1965 (hereinafter: 'Protocol'). The Protocol is an integral part of the EC Treaty and is binding on all Member States of the European Union; it takes precedence over national law. Since privileges and immunities primarily concern the

relationships with the host state of the territory where the organization is established, the EU institutions concluded a number of treaties with the host states concluded that took the form of a headquarters agreement implementing the Protocol (hereinafter: 'Headquarters Agreement'). The Headquarters Agreement is an agreement under public international law and is binding on the EU Member States legislator and the EU authorities. The status of international organizations under international law is similar to that of sovereign states. Both enjoy privileges and immunities vis-à-vis other states. However, the scope and nature of their respective privileges and immunities differ. Whereas states enjoy worldwide unlimited immunity for *actiureimperii* (activities undertaken in the exercise of their sovereign powers), they are not immune with regard to *actiuregestionis* (activities which are not part of the state's sovereign power, such as the procurement of shoes for soldiers).

In contrast to this, in principle international organizations enjoy full immunity for all their actions regardless of their nature. According to Article 12, second paragraph, of the Protocol, European Union staff 'shall be exempt from national taxes on salaries, wages and emoluments' paid by the European Union institutions. However, income from other sources (e.g. interest income and rents) is fully subject to national tax law. According to Article 13 of the Protocol, such income is taxed in the country where the member of staff had their domicile before entering the service of the European Union institutions. The exemption from national taxation, which is often criticized, reflects a well-established international practice. The reason underlying this exemption is that the taxation of salaries in accordance with national law would raise a number of difficult legal questions. If the salaries were taxed in accordance with EU Member State tax law, that state would realize an unjustified profit from the fact that the seat of the European Union Institution is in that state. Alternatively, the salary received by a member of staff could be taxed in the staff member's country of origin. Due the different tax systems this would, however, entail unequal treatment of staff members. In order to avoid such distortions, the EU has established its own tax system for salaries, wages and emoluments paid to its servants. According to Article 12, first paragraph, of the Protocol 'Officials and other servants of the Communities shall be liable to a tax for the benefit of the Communities on salaries, wages and emoluments paid to them by the Communities...'.<sup>2</sup>

Such an internal tax system is fully in line with the general rule that servants of international organizations are exempt from tax; that exemption is limited to national tax law. On the basis of Article 12 of the Protocol, the Council adopted Regulation No 260/68 which also applies to European Union staff. It allows the refutation, at least in part, of the criticism that EU officials and European Union staff, unlike all other European citizens, are exempt from taxation. The implementation of Article 12, second paragraph, of the Protocol exempting salaries, wages and emoluments from national taxation has raised a number of legal questions. In a number of judgments the ECJ has stressed that the provision must be interpreted broadly. This applies initially to the terms 'salaries, wages and emoluments'. These include all kinds of payments received from the European Union in consideration for services rendered by the member of staff. The term 'emolument' covers all kinds of allowances, including for instance widows' allowances. The term 'taxes' has equally to be interpreted broadly. Article 13, paragraph 2, precludes any national tax, regardless of its nature and the manner in which it is levied, which is imposed directly or indirectly on an European Union staff member by reason of the fact that they are in receipt of remuneration paid by the European Union, even if the tax in question is not

calculated by reference to the amount of that remuneration. Taking into account the staff member's income for the calculation of the tax rate applicable to other income of that person or to the income of the spouse in the case of joint taxation is also prohibited. However, staff members are not exempt from charges and dues that are paid as a fee for services rendered by a public authority. Such charges and dues are not taxes within the meaning of Article 12 of the Protocol, even if they are calculated on the basis of the staff member's salary. The fact that the member of staff does not pay taxes to the national treasury does not, however, justify any kind of discrimination. It also merits attention that the scope of Article 12, second paragraph, is limited to taxes that are levied periodically and does not exclude the imposition of one-off taxes such as inheritance tax.

Recently, the question was raised whether the import of cars by ECB staff from their country of origin to Germany is subject to VAT. Article 12(d) of the Protocol provides that European Union staff may, under certain conditions, be entitled to import free of duty their furniture and effects at the time of first taking up their posts. The Protocol was adopted before the concept of turnover tax was introduced into the Community framework, so under a wide interpretation this provision also includes the import of vehicles free of VAT. The term 'effects' includes, *inter alia*, a vehicle personally owned by an ECB staff member. Article 12(d) of the Protocol is implemented by Article 12 of Headquarters Agreement. In 2006 the German Federal Finance Court (Bundesfinanzhof) decided on the case of a former EMI staff member who had purchased a new car from a car dealer in her EU home state and had brought it to Germany when taking up her position. The supply of the car by the Danish dealer was treated as an intra-Community supply and was accordingly exempt from Danish VAT. Subsequently, the German tax authorities sent the plaintiff a VAT assessment for personal vehicle taxation and determined the VAT due on the intra-Community acquisition of the car. Unlike the court of first instance, the Federal Finance Court ruled in favour of an exemption from VAT. Article 12(d) reads: 'In the territory of each Member State ... officials and other servants of the Community shall ... enjoy the right to import free of duty their furniture and effects at the time of first taking up their post in the country concerned ... subject in either case to the conditions considered to be necessary by the government of the country in which this right is exercised'. The existence of Article 12(e) of the Protocol, which also refers to the import of a vehicle free of duty, does not contradict such an interpretation, as it does not deal with the specific case of a member of staff taking up their post, but applies without a time limit. Article 12(e) reads: '... officials and other servants of the Community shall ... have the right to import free of duty a motor car for their person use, acquired either in the country of their last residence or in the country of which they are nationals on the terms ruling in the home market in that country ...' The provision reads as follows: 'At the time of first taking up their post in the Federal Republic of Germany, employees of the EMI and family members forming part of their households shall be exempt from customs and excise duties in respect of the import of their furniture and personal effects which are in their ownership or possession. Vehicles shall likewise be exempt, though where a vehicle is imported from a third country only if it has been used there by the employee for a period of at least six months prior to being imported ....

Furthermore, the Federal Finance Court stated that the import of the car must ensue within 12 months of the date of first entry, without it being decisive in that regard on what date the post was taken up. The Federal Finance Court considered this interpretation of Article 10 of

the EMI Headquarters Agreement to be free from doubt in Community law, so that it refrained from making a reference for a preliminary ruling under Article 234 EC. Furthermore, it did not decide on the application of Article 12 of the Protocol to this case.

On 8 December 2005 the ECJ issued its final ruling in a case between the ECB and the Federal Republic of Germany. The case concerned the European Union's claim for reimbursement of the VAT included in the rent for its premises and in the ancillary costs and investment costs related to this rent. The background to the case is the following: The inclusion of VAT in the rent and the ancillary costs paid by the ECB arose from the specific provisions of German tax law. Under normal circumstances, a company can offset the VAT it pays to its suppliers (input tax) against the VAT it charges to its clients (output tax), and as a result it only pays the difference between these two amounts to the tax authorities. For normal commercial undertakings, therefore, VAT should be a neutral tax. Charges for the supply of rented property (rent and ancillary services) are not in principle subject to VAT under German law. However, a landlord has the possibility of opting for the VAT regime (to 'opt to tax') and, if it does so, it can offset the VAT it receives against the VAT it has paid. The right to opt to tax is only available, however, if the tenant is carrying on commercial activities. Since the ECB is a public institution, it cannot be considered a commercial company for tax purposes. This means that the ECB's landlords cannot opt to tax. To avoid a financial loss resulting from the inability to offset input tax against output tax, landlords therefore compensate by including the input tax in the rent. The ECB's landlords did indeed increase the monthly rent charged correspondingly, once they were aware that the ECB could not be considered a commercial undertaking. The ECB considered that it suffered a *de facto* VAT charge, although *de iure* it is exempt from VAT. The German tax authorities had rejected the ECB's claim with the argument that the invoices of the ECB's suppliers did not show the tax separately. The ECB had argued that the Headquarters Agreement, construed in the light of the Protocol, supported its claim. In particular, the ECB argued that the obligation of Member States laid down in Article 3 of the Protocol to refund, 'wherever possible', turnover tax which is 'included in the price of movable or immovable property' does not require the tax to be 'invoiced separately'. By insisting on the tax being invoiced separately, Germany obtained a fiscal advantage which is exactly what the Protocol and the Headquarters Agreement are aimed at avoiding. The Court decided that Article 8.1 of the Headquarters Agreement expressly makes the refund of turnover tax subject to the condition that the tax is invoiced separately. It continued that, although some other interpretation of the Headquarters Agreement might be possible in the light of its legal context, in the opinion of the Court, this was not possible in this case because of the clear wording of the relevant clause. The Court ruled that this wording was not contrary to the aims of the provision of the Protocol which regulates the refund of turnover tax. The Court considered that refusing the refund of a tax which is not invoiced to the ECB, but which is paid as input tax by the other parties, does not go beyond the margin of discretion granted to the Member States and EU institutions concerning the implementation of Article 3 of the Protocol.

## **CONCLUSION**

Romania has and will continue to enter into agreements with other countries or international organizations that may have impact on the taxability of certain types of income

derived from certain activities. These agreements, as bilateral or multilateral agreements of the government of Romania, will prevail over the Romanian Tax Code, according to Romanian constitutional provisions. Although these provision cause a lot of work for the Romanian Tax System and for the Revenue Services it is very important for the Romanian foreign policy and for Romania's positions in a growing economy to engage in such treaties and create exemptions for taxation.

### References

1. Afrasinei, Mihai-Bogdan, Iuliana Eugenia Georgescu, and Costel Istrate. The Influence Of The Connections Of Romanian Non-Listed Firms To Tax Havens On Their Profitability. CES Working Papers 8.4 (2016): 572.
2. First instance HessischesFinanzgericht AZ 6 K 1971/02, decision of 17 September 2003, second instance, Bundesfinanzhof AZ V R 65/03, decision (Gerichtsbescheid) of 28 September 2006
3. ECJ 5 December 2005,C-220/03, European Central Bank v Federal Republic of Germany [2005] ECR I-10595.
4. Seidl-Hohenveldern, I./Loibl G., DasRecht der InternationalenOrganisationeneinschließlich der SupranationalenGemeinschaften, 6thedition(Köln: Carl HeymannsVerlag KG, 1996), p. 281; Commission de Recours de l'Organisation de Coopération et de developpement économiques 23 November 1985, Decision No 115 (unpublished).
5. Gruber, G./Benisch, M., "Privileges and Immunities of the European Central Bank", ECB Legal Working Paper Series No 4, (2007).
6. Abkommen zwischen der Europäischen Zentralbank und der Regierung der Bundesrepublik Deutschland über den Sitz der Europäischen Zentralbank vom 18. September 1998, BGBl. 1998 II, p. 2745.
7. Miff, A./Păun, C. , Drept comercial, (Cluj-Napoca: Imprimeria Ardealul Publishing House, 2005), p.223.
8. Hattingh, J. „Article 1 of the OECD Model: Historical Background and the Issues Surrounding It”, 57 Bulletin for International FiscalDocumentation 5(2003), p. 215.
9. Baker, Double Taxation Conventions and International Tax Law,2nd edition,(London: Sweet & Maxwell, 1994), p.344.
10. Paun, C., Business Law, Cluj, EFES Publishing House, 2009, p. 34, Author's Translation.



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## **UNFAIR COMPETITION - AND INFLUENCING FACTORS WITH AN IMPACT ON CONSUMER ECONOMIC INTERESTS**

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**Abstract:** *Until recently, the competition law of the Republic of Moldova was at a stage of training and development. Currently, that is, from 2012, this fact has been confirmed by the specific regulation of competition, which transposes the provisions of art. 101-106 of the Treaty on the Functioning of the European Union of 25 March 1957 [9], the provisions of (EC) Regulation No 1/2003 of the Council dated 16th of December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, published in the Official Journal of the European Union no. L1 dated 4th of January 2003 [6], and, in part, the provisions of (EC) Regulation No 139/2004 of the Council dated 20th of January 2004 on the control of economic concentrations between undertakings, published in the Official Journal of the European Union no. L24 dated 29 th of January 2004 [7]. Thus, according to art. 4 of the Competition Law no. 183/2012, the notion of "unfair competition" is defined as "any action taken by undertakings in the competition process, which is contrary to honest practices in economic activity", being considered by the doctrinaires as an illegal act that may directly or indirectly influence economic interests of consumers.*

**Keywords:** *competition, consumer, court, commercial practice, influence factors, consumer disputes*

Competition is the quintessence of market economy. It represents the possibility of choosing between several alternative products or services offered. Where there is competition, there is a more efficient allocation of resources, as the manufacturer constantly pursues the ratio between such and expenses. However, the manufacturer does not influence the market on its own, but only through competition relations with other producers which always leads to a fall in prices and, implicitly, a diversification of the market - by stimulating purchases. The concept of "competition" is a set of relations between economic agents that stem from their desire to offer the consumer the most advantageous price, thus ensuring the best place on the market. It should be noted that the phenomenon of competition is naturally linked to the consumer's freedom to choose, competition being the most important balancing force of the market economy.

Competition is an inherent feature of a market economy, based on the free initiative generated by private ownership. Moreover, it can be said that the mechanism of any real market

economy is a competitive one. A competitive and healthy market leads to increased productivity and competitiveness, lower prices and costs, as well as innovation. In the Republic of Moldova, the foundations of a systemic competitive environment have only begun to be laid down in the past few years. Due to the decades of a complete lack of a market economy, the process of adapting and learning new values has been difficult and has taken long. The Constitution of the Republic of Moldova stipulates in art. 9 par. (3) that the market, the free economic initiative, loyal competition, are the basic factors of the economy. Moreover, according to art. 126 of the Constitution of the Republic of Moldova, the economy of the Republic of Moldova is market economy, of social orientation, based on private property and public property, engaged in free competition, and the state must ensure fair competition.

In the context of the obligations assumed by the Republic of Moldova under the Partnership and Cooperation Agreement between the Republic of Moldova and the European Union, as well as the RM - EU Action Plan [4], it was necessary to develop a legislative framework that promotes economic development by improving the investment climate, in view of ensuring non-discriminatory conditions for the conduct of business. This implicitly presumes an adequate legislative framework in a liberalized economy and in a loyal competitive environment. The adjustment of the competition law of the Republic of Moldova has taken place over several years, with external assistance. Competition, as the fundamental trait of the market economy, represents in fact the competitive manifestation between the economic agents, in order to obtain better conditions of production and selling. Competition, thus being a race or a confrontation, involves the use of specific means and tools to reach the interests. These means can be economic and extra-economic.

When we talk about economic means, we are considering: reducing the price as a result of reducing production costs, diversifying the structure of the offered goods' assortment, granting certain advantages to buyers through different promotions or special sales conditions, all of which have the effect of improving goods and services. Certainly the extra-economic means include: corruption acts; economic espionage; blackmail; theft of information and documents; advertising based on false information.

It seems that Moldova has made progress compared to other countries in the region, yet however, further efforts are still needed to complete reforms which are already under way, in order to adapt their legislation to the legislation of the EU [1]. The culmination of the efforts of the Moldovan specialists in the field of competition law, the competition authority and the support of foreign experts, was the elaboration and adoption by the Parliament of the Competition Law no.183/2012 [8]. Although some consider that very detailed provisions of the law should be reflected in secondary legislation, such as internal regulations and guidelines, this normative act is an innovative one for the Republic of Moldova and closely transposes the provisions of art. 101-106 of the TFEU [9] and other secondary European provisions, as confirmed by the Joint European Commission Document on the progress of the Republic of Moldova in implementing the European Vicinity Policy of 2013, which stipulates that competition law "is well aligned with EU rules ". This Competition Law no.183/2012 is one of the most progressive pieces of legislation, as it introduces new attitudes, procedures and mechanisms that the Competition Council will have to deal with in the future. Moreover, the recent conclusion of the Association Agreement [4], incorporating deep and comprehensive free

trade area provisions with the European Union, has marked an important benchmark in the European integration trajectory of the Republic of Moldova.

This agreement will provide an important foundation for mutual trust in trade relations between the EU and the Republic of Moldova, along with specific benefits for enterprises and consumers in Moldova in the framework of the market economy. But this also requires, concurrently, scientific research on the content of the obligations undertaken by the Republic of Moldova, obligations reflected in the Competition Law no. 183, adopted in 2012. To this end, professionals in the legal environment, the competition authority, as well as businesses and consumers, must know the European Union's legislation and practice on prohibited activities, such as horizontal anti-competitive agreements, existing leniency policies, etc. Furthermore, we can ascertain an absolute lack of monographs, scientific works and research regarding horizontal anti-competitive agreements, especially in light of proximity to the European Union. Reason for which there is a strong need for a clear analysis that explains the existing notions within the competition laws, taken over from the EU legislation and practice.

The issue of unfair competition determines the need to assess the entrepreneur's illicit behaviour towards consumers, taking as basic criteria certain factors, because, by their very essence, unfair competition can affect the economic interests of each consumer:

- can be applied to the marketing of any product and provision of any service starting with the ones for basic needs to the luxury ones;
- can be applied to any consumer category (according to age, purchasing potential, etc.);
- can be applied both in large and small commercial units located in rural towns or municipalities.

There is indeed a worldwide concern today to find the meanings and dimensions of the quality of products and services that reflect the progress of terrestrial civilization at the beginning of the third millennium, as well as the concerns and expectations of the most numerous community groups in relation to this aspect. An agreement on these concerns can only be achieved by analyzing the dimensions of the concept of unfair competition in accordance with the requirements and needs of all the stakeholders that could influence their unfairness. In this respect, we have two main categories of factors that influence the economic interests of consumers:

- Environmental factors (external) and
- Internal factors.

Hereafter, we shall examine the influence of environmental factors and the organization's partnership with such. In fact, each organization interacts permanently with the environment in which it operates. The components of the surrounding environment can be expressed by:

- the environment of outlets and consumers;
- traders' environment;
- the competitive environment;
- economic environment;
- the educational and human resources environment;

Between these components of the environment and the organization, the factors corresponding to each component act, factors by means of which the environment asserts its demands regarding the quality of the product and / or service provided by the trader. We shall briefly continue to outline these factors, analyzed in the [5] doctrine and the manner in which

they influence the economic interests of consumers.

Market factors and consumers. These factors, referred to as socio-cultural factors, represent the entirety of factors of interaction between the market, consumers and traders, factors that make the organization aware of the emergence of needs, demands and product exchange capabilities on the market. Although it is not possible to elaborate a general recipe with market factors, there is still the possibility of forecasting market demand, represented by the segment of the end consumers as well as of the intermediary beneficiaries (first assembly, distributors, retail shops, intervention units / services, repairs, direct consumers, etc.). Thus, identifying market needs for a product is achieved through marketing studies and takes into account the rational needs of consumers as well as their emotional needs. There are three essential components of necessity, which give it its actual character, namely:

- The consumer has desires, tastes and product preferences, direct aspects of the need for the product (sometimes expressed in the form of reasons, motivational impulses, images, attitudes, aspirations, etc.) that determine the psychological side of demand;
- The consumer has buying power, this representing the economic aspect of demand;
- The consumer has a willingness to buy, which is the volition aspect of action and decision-making.

The final demand for a product takes place when these three aspects are concurrently combined, and in the event that they are not cumulatively gathered, an incorrect commercial practice is admitted. The product's outlet as well as its user clients are studied by the organization's marketing sector. Between this function of the organization and the market / customers there is a continuous exchange of information, favoured by the current technical means of communication .

## **2. BUSINESS ENVIRONMENT FACTORS**

As a dynamic and socio-economic system, the enterprise takes the resources from the external environment, inputs them into specific processes resulting in products, services or works that will be transferred to the same environment. The materials, components, assemblies and natural resources that the organization needs are extremely important elements that effectively participate in achieving the quality of the respective product and / or service. For this reason, a special emphasis is given to the relationship between the trader and the consumer, the new culture from the beginning of this century marking a real revolution in supply. In this search flow for optimum in this relationship, traders have been compelled to comply with quality requirements for delivered products or services, and subsequently, between consumers and them, they have established the basis of co-producers relationships or partners strongly involved in achieving the end product or work.

The main directions of such partnership relations generally address the following aspects:

- cooperation in designing new products and technologies;
- joint investments in research and development;
- sharing information on processes and products, but also on strategic issues;
- collaboration in redistribution of profits.

The factors of the traders' environment and their partnership therefore play a major role in establishing and achieving the objectives of a fair trade practice.

### **3.COMPETITION FACTORS**

The competitive environment and its factors must be observed in the context of today's free competition markets, world-wide, in the framework of which they manifest, as an ongoing challenge which they project on the product-making organization, as a fierce competition against it to occupy market segments. Competitive factors can manifest themselves under the following aspects:

- competition in relation to the manufacturing volume over a certain period of time;
- competition with reference to the development cycle of a new product;
- competition in maintaining and expanding product markets;
- competition in relation to product performance characteristics (technical, aesthetic, reliability and availability aspects, etc.);
- competition in terms of efficiency, turnover, manufacturing costs and profit of organizations of the same type;
- competition in access and availability to performing information and know-how;
- competition in obtaining the best suppliers;
- competition to improve and provide working conditions and staff salaries;
- competition in having the most competent and better-trained staff;
- competition in offering after-sales support services that offer customers more satisfaction than those provided by competing organizations;
- competing in offering certified products and services and well-known brands in terms of quality.

All these aspects highlight a fierce competition between organizations that produce the same products or services and require a profound knowledge of the competitive factors. In this sense, we have to see the concept of "orientation towards competition", which in many organizations comes to counterbalance the concept of "customer orientation". Competitive factors have, as seen above, a strong influence on trade practice and are significantly involved in setting its objectives .

### **4. LEGAL FACTORS**

Legal factors represent the totality of all legal regulations that directly or indirectly concern the business of the enterprise. The complexity of supplier-client relationships and the many litigations generated by functional deficiencies, non-conformities, damages, warranty interventions, third-party damages, etc. have led to the creation of a legislation that must be taken into account by any manufacturer aiming to achieve the quality expected by the customer. The elements that shape the legal framework of this environment are the laws and regulations on producer's responsibility (manufacturer's responsibility for product quality deficiencies and breach of warranty granted), the supplier's and the seller's responsibility. These regulations concern several aspects:

- a) regulation of product and / or service definition documents (technical specifications,

norms, technical rules);

- b) proper development of consumer products and / or services;
- c) properly informing consumers and accessing such information to allow selection;
- d) protection against the distribution of poor quality products as well as those affecting the lives, health and safety of consumers;
- e) protection against unfair business practices;
- f) organizing associations to protect the interests of consumers;
- g) liability for quality defects (negligence or defects), whether due to inappropriate manufacture, design or labelling;
- h) liability for the warranty period (through fast and free-of-charge supplier's intervention) and for the average duration of use (the period during which the safe use of the product and the provision of spare parts and service interventions must be guaranteed);
- i) liability for rewarding the buyer who loses the pleasure of using the product due to its damaging.

## **5. ECONOMIC FACTORS**

Economic factors have a decisive influence on the establishment and functioning of the organization producing goods or services. Thus, economic factors can be considered real levers through which the following macroeconomic context policies are manifested:

- employment policy (training and retraining, labour regulation, social issues);
- capital management policy (monetary control, fiscal control, industrial control - subsidies, facilities, social control, taxes, contributions, aids);
- economic goods management policy (budget, competition regulation, infrastructure insurance, foreign trade management, taxes, exchange rates, other facilities).

All these government macroeconomic policies are transmitted through the various structural components: ministry, departments, etc., manifested at the level of the organizations in its interface activities with the economic environment, but also within its internal activities, starting from the managerial function to operative functions. In this way the factors of the economic environment intervene in the activities involved in establishing and achieving the product quality objectives, influencing them strongly.

The objectives of the product and / or service quality with reference to the economic factors are then established, starting from the overlaps of the economic policies mentioned above, with the respective product and / or service quality dimensions.

## **6. CONSUMERS' EDUCATIONAL FACTORS**

The educational environment of the society in which the organization operates is manifested through the following aspects:

- education and training systems for consumers;
- the means, resources and funds allocated to the components of the education system;
- levels of organization of education and training systems;
- the degree of participation of consumers in the various forms of training and education.

Appropriate and continuous training of consumers in society represents a tool that is currently used by all the companies that have succeeded in affirming and achieving success, and the manner how this consumer education is achieved and its efficiency are closely linked to the educational environment of the society. The factors of the educational environment influence in an overwhelming manner the activities of the traders through the educational construction of their employees, thus putting their mark on the quality of the product and / or the service that they perform directly [2]. The partnership of the organization with the factors of the educational environment of the consumers is obvious and is manifested through the connection: training institutes - training and organization, a almost symbiotic form in the context of any human community today.

## **7. TECHNICAL AND TECHNOLOGICAL FACTORS**

These factors are mainly represented by the technical level of equipments, machines, machinery, facilities provided to enterprises in the country or abroad, the level of technologies used, the number and level of registered licenses and patents, the documentation and innovation capacity, etc. The technical, technological environment through all the specific factors influences the level of productivity, production cost, production quality, profit level; generally, the company's final economic results. Given the impact of scientific research results, these factors have an increasing influence due to the acceleration of the moral wear and tear of technologies, the reduction in the duration of application of knowledge in all areas of activity.

Analyzing the technical and technological endowment used by the enterprise compared to other enterprises in the country and abroad, with similar activity, it can be observed that it is situated at an equal, superior or inferior level. Technical or technological disparities that arise in such situations generate economic disparities between businesses, which in turn generate economic gaps between countries. An enterprise may have a higher technical, technological endowment than other firms in the external and domestic environments and still achieve a reduced efficiency and competitiveness if it has a poor performance management.

Here comes the important role of management, decision-making aimed at eliminating the unfavourable business disparities in order to increase its competitiveness. The consumer uses the information thus obtained to feed its reflections and reach a judgment on a product by processing information in a controlled reflection process or in semiautomatic processes that may be conscious or not. This perceptual activity has several characteristics [3, p.350], which are particularly significant for the marketing specialist. Perception is selective, therefore the individual operates the choice for stimuli, interpreting only those who are imposed by quality (intensity, difference) and those that correspond to a state of internal imbalance; perception is distorted, deformed by a series of factors such as: similarity, first impression, stereotyping; perception is subjective, on the same stimuli it may be different from one individual to another.

## **CONCLUSIONS**

According to European Commission regulations, agreements between different competing undertakings, which aim at fixing prices or sharing the market so that everyone can ensure a monopoly position, can be classified as infringements of the competition rules.

Anticompetitive agreements may be public or classified (i.e. cartels) concluded in writing or may be less formal (as "business-to-business agreements" or as decisions or regulations of professional associations). Businesses which are part of cartels are not exposed to competitive pressure, which forces economic operators to launch new products and propose consumers a better quality offer at competitive prices. As a result, consumers will pay more for lower quality.

In conclusion, competition policies stimulate entrepreneurship, provide consumers with a more diverse supply of goods and services, helping to increase their quality and, implicitly, lowering consumer prices. Benefits are thus created, directly or indirectly, for consumers. We believe that effective enforcement of competition rules leads to the development of a competitive culture and enables businesses to learn to respect both the consumer and the regulations in the field.

In the matter of abating unfair competition, civil liability prevails, as the practices that affect generally concern individual interests. In cases where practices that are detrimental to fair competition can have a significant impact on the overall economic environment and where public interest may be targeted, criminal or contravention liability also operates. Nothing prevents these types of liability from being applied cumulatively. Fair competition must be understood as a competition or a rivalry situation between companies pursuing simultaneously sales / profit / market share, competition in which honest practices, the principle of good faith and the interests of consumers are observed. A number of factors influence the competition, thus affecting the interests of consumers. Enterprises have an obligation to act in their trade relations in accordance with the established and applicable rules, in order to prevent the infringement of legitimate rights.

## References

1. Directive 2014/104/UE of the European Parliament and CE – 26.11.2014 regarding certain detailed rules governing the action in the claims under national law in the case of infringements of the provisions of the legislation in the field of competition of the laws of the Member States and the European Union ( [HYPERLINK "http://eur-lex.europa.eu/legal-content/RO/AUTO/?uri=uriserv:OJ.L\\_.2014.349.01.0001.01.RO.N"](http://eur-lex.europa.eu/legal-content/RO/AUTO/?uri=uriserv:OJ.L_.2014.349.01.0001.01.RO.N) JO L 349, 5.12.2014).
2. I. Catoiu , N Teodorescu, 1997,p.114, Comportamentul comsumatorului, Teorie si practica , Bucharest, Ed Economica
3. Lefter, 2006, p. 350, Lefter, C. (coord.) (2006). Marketing (vol. I). Braşov: Editura Universităţii „Transilvania”
4. Partnership and Cooperation Agreement between the Republic of Moldova and the European Union, M.O. 185 - 199/442 of 18.07.2014, [HYPERLINK http://www.parlament.md/LinkClick.aspx?fileticket=gXkOTU94I6Q%3D&tabid=203&language=ro-RO](http://www.parlament.md/LinkClick.aspx?fileticket=gXkOTU94I6Q%3D&tabid=203&language=ro-RO)
5. Ph Kolller, G. Armstrong, ,2008,p.334-348, Marketing Management, Bucharest, Ed. Teora,
6. Regulation (EC) No 1/2003 of the Council of 16 December 2002 on the implementation of the rules on competition, JO EU L1from January 2003.
7. Regulation (EC) No. 139/2004 of 20 January 2004 regarding the control of economics concentration between the companies, JO UE L 24 of 29 January 2004
8. The Competition Law no.183/ 2012 M.O. Nr. 193-197/ 14.09.2012
9. The Treaty on the Functioning of the European Union, from 25 march 1957, [HYPERLINK "http://eurlex.europa.eu/legalcontent/RO/TXT/?uri=URISERV%3Axy0023"](http://eurlex.europa.eu/legalcontent/RO/TXT/?uri=URISERV%3Axy0023)



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## **THE PREVALENCE OF SUBSTANCE OVER FORM IN TAXATION CASE LAW**

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**Abstract:** *The principle of prevalence of form over the substance in regulation is a fundamental principle of law in general, but in taxation disputes its effects are reversed. This is one of the many changes in the EU legal order that is born in the EUCJ' s jurisprudence, which aims at insuring the respect of fundamental rights and liberties. The paper analysis this case law and points out that currently the domestic courts should respect the solution of the court in Luxembourg, ensuring the prevalence of substance over form in the fiscal jurisprudence they are asked to draw.*

**Keywords:** *regulation, substance, form, EUCJ, jurisprudence.*

**JEL Classification:** *K34, K41*

### **INTRODUCTION**

In a global world, taxation is not international, as it refers to a particular system of taxation, in a certain state (Philippe Malherbe, 2017). Each state is allowed to define its own tax policy but in the context of the EU cooperation, the taxation is influenced by the rules of the free market. VAT is one of the taxes with double regulation: at the EU level, there is a system of regulation concerning the VAT and also at the Member States level, there are 28 (27 to be) different particular regime for VAT (Saguna & Tofan, 2010). The deduction of VAT is a mandatory mechanism that insures the neutrality of the this tax (Costea, 2016) and in the context of the EU law, each Member State is required to respect the general framework that is described in regulation of wider legal force (Bercu et al., 2015).

The Romanian National Fiscal Authority settlement body breached the principle of prevalence of substance over form. Deduction system is meant to relieve the traders entirely of the burden of VAT; it ensures neutrality perfect taxation of all economic activities, whatever the purpose or results of such activities, under the condition that the activities referred to are, in principle, themselves subject to VAT. The principle of fiscal neutrality requires that deduction of VAT for input of goods is allowed if the substantive requirements are satisfied, even if certain formal requirements were omitted by taxable persons (Bilan et al., 2016).

The firms' right to deduct VAT must be respected even if the documents do not fulfil all the formal requirements, the High Court of Cassation and Justice said in a decision, of after a lawsuit between a firm and ANAF. The Supreme Court ruled that companies are entitled to deduct VAT even when the documents do not fulfil all the formal requirements; deductibility cannot be conditional on the existence of supporting documents, except appropriate invoices (Paun, 2015).

## **NIDERA CASE IN ROMANIAN COURTS**

In Romanian legal system, the decision of the High Court of Cassation and Justice HCCJ's have a consistent influence on the interpretation and applicability of the law (Lazar, 2013). One of the most recent and interesting case law in the Romanian courts is the Nidera case. The dispute was for the annulment of the National Authority of Fiscal Administration (NAFA) 's decision to deny the right to deduct VAT, on the basis that certain documents do not contain all the formal elements. Fiscal authorities arguments used the previous decision of HCCJ from 2007, which cancelled the right of deduction of a company. The decision from 2015 showed once again the prevalence of the substantive elements (the right of deduction) to the form (how the documents are completed) in tax law; also, the 2015 decision removes the 2007 decision's effects, although adopted after Romania's EU accession. This solution confirms that an appeal in the high court cannot be enforced against European Union (EU) law.

### **2.1. The circumstances of the dispute**

The applicant company, Nidera ROMANIA, is a limited liability company, which has main activity wholesale of grain, seeds, animal feeds and unmanufactured tobacco (Cristea & Stoica, 2008). In order to achieve the object of activity, the company is purchasing for resale agricultural products from domestic, on the EU free market and third countries markets. Also, the company acquired the services necessary to achieve the object of activity, such as warehousing, auditing, accounting, transport, freight certification services etc. As the company does not have the necessary storage space for received goods, it uses various logistics operators who hold special places (silos), drawing in this regard contracts with various independent companies for services of reception, supervision and certification of the products. The procurement contracts for agricultural products mainly provide one of the following two delivery clauses:

- INCOTERMS CPT - Delivery place when the receipt of the goods is done by the depositary at the agreed deposit and the operation is overseen by an independent company
- INCOTERMS FCA - loading place, when the products are weighed at the moment of uploading by the supplier, or by another person designated by him, in the presence of a representative of the company

In the period 2008-2011, the applicant company was subject to general tax auditing, carried on many taxes, contributions and VAT for the period May 2004 - August 2011. For the period 2004 - 2006, the tax authority refused the deduction of VAT for the invoices issued by Grain House, on the ground of partially filling of the invoices and notices accompanying the goods, and for Cereal Cargo invoices, for not filling the cartridge bottom left of the invoices. For the period 2007 - 2009 fiscal authority refuse deduction of VAT for the invoices issued by several partners (Cereal Cargo, Western Grain, Forest, Anpo, Primera Agro, Iulis Trans, Andoflor, Gilacom, Florcereal, Primera Trading), each time blaming omissions on the invoices issued, such as lack of unit price, no date of issue, the lack of signature, time and date of the expedition, miss-recording of the names of the company on the documents accompanying the goods etc.

The applicant company drew a complaint and then a legal action in front of the contentious administrative courts, addressed to the competent judge at the Court of Appeal from Bucuresti, Romania.

## **2.2 Main topics of solution of the court of first instance (Court of Appeal)**

Court of first instance held that this case raises the question of the legality of the tax authority's refusal to recognize the right to deduct VAT on the grounds for which the invoices do not contain all the elements provided by fiscal and accounting legislation. The Court notes that, pursuant to art. 145 par. (8) of the Tax Code, the taxable person must hold an invoice that includes all information provided in art. 155 par. (8) Fiscal Code (applicable for the period prior to 1 January 2007), in order to exercise the right to deduct VAT on the purchase invoices. Also legislature provided at pt. 51 par. (2) in the Methodological Norms the possibility of justifying the right to deduct VAT on "[...] documents referred in art. 145 par. (8) of the Tax Code and / or other specific documents approved by Government Decision no. 831/1997 (...) or by order of the Minister of Finance issued under Government Decision no. 831/1997, as amended. "

Accordingly, the right to deduct VAT shall be exercised:

- Mainly, only on the invoice (art. 145 par. (8) of the Tax Code);
- Alternatively,
- Based on the invoice and other documents provided by Government Decision no. 831/1997 for the approval of the models forms regarding financial and accounting activities and detailed procedures for establishing the utilization thereof (Government Decision no. 831/1997);
- Either only on the documents provided by GD. 831/1997, which contain all the information required by art. 155 par. (8) of the Tax Code. (Bufan, 2016)

First, the Court notes that tax authorities, in tax inspection report, specifically says that invoices from Grain and Cereal House Cargo contain all mandatory elements specified in art. 155 par. 8 Tax Code, namely: a) series and the invoice number; b) date of invoice; c) the name, address and tax identification code of the person issuing the invoice; d) name, address and tax identification code, if applicable, of the recipient of goods or services; e) the name and quantity of goods delivered, name of the services; f) The unit price without value added tax and the tax base for each rate or exemption; g) value added tax rate applied; h) the amount of VAT payment.

Second, the Court notes that the information in the cartridge below the invoice contains information on shipment of goods (name of the person delegated, identification number of the person delegated, number of means of transport, date and time to which they dispatch the goods signatures) and these information was identified as missing or incorrectly filled out by tax inspectors - and that it is the only reason for what the tax authority refused the right to deduct VAT for the applicant. The missing information is not included among the mandatory elements required by art. 155 paragraph (8) of the Tax Code for exercising the right to deduct VAT on purchases of goods.

The court notes that the legislature has regulated the content of "cartridge" in the bottom of the invoice by GD 831/1997, which includes descriptions of models of forms for financial and accounting activity, including model (form) for the invoice, containing a cartridge comprising consignment identification elements, as follows: "data expedition, delegate name .... ID. Series ... no. ... Issued (a) ..., the number of transport; Sending was performed in our presence, on..., Time ... signatures ...".

In accordance with Articles 3 paragraphs. (2) the Minister of Finance Order no. 29/2003 on the implementation of Government Decision no. 831/1997 for the approval of the models forms regarding financial and accounting activities and detailed procedures for establishing and using them, "in the bottom left of invoice will be mentioned and the identification of the person delivering the goods, ie: name and surname series and number of identity document (identity card or passport), identification number. " But the GD 831/1997 or MFP Order No.29 / 2003 does not expressly establish formal requirements beyond those imposed by the Tax Code for exercising the right to deduct VAT.

Moreover, such an amendment, made through acts of lower legal power would be illegal, because it would add to regulations and texts which provide limitations on the right to deduct VAT, covering exceptional situations; these norms must be interpreted restrictively and not extensive. Also, it would be impossible to make changes on the legal framework regulating the forms to be used in relations between operators (invoices, slips, etc.) in terms of the issuance, redemption and acceptance of transport documents, which are governed by lower power legal acts. The fiscal liabilities are subject only to the tax Code and the regulations issued on its basis (Gherghina, 2015).

Accordingly, the findings of the tax authority regarding the lack of the above mentioned elements from the documents can not have any relevance regarding the possibility of deduction of VAT by the applicant company, as long as the rules of tax legislation binds only justification for the right of deduction on the possession of an invoice containing the information described in art. 155 par. 8 Tax Code. Regarding the errors found on the other documents, the Court also notes that there is no provision of lawful order to condition the exercise of the right to deduct VAT on the content of delivery notes, which remains exclusively subject to the conditions imposed by art. 155 paragraph 8 from the Tax Code. The errors occurring on the documents can not have the effect of removing the right of deduction, as long as the applicant company exercised its right on a correct invoice.

### **2.3 Decision V from 2007 of the HCCJ**

The fiscal authority raises the arguments in the Decision V of 15.01.2007 issued by the United Sections of the High Court of Cassation and Justice, in which the court held that "value added tax is not deductible nor taxable base may be diminish for the establishment of the corporation tax if the supporting documents do not contain or do not provide all information required by the laws in force at the time of the operation for requesting the deduction of value added tax". The decision V / 2007 should be interpreted in light of considerations that straight it. As can be gleaned from decision text, it uses the term "supporting documentary" for both income tax and VAT. Therefore, for explaining the decision in the part concerning VAT deduction, we should consider only the arguments that aimed at a particular matter of law. Regarding this aspect, the text of the Decision V / 2007 provide: "(...) in all normative acts adopted before or after the Tax Code, in cases of performing operations to deduct VAT, there is ruled the express liability to provide supporting documents, legally or under law issued", without namely indicating, however, the type of document required.

The Accounting Law no.82/1991 and the Regulation for its application did not contain claims or criteria to determine what information should contain the supporting documents, and by Law no.345/2002, applicable from 1 June 2002-31 December 2003, it is ruled for the first

time the liability to provide supporting documents, specifying particular information that they should contain; the Law no. 571/2003 unitary ruled on the obligation to provide supporting documents and the particular information that result from them (Tofan, 2016). In this regard, the Decision V / 2007 recalls the art. 145 of the Tax Code, that provided at par. (8) that "to exercise the right to deduct VAT, any taxable person must demonstrate the right of deduction, depending on the kind of operation", stating in the regulations issued at point a) and b) the documents to be presented to prove each specific situation.

Therefore, the analysis of the arguments above clearly indicates that in Decision V / 2007 High Court made a summary analysis of legislation on "supporting documents", prior and after the entry into force of the Tax Code, concluding that in light of the latter, the "supporting documents" (in the broad sense) are clearly specified in art. 145 a and b of the Fiscal Code. In addition, it is important to note that Decision V/2007 can be applied only in the light of European Union law and the case-law of the Luxembourg Court on VAT, as detailed in the following subsection.

### **ANALYSIS OF THE CONTESTED ACTS IN THE LIGHT OF EU LAW**

The Court considers that the national judge became after January 1, 2007 the judge in the EU area, so he is obliged to directly apply EU law if he finds it incompatible with national law, in compliance with the principles and the direct effect of its rule. Any national court must apply EU law in its entirety and protect rights, which it confers on citizens, in a case falling within its jurisdiction. The national court is bound, as such, not to apply any provision of national law which may be in conflict with EU law, either adopted before or after the entry into force of the EU rule (Romanian High Court of Cassation and Justice HCCJ, Civil and Intellectual Property Section, civil decision no. 2119 from 31 March 2008).

As regards to EU law, the dispute raises the question of knowing whether the VAT Directive 2006/112 allows imposing any further condition for the exercise of the right to deduct VAT for the purpose of accounting nature that are not mentioned in the Directive, respectively if the VAT deductibility condition may refer to:

- The existence of the original of the notice of delivery, with all the information required by the regulated standard, when the goods are circulating without invoice and the invoice issued after transportation refers to this notice of delivery;
- The filling of other forms of claims on invoices of the supplier, when they are not included among the requirements laid down in art. 226 of the VAT Directive.

At the same time, the court has to examine whether art. 168 of the VAT Directive and the principles of neutrality and proportionality allow a Member State to refuse the right to deduct VAT on purchases of goods, only to the failure to specify the content of the invoice date of delivery of goods, when all other requirements of form and substance to exercise of the right of deduction are met.

Art.167 of the VAT Directive 2006/112 regulates the right of taxable persons to deduct VAT paid upstream for the supplies of goods or services used for the taxable transactions, stating that "the right to deduct arises when the deductible tax becomes due". Art.168 lit. (A) of Directive 2006/112 provides that "To the extent to which goods and services are used for taxable transactions, the taxable person shall be entitled, in the Member State where these transactions

are carried out, to deduct from the tax which is liable to pay the following amounts: VAT payable or paid in the Member State in respect of goods which are or will be delivered or services which are or will be provided by another taxable person". Art.178 of Directive 2006/112 provides that "to exercise the right of deduction, a taxable person must meet the following conditions: for deductions under Article 168 (a) in respect of the supply of goods or services, it is obliged to hold an invoice issued in accordance with Articles 220-236 and art.238, 239 and 240; [...]"

Under art. 226 of Directive 2006/112 "without prejudice to any special provisions of this Directive, for VAT purposes, on invoices issued pursuant to art. 220 and 221 there should be only the following details:

- a) date of issue;
- b) a sequential number, based on one or more series, which uniquely identifies the invoice;
- c) identification number for VAT purposes under art. 214 under which the taxable person supplied the goods or services;
- d) identification number for VAT purposes the client referred to in Article 214 under which the customer received a supply of goods or services in respect of which he is liable to pay VAT, or received a supply of goods, as provided in Article 138;
- e) the name and address of the taxable person and the customer;
- f) the quantity and nature of goods supplied or the extent and nature of services rendered;
- g) date when the delivery of goods or services was made or completed or the date on which the payment in advance referred to in paragraphs 4 and 5 of Article 220, as far as it can be determined and it differs from the date of issuing the invoice;
- h) the taxable amount per rate or exemption, the unit price exclusive of VAT and any discounts or rebates if they are not included in the unit price;
- i) the VAT rate applied;
- j) the VAT amount payable, unless they apply for special treatment for which this Directive excludes such a detail. "

According to the case law of the EUCJ, the invoice is a document that certifies a transaction between two traders, containing data about transaction (transaction date, the transaction purpose, the transaction value) and information about participants (name, address and Taxpayer Identification Number), and lack of evidence of the information that the control bodies refer to can not constitute a sufficient and essential element in the exercise of the right of deduction; it is required to be taken into account all relevant aspects of the case in this regard. The EUCJ ruled that the right to deduct laid down in art. 167 et seq of the VAT Directive and it is part of the mechanism of VAT and, in principle, it may not be limited (see judgment of 21 March 2000 *Gabalfrisa* Cases C-110/98 -C-147/98, ECR. 1-1577, paragraph 43, Judgment of 15 December 2005, *Centralan Property*, C-63/04, ECR. 1-11087, paragraph 50, judgment of 6 July 2006 *Kittel and Recolta Recycling*, C-439/04 and C-440/04, Rec. p. 1-6161, paragraph 47, and Case and *David Mahageben* June 21, 2012, C-80/11 and C-M2/11, paragraph 38.

Deduction system is meant to relieve the traders entirely of the burden of VAT, due or paid in all economic activities in which they engage. Common system of VAT consequently ensures neutrality perfect taxation of all economic activities, whatever the purpose or results of such activities, under the condition that the activities referred to are, in principle, themselves subject to VAT (see Case February 14, 1985 *Rompelman*. C-268/83, ECR. 655, paragraph 19,

judgment of 15 January 1998 Ghent Coal Terminal, C-37/95, ECR. I-1, paragraph 15; Case Gabalfrisa and others cited above, paragraph 44, judgment of 3 March 2005, Fini H, C-32/03, ECR. I-I599, paragraph 25, judgment of 21 February 2006, Halifax Cases C-255/02, Rec, p. 1-1609, paragraph 78; Case Kittel and Recolta Recycling, cited above, paragraph 48, judgment of 22 December 2010, Dankowski, C-438/09, Rep., p. 1-14009, paragraph 24, and Case Mahageben David, cited above, paragraph 39).

Also, the EUCJ held that the principle of fiscal neutrality requires that deduction of VAT for input of goods is allowed if the substantive requirements are satisfied, even if certain formal requirements were omitted by taxable persons (judgment of 30 September 2010, Uszodaepito C-392 / 09, paragraph 39; Case 8 May 2008 Ecotrade C-95/07 and C-96/07, Rep., p. 1-3457, paragraph 63).

Moreover, the combined cases C-123/87 and C-330/87 "Jorion Lea, nee Jeunehomme, and Societe anonyme de gestion immobiliere EGI v. Belgian State" ("Cause Lea Jorion"), the ECJ decided that Directive VI VAT (which underpins the current VAT Directive) provides imperatively that Member States must include into their national legislation two formal requirements on the right of deduction of VAT by taxpayer, namely the provisions of art.22 par.3b the content of the 6th VAT Directive, which refers to the amount invoiced and share of the applicable VAT.

However, in case law Lea Jorion ECJ stated that VAT Directive allows Member States to make the right deduction of VAT on the basis of existence of an invoice containing the elements to ensure the levy and to allow supervision the tax authorities. Without these elements, by the number or by nature, the right to deduct is impossible or excessively exercised.

## **THE RELATIONSHIP BETWEEN THE SUBSTANTIVE AND FORMAL CONDITIONS FOR THE DEDUCTION OF VAT**

### **4.1 The arguments of the EUCJ**

Ab initio, the court noted that the company respects all the substantive conditions for the right to deduct VAT and conducted effectively taxable transactions in the exercise of its object, collected and paid to the state budget the VAT and the substantive conditions are demonstrated by an expert report given to the court. In the light of the EUCJ's opinion, in Case C-146/2005 Albert Colee, the fiscal authority settlement body breached the principle of prevalence of substance over form when ejecting the appeal: "The principle of fiscal neutrality requires that exemption is allowed if the substantive requirements are satisfied, even if certain formal requirements were not met by taxpayers, the VAT exemption of an intra-Community supply, which actually took place, can not be refused simply because proof of such delivery was not filed in a timely manner."

Also, in Case C-368/09 Pannon GEP Centrum Kft, the ECJ held that Community law "precludes a national practice under which national authorities refuse the right to deduct the VAT to a taxable person which must pay the amount of tax due or paid for services that have been provided, for reasons that initial invoice, in its possession at the time of deduction, contained a wrong date of completion of service provision and that there was a continuous numbering bill corrected later and the credit note canceling the initial invoice, if the substance of deduction are met. "

The judgment of the Court from 15.07.2010 in Case C-368/09 Pannon GEP Centrum Kft against EH AP KÖZPONT Hatóság Foosztaly Hivatal Del-DUNÁNTÚLI Kihelyezett Hatóság osztály court in Luxembourg showed that Articolul 167, Article 178 (a), Article 220 paragraph 1 and Article 226 of Directive 2006/112/EC of 28 November 2006 on the common system of value added tax, must be interpreted as precluding legislation or a national practice in the terms that the authorities national refuses a taxable person the right to deduct from the value added tax they have to pay the amount of tax due or paid for services that have been provided, for reasons that initial invoice, in his possession at the time of deduction, included a wrong date of completion of service provision and that there was a continuous numbering of the bill subsequently corrected and the credit note cancelling the initial invoice, in case the substance of deduction are satisfied and, before the decision by the authority concerned, the taxable person latter provided a corrected invoice, which stated the exact date of ending the services that, even if there is a continuous numbering of that invoice and credit note cancelling the initial invoice.

In joint cases C-123/87 and C-330/87 "Jorion Lea, nee Jeunehomme, and Societe anonyme d'etude et de gestion immobiliere" EGL "v. Belgian State" Belgian tax authorities refused the right to deduct VAT for purchases made by Ms. Jorion and EGI on the grounds that the purchases invoices do not contain all the information required by Belgian law: beneficiary's address, registration code for VAT purposes, description of goods and services (Sararu, 2012). Thus, the EUCJ ruled that the Directive VI VAT provides the imperative obligation of Member States to take into their national legislation two formal requirements on exercising the right to deduct VAT by taxpayers, those provided by art.22 para.3 letter b) the content of the Directive, which refers to the invoiced amount and rate of VAT applicable.

The ECJ held that it is possible, according to art.22 paragraph 8 of the sixth VAT Directive, Member States should impose in their national legislation other formal requirements to be included in the taxpayer invoices, for exercising the right to deduct VAT, in order to ensure fair settlements VAT and enable tax authorities to exercise control of the VAT system (para. 16 of the judgment).

#### **4.2 The arguments of the Romanian courts**

This principle and ECJ decision was considered by the Romanian HCCJ - Department of administrative and fiscal decision in a particular case (decision no. 4739 / 14.10.2011), stating that "first court correctly granted priority for the substance elements for VAT exemption with deductibility retaining occurrence of intra-community supply of goods to a taxable person established in the community by promoting the prevalence of substance over form (in this respect the ECJ rulings in court cases Cole Connon, Teleos). However, the principle of formalism must not take precedence over the essence of the dispute, namely the occurrence highlighted by the submitted supporting documents and reviewed by the court. The recent European regulation and the practice in the field showed that payment of VAT by the company are not in direct connection with the errors occurred in commercial transactions, the essence is the reality of trade".

However, the right of Member States to impose additional formal requirements for the content of the invoices, as a condition for exercising the right to deduct VAT by taxpayers, is not absolute and it must be limited to what is necessary to achieve the pursued aim (par. 17 of the judgment). Such additional requirements may not limit the right to deduct VAT, not by their



number or by technical nature, in such manner so it becomes practically impossible or excessively difficult. Therefore, the fiscal authority arguments, based on Decision V / 15.01.2007 of the ICCJ, that the prevalence of form over substance is established and that it is inconsistent with EU regulations and case-law of the EUCJ. On the other hand, when the reality of the operation presented on the invoice and the existence of commercial relationship which led to issuing that invoices were determined by tax inspectors, not allowing the deduction of VAT by the control bodies would contravene obviously not only the principle of proportionality but also to that of the neutrality of VAT relief steadily in ECJ case law (Case Jeunehomme) ".

Against the decision of the Court of Appeal, the National Authority for Fiscal Administration appealed, considering that the solution was pronounced with the wrong application of the law in terms of VAT and its related accessories. Given that the applicant did not submit documents to provide all information required by applicable regulations, designed to ensure complete registration of the transactions and to confirm the respect of the cumulative conditions for exercising the right to deduct VAT, the applicant company has, in NAFA's opinion, the right to deduct VAT on the purchase invoices from 11 partners. The National Fiscal Authority considers that the court which solved the conflict has misinterpreted the provisions of Decision V / 2007 United Sections HCCJ regarding the right to deduct the VAT shown on the invoice that does not contain or does not supply all the information provided by legal provisions in force on the date of the operation for requesting a VAT deduction.

The HCCJ found there are no grounds for reforming the solution pronounced by the court of first instance. Solution of the Court of Appeal is correct and has been maintained by the HCCJ, after conducting its own examination of the case.

Refusal of the tax authority has no legal justification, as long as there is the deductibility of VAT on invoices submitted by suppliers for procurement when the following conditions are fulfilled:

- the operation substance (art. 145 par. 3-4 Fiscal Code in force before the date of January 1, 2007 and the respectively art. 146 alin. 2 of the Tax Code in force after 1 January 2007
- the form of the provided documents relating to operations performed, art. 145 Fiscal Code in force before 1 January 2007 respectively art. 146 Fiscal Code in force after 1 January 2007

The judge who solved the case in the first instance correctly observed that the National Fiscal Authority did not deny the reality of the transactions made by the applicant company. On the one hand, these operations were noted throughout the report of fiscal inspection, and although later, in the decision rejecting the applicant administrative request. The National Fiscal Authority body has an oscillatory position, proving no occurrence in their arguments and concluding that the documents presented did not justify correlating invoices opinions accompanying the goods or other documents and, moreover, the applicant is not entitled to deduct VAT.

Regarding the conditions of form, HCCJ notes that first court concluded judiciously that the lack of elements mentioned by National Fiscal Authority in the invoices can not have any relevance regarding the possibility of the tax authority to deny the right of deduction of VAT by the applicant company, as long as the tax legislation binds owning this right exclusively on justifying that the submitted invoices include the information in the art. 155 par. 8 Tax Code.

High Court holds that regulation on the content of the cartridge at the bottom of each invoice was made by GD 831 / 1997 and by Order 29/2003, but none of these acts do not contain

additional requirements as those stipulated in the Fiscal Code. The provisions of the Tax Code can not be modified or supplemented by acts of lower power, regulating model invoiced used in the relations between economic agents. The errors in the delivery notes accompanying the goods do not justify denying the right to deduct VAT because no legal provision condition the right to deduct VAT for the accuracy of the accompanying documents for delivering goods, but condition the deduction of VAT by complete documents imposed law but also VAT Directive.

## **CONCLUSIONS**

From the jurisprudence of the EUCJ in the matter of VAT, we notice that the court in Luxembourg focuses primarily on ensuring the principle of VAT neutrality and proportionality of the measures imposed by Member States relating to the right of deduction of value added tax. When they verify the conditions for exercising the right to deduct, the administrative authorities of Member States shall ensure in particular that the requirements were met, permitting to accept a deduction, even if certain formal requirements were distort by the taxable person.

Both in administrative appeals and during the first instance lawsuit, the domestic courts stated that the principle of prevalence of substance over form should prevail. As a direct consequence, if the tax auditors raised no objections to the substance of transactions, but found only some flaws form, than these arguments cannot be accepted in a settlement favourable to grant the right to deduct VAT. The taxable person who purchases goods on the basis of invoices and who accepts the registration in supporting documents as taxable transactions, is responsible for receiving and recording in its accounts the improperly prepared documents, incomplete, not in accordance with the legal provisions in force. The domestic courts ruled that the decision to reject the appeal in this regard is unlawful, as it is contrary to the settled case law of the EUCJ, that the information to be included in the invoice should not be a determining factor in granting the right to deduct VAT, as long as other elements can attest commercial relationship between the parties to the transaction.

This ruling is binding for Romania upon accession and applied priority, recent case law proving its effects. Still, the effects are mainly present in the courts of law and there is certain inertia in improving the fiscal authority action.

## **References**

1. Bercu, A.-M.; Tofan, M.; Cigu, E., (2015), New Challenges Concerning Sustainable Local Development. Romanian Case, *Procedia Economics and Finance*, vol. 20, 65-71, 2015, Elsevier, doi:10.1016/S2212-5671(15)00048-9.
2. Bilan, I., Oprea, F. Cigu, E., Toderascu, C., (2016), Local Government, Expenditure and Economic Growth: the Evidence of Romanian Counties, *Transformations in Business & Economics*, Vol. 15, No 3C (39C), 352-375.
3. Bufan, R., (2016), *Tratat de drept fiscal vol. I. Teoria generala a dreptului fiscal*, Bucuresti: Hamangiu
4. Costea, I. M. (2016), *Drept financiar. Note de curs*, Bucuresti: Hamangiu
5. Cristea, S., Stoica, C. (2008), *Drept societar*, Bucuresti: Universitara
6. Gherghina, S. (2015), *The Financing of Public Investments: Between Legal Limitations and the Public Interest Imperative. A Romanian Law Perspective*, Bucuresti: C.H. Beck
7. Malherbe, P. (2017), *Elemente de drept fiscal international*, Bucuresti: Hamangiu

8. Lazar, I. (2013), *Dreptul finantelor publice*, Bucuresti: Universul Juridic
9. Paun, C. (2015), *Forma si fondul TVA intracomunitara in dezbaterile CJUE*, *Curierul fiscal*, no. 2/2015, 6-12
10. Sararu, C.S., *State Aids that are Incompatible with the Internal Market in European Court of Justice Case Law. International Conference 2012 Perspective of Business Law in the Third Millenium. Studies of Business Law – Recent Developments and Perspectives* (pp. 25-39). Frankfurt: Peter Lang Academic Research.
11. Saguna, D. D., Tofan, M., (2010), *Drept financiar si fiscal european*, Bucuresti: CH Beck
12. Tofan, M., (2016), *Drept fiscal*, Bucuresti: CH Beck



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