

The background of the cover is a dramatic photograph of a volcanic eruption. A bright, glowing plume of orange and yellow lava or ash rises from a dark, jagged volcanic landscape. The scene is illuminated by the intense light of the eruption, creating a stark contrast between the dark rocks and the bright fire.

HRVATSKI  
RACUNO  
VOĐA

*Journal of  
Accounting  
and  
Management*

UDC 336.2/657.1/657.3/657.343/658.155

ISSN 2459-5888

Vol. 7 No. 2  
pages: 1 - 64

Croatian Accountant

December  
2017





# **Journal of Accounting and Management**

**Volume 7, No. 2, 2017**  
Pages: 1 - 64

*Zagreb, December 2017*

# **Journal of Accounting and Management**

## **Founder**

Croatian Accountant – Independent Association of Accountants,  
Tax Advisors and Finance Professionals

## **Published by**

Croatian Accountant © Copyright 2017  
UDC 336.2/657.1/657.3/657.343/658.155  
ISSN 2459-5888

## **Editor-in-Chief**

Đurđica Jurić, PhD (CRO)

## **Editorial Board**

Tamara Cirkveni Filipović, PhD, College Professor (CRO)  
Tatjana Dolinšek, PhD (SLO)  
Martina Herceg Rendeli, MA (CRO)  
Ljerka Markota, PhD, College Professor (CRO)  
Urszula Michalik, PhD (POL)  
Miroslawa Michalska-Suchanek, PhD (POL)  
Dubravka Paris, MA, Lecturer (CRO)  
Dolores Pušar Banović, PhD, Senior Lecturer (CRO)

## **Address of the Editorial Office**

Hrvatski računovodja, HR – 10000 Zagreb, Vlaška 68  
Phone: + 385 1 4699 700, Fax: + 385 1 4699 703  
e-mail: [info@hrvatski-racunovodja.hr](mailto:info@hrvatski-racunovodja.hr)  
[www.hrvatski-racunovodja.hr](http://www.hrvatski-racunovodja.hr)

**Journal of Accounting and Management** is published in two issues a year.

**Journal of Accounting and Management** is a free periodical of the Croatian Accountant – Independent Association of Accountants, Tax Advisors and Finance Professionals.

**Journal of Accounting and Management** is indexed in:

- HRČAK (Portal of scientific and technical journals of the Republic of Croatia),
- European Reference Index for the Humanities and Social Sciences - ERIHPLUS

All rights reserved. Authors are responsible for the linguistic  
and technical accuracy of their contributions.  
Electronic version only.

## **FOREWORD**

Dear readers,

it is our great pleasure to present to you a new issue of the **Journal of Accounting and Management**.

The papers published in this issue of the Journal were presented at the International Scientific and Professional Conference Accounting and Management organized by the Association "Croatian Accountant" and the RRiF College of Financial Management, Zagreb.

Our efforts to maintain the quality of the published articles continue in the following period, presenting the result of new research and practice in a variety of topics in the field of accounting and management with the aim to provide the necessary knowledge and information important to professionals, researchers but also key opinion leaders.

The Journal is on a completely open-access basis and is available for use to scholars, professionals and students.

We thank all the authors, co-authors and reviewers for their effort and willingness to share their knowledge and invite you to contribute to our joint work and permanent endeavour to retain the quality of our Journal.

**Editor-in-Chief**

Đurđica Jurić, PhD, College Professor



## CONTENTS

Prof. Branimir Dukić, PhD;

Goranka Majić, univ. spec. oec;

Stojanka Dukić, PhD

Scientific Review

### **PROBLEMS REGARDING THE ASSESSMENT OF THE BOOK VALUE OF A BUSINESS IN THE KNOWLEDGE ECONOMY**

1 - 12

Nikolina Markota Vukić, PhD;

Renata Vuković, bacc. oec.;

Donato Calace, PhD

Scientific Review

### **NON-FINANCIAL REPORTING AS A NEW TREND IN SUSTAINABILITY ACCOUNTING**

13 - 26

Branko Mayr, PhD

Scientific Review

### **INDIRECT METHODS IN ASSESSING ILLEGAL ORIGIN OF INCOME AND ASSETS**

27 - 40

Dubravka Paris, MA,

Professional Paper

### **TEACHING BUSINESS ENGLISH AT RRIF COLLEGE OF FINANCIAL MANAGEMENT IN ZAGREB, REPUBLIC OF CROATIA**

41 - 52

Ivan Petarčić, Professional Specialist for Corporate Finances

Professional Paper

### **THE ROLE OF VAT ON CORPORATE SOCIAL RESPONSIBILITY IN CROATIA**

53 - 64

### **INSTRUCTIONS FOR AUTHORS**

65

### **PUBLICATION ETHICS AND PUBLICATION MALPRACTICE**

### **STATEMENT FOR JOURNAL OF ACCOUNTING AND MANAGEMENT**

66 - 69





Scientific Review  
UDK: 657.1/657.3

*Paper received: 14/06/2017*

*Paper Accepted: 01/09/2017*

## **PROBLEMS REGARDING THE ASSESSMENT OF THE BOOK VALUE OF A BUSINESS IN THE KNOWLEDGE ECONOMY**

***Prof. Branimir Dukić, PhD***

*Faculty of Economics in Osijek, Osijek, Croatia*

***Goranka Majić, univ. spec. oec***

*Kruna 2011 d.o.o., Zagreb, Croatia*

***Stojanka Dukić, PhD***

*duxMission d.o.o., Osijek, Croatia*

### **ABSTRACT**

Significant changes in the society starting from the end of last century, have transformed the industrial age into the new post industrial age, which could colloquially be denominated as information age. One of vital characteristics of that economy is the transition from matter management to data management. Data is, at the same time, a basis for business processes management, a means for completing business processes, as well as a product of business processes. Thus, data is simultaneously a raw material, as well as semi-finished goods and finished goods, but also a management resource and company equity. The thesis that data resources are the key to a successful business of a modern business entity is today accepted in an axiomatic manner, in theory. Therefore, a question whether the power of a business entity in contemporary circumstances of doing business should be measured by the value of its tangible assets as it was done in the industrial age should be rightfully raised, or is its value a product of its intangible assets, i.e. its organized repositories of data, information and knowledge. In the bookkeeping assessment of the economic value of a business, material assets are still the key factor, and accounting is the only activity oriented towards maintaining the material essence of a business. Such accounting is not updated, therefore it is necessary to implement new ways of bookkeeping assessment of the economic value of a business, which shall accept the value of data, information and knowledge that the business possesses.

**Keywords:** *knowledge economy, data basis intellectual capital, bookkeeping assessment of the economic value, information, knowledge*

## 1. INTRODUCTION

Humanity stands at the threshold of the new information age. It is hard to envision all the implications of the new age at the moment, however, it is evident that many principles of life and work in the new age are changing and that the science would have to offer answers and explanations for various newly-created processes very soon. One of such processes is a transfer to electronic, or virtual forms of doing business. Namely, most of business processes are information communication processes, so instead of making use of physical communication channels, these processes today are realized virtually, in the framework of global information network, meaning Internet. Internet facilitates not only virtual trade, virtual products distribution, marketing, payments, administrative and management transactions, etc., it also facilitates social contact. In other words, it provides new forms of social interaction among people which globalize the world and make it a sole entirety regardless of a spatial and cultural distance between people. Considering the availability of information communication technology and the possibilities of its use for performing various jobs, and considering that most of jobs in mass production are performed by robots, the forms of work are changing, and as a result, the role of urban centers as points of attraction of industrial workforce is changing, too. It can be expected that fixed working hours and fixed work place will gradually become extinct and replaced by temporary project-orientated jobs, which will require a more flexible workforce, especially in terms of skills and knowledge. It is important to bear in mind that the human self-consciousness evolves with the increase of knowledge and the availability of information, and that individuals from an impersonal part of amorphous mass of humanity transform themselves into conscious individuals with all their peculiarities and needs. This already has an effect on consumption, where people began asking for tailor-made products in accordance with their needs instead of uniform products of mass production. Such approach shall certainly affect the transformation of a larger part of mass production into individualized production which would comply with individual needs of each person. The increase in the volume of the data, which includes the increase in the share of information and knowledge, makes this new age essentially different than the industrial age that preceded. All the above mentioned leads to a change in the system of values, so the previous meaning of fortune has been fundamentally changed. In the new age the fortune shall be the data or information potentials, as well as potentials of knowledge, whether it be tacit knowledge, knowledge of people or explicit, externalized knowledge, saved in a virtual environment. New systems of value require different approaches to the evaluation of the book value of business entities, particularly capital companies in the knowledge economy.

## **2. METHODOLOGY OF RESEARCH**

The today's bookkeeping is a product of the industrial age, and is, as such, focused on a classic industrial viewpoint of the value of business entities. To that regard, the focus is on material and financial assets, meaning the "visible" and the financial assets of a business entity. Externalized data, whether it be the presentation of information or knowledge, or internalized (tacit) knowledge and information which people possess, comprise assets with completely different characteristics from the classic operating assets which are wasted during the reproduction cycle. On the contrary, unlike the land, data is not wasted with the exploitation; it actually increases in volume over time, which consequently increases its value. Therefore, it shows that classic accounting has no answer to the question about the capital value of data resources. On the basis of the aforementioned, the following hypothesis has been formed:

Accounting in its today's form and with its current principles of functioning does not generate a real image of the value of business entities organized as capital companies, and as such is not adequate for the evaluation of the value of business entities in the knowledge economy.

Objectives of research are the following:

1. Giving an overview of the basic terminology
2. Giving an overview of the principles for assessing the value of business entities
3. Determining the strengths and weaknesses of the accounting in the registration of data resources considered to be a basis for obtaining the information and knowledge
4. Defining the course that the accounting shall take in order to be able to change and show a realistic picture of business transactions of companies in the information age

The following scientific methods have been used in this research: method of deduction, historical method, method of analysis, method of generalization, method of specialization, method of combination, method of causal conclusion, method of analogy, method of descriptive modelling and other scientific methods. Written and digital secondary data resources have been used in the research. The results of the research presented are a product of a year-long systematic dedication of the author to the changes brought by this age and the reflections on the implications of transition occurring at the shift from the industrial to the new information age, meaning the age of knowledge.

### 3. RESEARCH RESULTS

Bookkeeping can be perceived as a subset of accounting. While bookkeeping is focused on keeping the books, that is registering business transactions, accounting deals with:<sup>1</sup>

- Continuous monitoring of legal rules and regulations
- Business analysis
- Identifying and pointing out mistakes
- Searching for the most adequate solution for the improvement of business operations.

Elaborating the balance sheet, profit and loss account and other financial reports belongs to the scope of accounting. It also deals with the evaluation of the economic value of a business. Assessments of the economic value are usually performed with a view to:<sup>2</sup>

- Assessing the value of private limited companies, so the owners can determine the value of their property
- Choosing the optimal stock portfolio of public listed companies for the needs of investors
- Determining the value of companies or their parts which are being purchased, sold or merged
- Assessing the effects of the business strategy, because a business should follow a strategy that maximizes the value of its equity
- Assessing market and economic prospects, considering that they are contained in the value of public listed companies

Business entities in the Republic of Croatia can be established according to different models, meaning on different legal basis. In accordance with the positive legal regulations in the Republic of Croatia, the basic legal forms of business entities are the following:<sup>3</sup>

1. Companies: Simple limited liability company (j.d.o.o.), Limited liability company (d.o.o.), Joint stock companies (d.d.), Limited partnerships (k.d.)
2. Crafts and freelancers
3. Cooperatives, Partnerships, Family Run Farms (OPG), Associations, Institutions, Trusts, Foundations

<sup>1</sup> <http://www.ergon.hr/pitanja-i-odgovori-klijenata/znate-li-razliku-izmedu-knjigovodstvenih-racunovodstvenih-usluga/> [17.1.2017]

<sup>2</sup> <http://www.poslovnih.hr/tips-and-tricks/ovako-se-procjenjuje-vrijednost-poduzeca-metodom-diskontiranja-novcanog-toka-239766> [20.1.2017]

<sup>3</sup> <http://ekonos.hr/portfolio-view/pravni-oblici-poduzetnistva-i-dio/> [1.4.2016]

Companies can be founded by individual entrepreneurs or groups of entrepreneurs in accordance with the Companies Act<sup>4</sup>. The Companies Act establishes a difference between:<sup>5</sup>

- Private companies
  - Public companies
  - Limited partnerships
- Companies
  - Limited liability companies (d.o.o.)
  - Joint stock companies (d.d.)

As regards companies, equity must to be defined. It can be concluded that: "Equity is the value of assets invested into a business venture by an entrepreneur with a view to gaining profit."<sup>6</sup> Regarding the gains, meaning profit, the following applies: "The word originates from Latin, where it stood for 'making (achieving) progress'. It came into Croatian directly from a French word 'profit' – which means a positive return on investment made by an individual or generated by a business operation. The size of net results is obtained by deducting the total expenses from the total income"<sup>7</sup>. Consequently, vital feature for the activities of business entities is entrepreneurial behavior, investments of capital with a view to making profit. The most common form of business entities is a limited liability company.

Investments of capital in a business venture, as regards business entities, can be made in form of:<sup>8</sup>

- a). One's own capital (equity) – value of own capital invested
- b). Debts or liabilities – capital of others

Invested capital can appear in the following forms:<sup>9</sup>

- a). In form of money
- b). In form of things (tangible assets)
- a) In form of rights (intangible assets)

It should be observed that the information and knowledge, meaning data and human resources are at present not considered as equity within the mean-

---

<sup>4</sup> <https://www.zakon.hr/z/546/Zakon-o-trgova%C4%8Dkimdru%C5%A1tviman> [20.12.2016]

<sup>5</sup> <http://poslovnj-plan.hr/trgovacka-drustva/> [21.12.2016]

<sup>6</sup> <http://knjigovodstvo-racunovodstvo.blogspot.hr/2009/11/kapital-pojam-podjela-oblici-temeljni.html> [20.12.2016]

<sup>7</sup> <http://www.raza.hr/Poduzetnicki-pojmovnik/Profit-dobit> [20.12.2016]

<sup>8</sup> <http://knjigovodstvo-racunovodstvo.blogspot.hr/2009/11/kapital-pojam-podjela-oblici-temeljni.html> [20.12.2016]

<sup>9</sup> Ibid.

ing of investments. On the other hand, even though investments in inventions or rights to an invention are considered equity, the mentioned category does not include those resources which will most certainly become the basis of a company capital in the new age. Therefore, from the viewpoint of importance, the following capital structure can be expected:

- a). In form of human resources (intangible assets)
- b). In form of data resources (intangible assets)
- c). In form of rights (intangible assets)
- d). In form of money
- e). In form of things (tangible assets)

It is to be realistically expected that the evaluation of economic value of human resources will cause mayor problems, since human resources appear as an expense, but also as an important resource in terms of capital investments. Another problem, just as important as the previous one, is the one that is the focal point of this research, the problem of assessing the value of intangible assets in the sense of data resources. Data per se has no value or its value equals the purchase price if the data was bought, or equals the expenses for the data production in the sense of gathering, preparation for the entry and the entry itself in structured, semi-structured and unstructured data repositories, and finally the cost of its processing and distribution. Data, as a capital base, as well as human resources, can be observed from several viewpoints: both as capital assets and as provisions of materials, as well as semi-finished products, and in certain circumstances, when data is a commodity, as a finished product. But, information sciences state that data cannot be considered to be a finished product, because it is only a resource for acquiring information and knowledge. Namely, a hidden value of data is manifested in the concept of data as the resource of information, i.e. the resource of knowledge. Since knowledge and information constitute the capital base of the new economy, their correct bookkeeping leads to a significant change in the value of a business entity. In the aforementioned list, which brings an overview of the position of each capital base in the new age, rights are rightfully placed in third place. Unlike the industrial age, which is essentially a reproductive age focused on the production of the largest possible scale of identical products, the new age is focused on production of individualized, mostly digital, products for each and every person. Under such circumstances, innovation and creativity are becoming important features, and protection of innovative and creative solutions will evolve from individual cases into a common practice. The discrepancy from this projected behavior is possible in case where the future economy is reorganized in a manner to make all innovations and creations a public good, which is not to

be realistically expected. Furthermore, the following item on the list is money as permanent capital equivalent to value, but money also tends to transform from a physical into a completely virtual equivalent. In the distribution of a capital base of the modern economy, the equity in form of things comes last as the least important element of the assessment of economic value.

In principle, before considering human or data resources as capital resources, their real position in terms of assets of a business entity or the origin of assets of a business entity should be observed. Therefore, a potential position of human, i.e. data resources should be reflected upon in a balance sheet. To that regard, the following should be taken into account: "Balance sheet is a two-sided accounting expression with a balanced left and right side. It consists of two component parts, assets and liabilities. In the accounting language, the property is called assets, and the origins of property in our past practice is called liabilities. Balance sheet identifies the entire assets (property) and liabilities (financial sources). It provides the users with the information on the company's possessions on a certain date (assets), the information on its debts and where it stands after the liabilities are deducted from the assets. Balance sheet is a basis for a financial analysis, an analysis of indebtedness, profitability, liquidity and activity."<sup>10</sup> As regards data resources, having in mind that they belong to intangible assets which are not wasted in the process of reproduction, its essential characteristics match the position of fixed assets. The source of such assets can be equity, but the value of such assets can change under the influence of business processes. Digital business processes shall, in principle, increase the volume of data resources, thus changing the volume of useful information and knowledge. Considering the importance of information and knowledge in terms of assessing the economic value of a business entity, the problem regarding the bookkeeping expression of a value equivalent to data resources remains.

Each assessment of economic value of a business entity is based on a bookkeeping evaluation of equity value. In principle, the book value of company equity is calculated according to the following equation:<sup>11</sup>

$$BVE=BVA-BVL$$

In which:

BVE means book value of equity

BVA means book value of assets

BVL means book value of total liabilities

---

<sup>10</sup> <http://www.poslovnih.hr/trzista/bilanca-je-najvazniji-dokument-tvrtke-149649> [10.1.2017]

<sup>11</sup> [http://www.poslovnih-info.eu/sadrzaj/menadzment/koliko-vrijedi-poduzece-\(saznajte-iz-bilance\)/](http://www.poslovnih-info.eu/sadrzaj/menadzment/koliko-vrijedi-poduzece-(saznajte-iz-bilance)/) [10.1.2017]

In respect of the assessment of the economic value of a business entity, it can be stated the following: "In order for the assessed book value to be realistic, the data used as a basis for the assessment must be realistic. However, when using the data from accounting records, a manager must be aware that in bookkeeping, hence in the balance sheet as well, the stated values show more or less discrepancies as compared to market values. Those discrepancies are inevitable even when the financial reports had been checked by an authorized auditor who had issued a positive report. Namely, even in cases when accounting regulations and standards are fully applied, due to the permitted use of different accounting principles and politics and allowed approximations, the discrepancies from market values appear. If the book value is not accurate enough, the value of company can be evaluated with more precision by adjusting the balance sheet positions. In such evaluation, the amounts stated on balance sheet positions, which significantly defer from reality, shall be adjusted to market values. In such a manner, and depending on used methods and depreciation rates, technological advances/obsolescence and changes in market prices, the value of capital assets is increased or decreased, and the real value of provisions, receivables, liabilities, etc. can be verified. Adjusted data are entered into the balance sheet instead of bookkeeping data, and the difference between the adjusted and book values increases or reduces own capital."<sup>12</sup>

It is clear from the quote above that the economic theory has at its disposal mechanisms which can adjust the book value according to the real value of a business entity. However, all methods of adjusting the book value to a real value make sense in case where there is a rather small discrepancy between the book value and the real value. In case of large discrepancies, the accounting records which prove to be completely inaccurate from the very beginning should be questioned. The existence of such a phenomenon regarding the book value of a business in the knowledge economy for business entities whose equity shall be based on data resources is to be realistically expected.

#### **4. CONCLUSION**

Each era in the development of humanity has been marked by a certain capital base which has defined the forms of management, i.e. the forms of company organization. The transition periods until the full maturity of a certain characteristic or individual eras in the development of human community have been marked by transitions in which characteristics of a previous period were mixed with the characteristics of a succeeding period. Such transitional

---

<sup>12</sup> Ibid.



periods are extremely interesting from a scientific point of view, because science is required to give plenty answers regarding the new evolutionary period or the new economic form. It is precisely the modern economy that finds itself in such a transitional period, meaning shifting from the industrial to the information age, or the age of knowledge.

The change in the structure of consumption, meaning the increase in the share of digital products, and the increase in the share of products based on information and knowledge, changes at the same time the capital base of the economy in which the economy of tangible assets is becoming the economy of intangible assets in which information and knowledge are the capital base of the business. Considering that people are holders of information and knowledge, i.e. data resources in which the information and knowledge are externalized, they are becoming the capital base of the economy in the new age, which means the basic economic resource. It means that in the emerging information society, or knowledge economy, competitiveness will be achieved based on quality and volume of factors which define the information and knowledge, and these are human resources and data resources. Yet, taking into account the fact that these resources have up until recently been seen as an expense, which means that they have not frequently been included in the capital base of a company, and that from the actual time position the value of these resources is hardly or not at all perceived nor evaluated, it can be concluded that the actual system of monitoring of business entities is not apt for this new age. The primary question here refers to bookkeeping principles oriented towards monitoring the material processes and evaluating physical, meaning monetary capital base.

The existing bookkeeping is a product of the industrial age, hence it is reasonable that such accounting seeks changes and adjustments to the new age. Without significant changes in relation to the capital base of business entities, accounting records are becoming inaccurate and incomplete, which distorts basic accounting principles. This research was carried out with the aim to find the answers to the questions whether the today's accounting can provide a concrete data regarding the economic value of business entities, of companies in the emerging information economy, i.e. knowledge economy. Having analyzed the bibliographical resources and having performed experiments on models of bookkeeping records of various types of business entities of the information age, whose basis for business operations are data resources, meaning information and knowledge, it has been concluded that there are true problems regarding the assessment of the economic value of such business entities, and that the actual methods of assessment of book value do not provide relevant answers, not because of the methods of bookkeeping assess-

ment of the economic value themselves, but because of inadequate book-keeping treatment of the value of intangible assets. Therefore, the modern bookkeeping should be adjusted to the new age and correctly accept both the data resources and human resources, i.e. information and knowledge for the correct assessment of the economic value of a business entity, and for maintaining this substance as a vital capital base in modern business entities.

The follow-up of the research regarding the transformation of the book-keeping records and its adjustment to the new age is planned for the forthcoming period. To that regard, the models for the assessment and maintenance of the value of data and human capital shall be elaborated, as well methods for the monitoring of those resources through the balance sheet. Finally, it can be concluded that the previous research has shown that the accounting in its present form and with its present operating principles does not provide a realistic picture of the economic value of business entities organized as capital companies, therefore it is not, as such, convenient for the assessment of the economic value of business entities in the knowledge economy. Future research should resolve this problem through concrete model solutions.

## 5. REFERENCES

1. Cvjetković, N. Procjena vrijednosti poduzeća i poslovnih rezultata, <http://www.treasury.hr/docs/hukrhr/dokumentitekst/89/0.0/original.ppt> [16.12.2016]
2. Dolinar, D. (2012) Vrednovanje građevinskog poduzeća narušene snage privređivanja, specijalistički poslijediplomski rad, Ekonomski fakultet Zagreb, Zagreb.
3. Helfert, E. A. (2001.). *Financijal Analysis:Tools and Techniques*. McGraw-Hill.
4. <http://ekonoss.hr/portfolio-view/pravni-oblici-poduzetnistva-i-dio/> [1.4.2016]
5. <http://www.ergon.hr/pitanja-i-odgovori-klijenata/znete-li-razliku-između-knjigovodstvenih-racunovodstvenih-usluga/> [17.1.2017]
6. <http://knjigovodstvo-racunovodstvo.blogspot.hr/2009/11/kapital-pojam-podjela-oblici-temeljni.html> [20.12.2016]
7. <http://poslovni-plan.hr/trgovacka-drustva/> [21.12.2016]
8. <http://web.efzg.hr/dok/EPO/sorsag/Pk03-Vrednovanje%20poduzea.pdf> [16.12.2016]
9. <http://www.poslovni.hr/tips-and-tricks/ovako-se-procjenjuje-vrijednost-poduzeca-metodom-diskontiranog-novcanog-toka-239766> [20.1.2017]
10. <http://www.poslovni.hr/trzista/bilanca-je-najvazniji-dokument-tvrtke-149649> [10.1.2017]
11. [http://www.poslovni-info.eu/sadržaj/menadzment/koliko-vrijedi-poduzece-\(saznajte-iz-bilance\)/](http://www.poslovni-info.eu/sadržaj/menadzment/koliko-vrijedi-poduzece-(saznajte-iz-bilance)/) [10.1.2017]
12. <http://www.raza.hr/Poduzetnicki-pojmovnik/Profit-dobit> [20.12.2016]
13. <https://www.zakon.hr/z/546/Zakon-o-trgova%C4%8Dkim-dru%C5%A1tviman> [20.12.2016]
14. Orsag, S. (1997.). *Vrednovanje poduzeća*. Zagreb: Infoinvest.
15. Palepu, K. G., Healy, P. M. i Bernard, V. L. (1996.). *Business Analysis and Valuation*. South-Western.
16. Tintor, J. (2009.). *Poslovna analiza*. Zagreb: Masmedia.

## PROBLEMI PROCJENE KNJIGOVODSTVENE VRIJEDNOSTI DRUŠTVA U EKONOMIJI ZNANJA

### SAŽETAK RADA:

Znatne promjene u društvu koje su započele krajem prošlog stoljeća rezultirale su transformacijom iz industrijske ere u novu post-industrijsku eru, koja bi se kolokvijalno mogla nazvati era informacija. Jedna od najvažnijih karakteristika takve ekonomije je prijelaz iz upravljanja materijom u upravljanje podacima. Podaci su također i osnova za upravljanje poslovnim procesima, sredstvo pomoću kojeg se završavaju poslovni procesi, a predstavljaju i proizvod poslovnog procesa. Na taj način podaci predstavljaju sirovinu, polugotov i gotov proizvod, ali i resurs za upravljanje i kapital društva. Teza da su izvori podataka ključni za uspješno poslovanje modernog društva se danas prihvaća u teoriji kao aksiom. Stoga je opravdano postaviti pitanje je li se snaga nekog društva u modernim okolnostima poslovanja treba određivati vrijednošću njegove materijalne imovine, kao što se to činilo u industrijskoj eri, ili njegova vrijednost leži u proizvodu nematerijalne imovine, tj. njegovom organiziranom repozitoriju podataka, informacija i znanja. S knjigovodstvenog gledišta procjene njegove ekonomske vrijednosti, materijalna imovina se još uvijek smatra glavnim čimbenikom a računovodstvo je jedina aktivnost orijentirana na održavanje materijalne biti društva. Takvo računovodstvo nije modernizirano. Stoga je potrebno implementirati nove načine knjigovodstvene procjene ekonomske vrijednosti društva koji će uvažiti vrijednost podataka, informacija i znanja koje određeno društvo posjeduje.

***Ključne riječi:*** ekonomija znanja, baza podataka intelektualnog kapitala, knjigovodstvena procjena ekonomske vrijednosti, informacije, znanje



Scientific Review  
UDK: 657.3

*Paper received: 18/07/2017*

*Paper Accepted: 25/08/2017*

## **NON-FINANCIAL REPORTING AS A NEW TREND IN SUSTAINABILITY ACCOUNTING**

***Nikolina Markota Vukić, PhD***

*The Croatian institute for CSR, Zagreb, Croatia*

***Renata Vuković, bacc. oec.***

*RRiF College of Financial Management, Zagreb, Croatia*

***Donato Calace, PhD***

*eRevalue, London, United Kingdom,*

*LUM Jean Monnet University, Casamassima, Italy*

### **ABSTRACT**

The non-financial reporting trend is expected to continue and grow as corporate stakeholders demand more information concerning environmental, social, and governance impacts. Hence, understanding the importance of sustainability accounting plays a pivotal role in offering stakeholders information that is more reliable and accurate. According to a Governance & Accountability Institute, 82% of the S&P 500 companies published Corporate Sustainability Reports in 2016.

Dilemma for the business is no longer whether having a non-financial report or not, it is rather why, how and which report or option should companies choose to meet stakeholders needs and comply with the regulatory framework. The objectives of this paper are as follows: first, overview of the non-financial reporting and sustainability accounting, then its historical development will be presented. Finally, this paper will provide an overview on the new European legislative framework of non-financial reporting which will be presented and described.

***Key words:*** *non-financial report, history of non-financial reports, sustainability accounting, non-financial report legislation in European Union*

## **1. INTRODUCTION**

Current rate of corporate responsibility (CR) reports among the world's largest companies (G250) is over 90 percent, what presents a new trend of sustainability accounting (KPMG, 2015). With the EU Directive on non-financial reporting it is possible to notice a rapid increase in the volume of regulations and normative requiring transparency on environmental, social, governance (ESG) issues. Data from eRevalue's Observe database shows that between 2010 and 2016 the volume of regulatory initiatives concerning ESG transparency has increased by 64%. It is the case of the King III Code of Governance Principles in South Africa, the UK Companies Act, the Sarbanes-Oxley Act in the US, the Grenelle II Act in France, and the EU Directive 2014/95/EU. The latest KPMG Survey of Corporate Responsibility Reporting (KPMG, 2015) indicates that legislative initiatives by governments and stock exchanges are the main driver of such kind of reporting. More than two-thirds of the Fortune Global 500 companies issue a sustainability report (LeBlanc, 2012), showing a growing trend that is not prompted by contingent and temporary forces (Kolk, 2004). Sustainability reporting is also growing in emerging economies, in particular in the Asia Pacific area and Latin America, however the gap between leading and lagging industry sectors is narrowing too, converting sustainability reporting in a diffused and cross-sectorial practice (KPMG, 2015).

This is the manifestation of a wide and shared consensus that ESG data reporting offers a contribution towards the integration of sustainable development principles at business level and sustainability accounting. The integration of sustainability at accounting was based on the quantification of the ESG or social and environmental data. During time the quantification of ESG data resulted in development of sophisticated and internationally accepted non-financial reporting frameworks, tools and software.

## **2. NON-FINANCIAL REPORTING AND SUSTAINABILITY ACCOUNTING**

Discourses regarding ESG accounting and reporting began as soon as the idea of an extended corporate responsibility was introduced, as presented in more detail in the next section. This coupling is not casual, but refers to the inherent *raison d'être* of accounting.

To perform accounting, it is necessary to create and establish data collection systems, databases, and associated reporting processes. A broadened accountability towards a wider array of stakeholders implies that their claims and interests find representation in such systems. As a consequence, accountability towards stakeholders needs the construction of an adequate accounting and

reporting system, incorporating stakeholders' voices in its records, translating them into reliable, systematic, and accountable measurements (Hall et al., 2015).

Specifically, accounting consists of 4 basic processes: counting, recording, summarizing, and reporting (Goldberg, 1965). In particular, counting regards identification and measurement of relevant facts or phenomena. Recording refers to the translation of such measurements accordingly to the conventions of accounting principles. The resulting accounting data is then ordered to add meaning to it. For example, the summarizing process distinguishes between current and long-term liabilities and assets and calculates net accounts. The final process of reporting deals with communicating the information to relevant internal and external audiences, allowing the readers to assess, compare, evaluate, and analyze it.

As it is evident, reporting is only a limited portion of accounting, which more importantly regards constructing what is known by an organization, as showed by Mitchell, et al. (2015). According to this perspective, the path leading to knowledge begins with observation of phenomena – “facts” (Ackoff, 1989) - in a process of identification and measurement that clearly resonates the counting basic process. With the association of conventionally defined symbols to facts, they evolve into data (Ackoff, 1989; Davis, 1974). This is precisely what happens when applying the recording conventions prescribed by accounting standards in the recording basic process. Then, the infusion of meaning to data generates information (Checkland & Scholes, 1990; Davenport & Prusak, 1998; Davis, 1974; Drucker, 1988; Tushman & Nadler, 1978). In accounting, this step is carried out through the summarizing basic process, which generates the accounts conveying informative value. Finally, the transition from information to knowledge requires the application of information (Davenport & Prusak, 1998; Kuhlen, 1991; Nonaka & Takeuchi, 1995). The reporting basic process enables application of the accounting information for auditing, analysis, disclosure, and decision-making purposes.

In this perspective, accounting serves to create the space of what can be known by the organization, in turn defining what is manageable or not. It is a language familiar to firms, allowing them to “speak” and “listen” to stakeholders (Hall et al., 2015). In particular, an accounting language affects how managers form their views about what needs to be done, by operationalizing ideas and approaches and creating specific visibilities in the information (Burchell et al., 1997; Chapman et al., 2009; Miller & Power, 2013). Conversely, it contributes to constructing stakeholder's image, perception, and judgement concerning the organization (Cooper & Owen, 2007; Freeman et al., 2010; Zadek et al., 2013). In addition, it brings claimants together in this cognizable and manageable space (Crane et al., 2015).

In other words, the language of non-financial reporting which presents company's ESG performance reflects an extended accountability towards more demanded stakeholders. More precisely, non-financial reporting builds a transformative accounting in opposition to a conservative, business-as-usual one.

Stakeholders' representation in accounting has a normative value in the sense that it changes the power relationships between the company and its surrounding environment (Harrison & van der Laan Smith, 2015).

The normative foundations of stakeholder accounting rely on a general principle of fairness (Phillips, 2003), according to which accountability towards stakeholders and their right to access to created value depends on the extent of their contributions of resources to the firm. In this sense, stakeholders have a tacit contract with the firm, implicitly investing in non-monetary terms and expecting a return on such investment. They bring a residual claim to the value created thanks to their contribution. Clearly, they bear a form of risk in relation to their investment. Hence, according to the principle of participation to value creation deriving from voluntary risk-taking, accountability towards stakeholder is not different from accountability towards provider of financial capital (Harrison & van der Laan Smith, 2015; Mitchell et al., 2015).

Harrison and Van der Laan Smith (2015, p. 941) sum up effectively this rationale, "our normative argument, from an external reporting perspective, is that non-financial stakeholder groups that contribute significant resources to the corporation are as worthy of receiving reliable information (on a regular basis) that will help them to mitigate their risks (residual and otherwise) as are those stakeholder groups that supply financial capital to the firm."

In this perspective, sustainability reporting becomes an institutionalised practice contributing in building the necessary knowledge for voluntary risk-taking for all the actors involved in the value creation process. Hence, as Mitchell et al. (2015) put it, the problem of stakeholder inclusion/exclusion in accounting is one of knowing vs not knowing.

### **3. HISTORY OF NON-FINANCIAL REPORTING**

Social and political environment, as well as technological and natural changes have influenced the development of corporation's business and thus their external reporting. With the industrial revolution at the beginning of the 19th century, the concern of corporations on social responsibility of women's rights and social inequalities of employees which became the focus of corporate reporting. Carroll and Buchholtz (2012) states that this are the first examples of corporate social responsibility or non-financial reports across the Euro-



pean companies: German companies had to adjust their financial statements to the social reports (germ. Sozialbilanz), France introduced a law requiring the publication of social reports (fran. Budget social) of large corporations, in which it was necessary to describe the conditions of work and education of employees as well as the work safety policy. In the UK, the social audit movement known as Social audits has resulted with the first attempts of standardizing social reporting in order to make corporate social responsibility reports a useful tool which provides stakeholders a useful measurable indicator of corporate performance (Markota Vukić, 2016). It is possible to conclude that challenge of measuring non-financial performance of the company created a need to replace the traditional way of collecting data with a narrative reporting form. The environment issues and the first environmental reports appeared relevant to the company later in the 1990s with published articles about industrial pollution and connection to the natural disasters. Some countries realized that certain industries are excessively polluting the environment which followed by and legal regulations on environment protection in the Scandinavian countries, the United States, Australia, and Western European countries such as Germany, the UK and the Netherlands.

The expansion of the reporting domain of socially responsible reports to the environment resulted in the emergence of an environmental management system and the growth of standardization and regulation such as EMAS or ISO 14000 and AA1000 reports, resulting in a rise in the quality and quantity of published data in the company's reports (Schreck, 2013). Better quality data could be compared and used to track and evaluate corporate success in the area of social and environmental responsibility. The Earth Summit in Rio de Janeiro in 1992 launched the wave of detailed corporate reporting on environment issues. With the Rio+10 Summit on Sustainable Development in Johannesburg in 2002 decreased the number of company's environment reports and increases the number of sustainable development, corporate social responsibility and triple bottom line reports. The term triple bottom line was presented by the John Elkington (1998) which concept is to provide comprehensive information about business to all interested stakeholders. In the 2015 by adoption the Directive of non-financial reporting 2014/95/EU, in the most of the European countries the terminology of sustainable development, corporate social responsibility and triple bottom line reports began to refer to the concept of non-financial reporting.

According to the ACCA (2013) study, 92% of investors agree that financial and non-financial information should be integrated, what is becoming a new business trend as most of the non-financial information are disclosed together with the financial statements (Soderstrom, 2013).

The biggest challenge is measuring and gathering non-financial data across the business procedures and geographical prevalence. With today's technological improvements, software packages, and information and management control systems non-financial measures made their first entrance in the accounting systems through the popular Balanced Scorecard, firstly introduced by Kaplan and Norton (1996). According to Otley (2003) accounting systems do not disregard non-financial dimensions anymore.

#### **4. EU NON-FINANCIAL REPORTING DIRECTIVE AND RECOMMENDED REPORTING FRAMEWORKS**

In the resolutions from 2013, "Corporate Social Responsibility: accountable, transparent and responsible business behaviour and sustainable growth" and "Corporate Social Responsibility: promoting society's interests and a route to sustainable and inclusive recovery", the European Parliament called on the Commission to bring forward a legislative proposal on the disclosure of non-financial (or ESG) information. The main challenge was to take account of the multidimensional nature of corporate social responsibility (CSR) matched by a sufficient level of comparability to meet the needs of investors and other stakeholders as well as the need to provide consumers with easy access to information. Disclosure of ESG information, by presenting a legislative proposal was reiterated in the document "A renewed EU strategy 2011-2014 for Corporate Social Responsibility", which reached a political agreement on the Directive 2014/95/EU "The EU Non-financial reporting Directive" adopted in 2014.

##### **4.1. THE SCOPE AND THE CONTENT OF NON-FINANCIAL DISCLOSURE REQUIREMENTS**

The scope for non-financial disclosure is public-interest companies with an average number of employees in excess of 500, in the case of a group on a consolidated basis. This obligation to disclose a non-financial statement should apply to those public-interest entities which are parent undertakings of a large group.

In order to increase a further improvement to the transparency of company's non-financial information, according to the Non-financial reporting Directive the non-financial statement or the management report should contain information necessary for an understanding of the company's development, performance, position and impact of its activity, relating to, as a minimum, environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters, including (Directive 2014/95/EU): a brief description of the undertaking's business model; a description of the policies pursued

by the undertaking in relation to those matters, including due diligence processes implemented; the outcome of those policies; the principal risks related to those matters linked to the undertaking's operations including, where relevant and proportionate, its business relationships, products or services which are likely to cause adverse impacts in those areas, and how the undertaking manages those risks; non-financial key performance indicators relevant to the particular business.

Where the companies do not pursue policies in relation to one or more of those matters, the non-financial statement shall provide a clear and reasoned explanation for not doing so. Non-compliance with non-financial reporting policies should be explained in the report and market-sensitive information protection is permitted. Directive has allowed Member States to option that any information relating to developments or in negotiation to be omitted with the duly justified opinion of the members of the administrative, management and supervisory bodies (Directive 2014/95/EU).

#### 4.2. ASSURANCE OF THE NON-FINANCIAL STATEMENTS

Statutory auditors and audit firms should only check that the non-financial statement or the separate report has been provided. However, the Directive of non-financial reporting gave the option for Member States to require from the companies that the information included in the non-financial statement or in the separate report is verified by an independent assurance services provider.

#### 4.3. RECOMMENDED FRAMEWORKS FOR NON-FINANCIAL REPORTING

There is a wide range of recommended frameworks from which companies can choose a tool for non-financial report that are not legally binding, but provide necessary and helpful guidance while drafting a report. The non-financial reporting frameworks are initiatives which are jointly seeking to help the organization in non-financial reporting by ensuring legitimacy, clarity of standards, functionality, learning and engagement, clear communication and significance.

According to the Non-financial reporting Directive, in providing the non-financial information companies may rely on national frameworks, Union-based frameworks such as the Eco-Management and Audit Scheme (EMAS), or international frameworks. International frameworks for non-financial reporting are: the United Nations (UN) Global Compact, the Guiding Principles on Business and Human Rights implementing the UN "Protect, Respect and Remedy" Framework, the Organisation for Economic Co-operation and Development

(OECD) Guidelines for Multinational Enterprises, the International Organisation for Standardisation's ISO 26000, the International Labour Organisation's Tripartite Declaration of principles concerning multinational enterprises and social policy, the Global Reporting Initiative. If a reporting company relies on a specific framework (national, European or international), it must state it in its report.

Below in the chapter is a brief summary of the most common non-financial reporting initiatives, frameworks and systems for corporate social responsibility management.

#### **4.3.1. United Nations Global Compact (UNGC)**

The United Nations Global Compact is a voluntary and strategic initiative to encourage companies to align their business strategy with ten principles in the area of human rights, working conditions, ecology and anti-corruption based on the United Nations Declaration and Convention, including the Millennium Development Goals. The signatories of the UNGC are obliged to issue a progress report, and to the stakeholder's public announcement on progress in the implementation of ten principles. Violation or omission of promotion may result in company categorization in the one who does not communicate and eventually may lead to ejection (Markota Vukić, 2013). UNGC has a goal to help companies around the world to build a social and environmental framework that will support and secure the survival of open and free markets, while allowing all people to have Benefits from the new global economy.

#### **4.3.2. The Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises**

OECD Guidelines are recommendations from governments of member states and organizations and affiliated members of multinational corporations on responsible business conduct abroad and include business issues from ten areas. Guidelines propose socially responsible activities to multinational companies to improve the lives of each individual by addressing issues of employment, human rights, ecology, corruption, market competition, the publicity of data, technology and tax policy. OECD member governments and non-OECD member countries from all over the world encourage companies to respect these guidelines. The OECD Guidelines are not binding, but multinational corporations are expected to adhere them.

#### **4.3.3. ISO 26000**

ISO 26000 is a voluntary standard (guidelines) developed by the International Organization for Standardization (ISO) in order to provide a standard for socially responsible business. Companies are given definitions, guidelines and

guidelines which can be easily and effectively implemented in their business. This standard was created as a result of international co-operation between government representatives, non-governmental organizations, various industries, consumer groups and trade unions from all over the world. ISO 26000 standardizes 7 core areas: (1) Organizational Management, (2) Human Rights, (3) Working Conditions, (4) Ecology, (5) Fair Business Practice, (6) Consumer Issues, and (7) Participation and Development community. It applies not only to trading companies, but to all types of organizations, regardless of their activity, size and location, as well as governments, regardless of the degree of development of their country. This standard is often referred to in the Tripartite Declaration of the International Labor Organization, the OECD Guidelines for Multinational Enterprises and UN's Leading Principles on Entrepreneurship and Human Rights and its Global Compact Initiative.

#### **4.3.4. Global reporting initiative (GRI)**

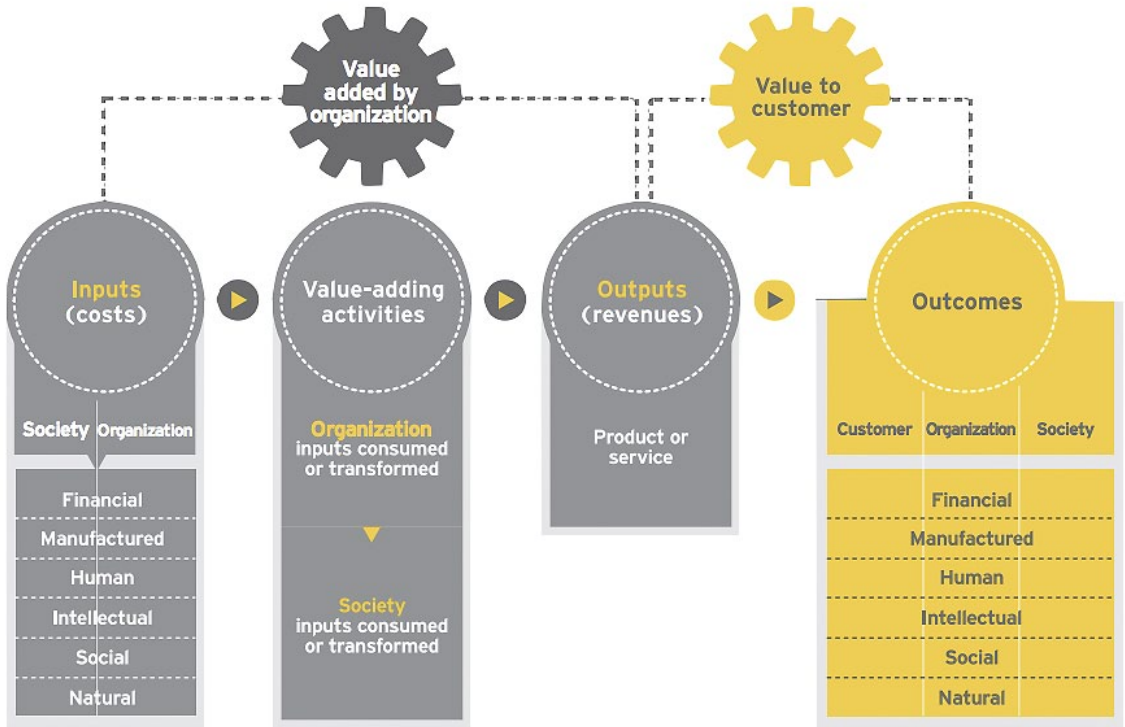
GRI is an independent international organization launched in 1997 by the Environmentally Responsible Coalition (CERES) and the UN Environmental Program (UNEP) with the mission to support companies to make decisions about the sustainable development of their business.

Current GRI Standards are the latest version of reporting framework published in October 2016 which is a result of comprehensive dialogue and collaboration with multiple stakeholders. GRI Standards are interconnected set of modules which organizations can apply for reporting on its material social, environmental and economic impacts. GRI frameworks give the highest importance to the identification and reporting of only material aspects of business operations which is identified through dialogue with key stakeholders. GRI Guidelines are currently the most comprehensive and influential framework of non-financial reporting.

#### **4.3.5. International Integrated Reporting Council (IIRC)**

Integrated reporting is a concept of creating an articulated and broader range of measures that contribute to long-term value and the role organizations play in society. According to the concept of integrated reporting helps businesses to integrate financial and non-financial business information in order to promote communication about value creation and its business model.

**Picture 1.:** Integrated reporting business model of interaction with internal and external capitals



Source: Ernst & Young Global Limited (2014), *Integrated reporting Elevating value*, adapted from IIRC, "Interaction of business model with internal and external capitals", March 2013, available at: [http://www.ey.com/Publication/vwLUAssets/EY-Integrated-reporting/\\$FILE/EY-Integrated-reporting.pdf](http://www.ey.com/Publication/vwLUAssets/EY-Integrated-reporting/$FILE/EY-Integrated-reporting.pdf) (date of access: 24.08.2017.)

The IIRC is developing the International <IR> Framework primarily focused to investors to make decisions about long-term investments. This framework enables business world to simplify communicating its value which creates over time. Integrated reporting is still in development, but more and more organizations decide to report on integrated way.

#### 4.3.6. The Sustainability Accounting Standards Board (SASB)

The SASB Foundation is an U.S. based organization with the purpose of establishing industry-based sustainability accounting standards for the recognition, disclosure and benchmark of material environmental, social and governance impacts by companies traded on U.S. exchanges. Its sustainability

accounting standards enable comparison of peer performance and within an industry, SASB is developing industry-specific sustainability standards that enable a company to characterize their performance with respect to the issue. (Carrots and Sticks, 2013)

## 5. CONCLUSION

With provisions of the EU Non-financial reporting Directive across the EU Member states the importance of business information on sustainability such as ESG data has been increased. In order to identify business risks and increase investor and consumer trust, disclosure of non-financial information is vital for managing change towards a sustainable global economy by combining social justice and environmental protection. In this context, disclosure of non-financial information helps the measuring, monitoring and managing business performance and as such the sustainability accounting.

The scope, content and assurance of the EU Non-financial reporting Directive is a significant step for development of the sustainability accounting. Also, it is promising that European Commission will monitor the implementation of the Non-financial reporting Directive and will produce a report on its implementation by 6 December 2018, which shall include possibility of drafting a reviewed legislative proposal.

It is possible to conclude that legislation and market trends are putting strong pressure on the development of the sustainability accounting, which is already a widely accepted trend in modern accounting practice.

## 6. REFERENCES

1. Ackoff, R. L. (1989). From data to wisdom. *Journal of Applied Systems Analysis*, Volume 16, pages 3–9.
2. Burchell, S., Clubb, C., Hopwood, A. G. & Hughes, A. (1997). The roles of accounting in organizations and society. *Accounting, Organizations & Society*, Volume 5, pages 5–27.
3. Carroll, A.B. & Buchholtz, A. K. (2012). *Business & Society: Ethics, Sustainability, and Stakeholder Management*, 8<sup>th</sup> edition. Cincinnati, OH: South-Western Cengage Learning
4. Carrots and Sticks (2013). Sustainability reporting policies worldwide - today's best practice, tomorrow's trends. Available at: <https://www.globalreporting.org/resourcelibrary/carrots-and-sticks.pdf> (date of access: 16.05.2017.)
5. Chapman, C. S., Cooper, D. J. & Miller, P. (2009). *Accounting, Organizations, and Institutions: Essays in Honour of Anthony Hopwood*. Oxford: Oxford University Press.
6. Checkland, P. & Scholes, J. (1990). *Soft Systems Methodology in Action*. Chichester: John Wiley & Sons.

7. Cooper, S. M. & Owen, D. L. (2007). Corporate social reporting and stakeholder accountability: the missing link. *Accounting, Organizations & Society*, Volume 32, pages 649–67.
8. Crane, A., Graham, C. & Himick, D. (2015). Financializing Stakeholder Claims. *Journal of Management Studies*, Volume 52(7), pages 878–906. Available at: <http://doi.org/10.1111/joms.12147>
9. Davenport, T. H. & Prusak, L. (1998). *Working Knowledge: How organizations Manage What They Know*. Cambridge, MA: Harvard Business School Press.
10. Davis, G. B. (1974). *Management Information Systems: Conceptual Foundations, Structure, and Development*. New York: McGraw-Hill.
11. 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, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0095> (date of access: 15.05.2017.)
12. Drucker, P. F. (1988). The coming of the new organization. *Harvard Business Review*, Volume 66, pages 45–53.
13. Elkington, J. (1998). *Cannibals with Forks: the Triple Bottom Line of 21st Century Business*, New Society Publishers, Gabriola Island, BC, Canada
14. Ernst & Young Global Limited (2014), *Integrated reporting Elevating value*, available at: [www.ey.com/Publication/vwLUAssets/EY-Integrated-reporting/\\$FILE/EY-Integrated-reporting.pdf](http://www.ey.com/Publication/vwLUAssets/EY-Integrated-reporting/$FILE/EY-Integrated-reporting.pdf) (date of access: 24.08.2017.)
15. Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L. & De Colle, S. (2010). *Stakeholder Theory: The State of the Art*. Cambridge: Cambridge University Press.
16. Goldberg, L. (1965). *An Inquiry into the Nature of Accounting - American Accounting Association Monograph No.7*. Menasha, WI: George Banta Company.
17. Governance & Accountability Institute (2017). Flash report, New York, Available at: <http://www.ga-institute.com/press-releases/article/flash-report-82-of-the-sp-500-companies-published-corporate-sustainability-reports-in-2016.html?type=123> (date of access: 20.05.2017.)
18. Hall, M., Millo, Y. & Barman, E. (2015). Who and What Really Counts? Stakeholder Prioritization and Accounting for Social Value. *Journal of Management Studies*, Volume 52(7), pages 907–934. <http://doi.org/10.1111/joms.12146>
19. Harrison, J. S., & van der Laan Smith, Joyce. (2015). Responsible accounting for stakeholders. *Journal of Management Studies*, Volume 52(7), pages 935–960
20. Kaplan, R. S. & Norton, D.P. (1996). Using the Balanced Scorecard as a Strategic Management System, *Harvard Business Review*, Volume January-February, pages 75–85.
21. Kolk, A. (2004). A decade of sustainability reporting: developments and significance. *International Journal of Environment and Sustainable Development*, Volume 3(1), pages 51–64.
22. KPMG (2015). *International Survey of Corporate Responsibility Reporting 2015*. Available at: <https://home.kpmg.com/content/dam/kpmg/pdf/2015/12/KPMG-survey-of-CR-reporting-2015.pdf> (date of access: 17.05.2017.)
23. Kuhlen, R. (1991). Information and pragmatic value-adding: Language games and information science. *Computers and the Humanities*, Volume 25, pages 93–101.
24. LeBlanc, B. (2012). Sustainability Rises On the CFO's "to-do" List. *Financial Executive*, 54-57.
25. Markota Vukić N., (2016). *Interaction between institutional frame and corporate social responsibility strategies*, doctoral thesis, University of Zagreb, Faculty of Economics and Business, Zagreb
26. Miller, P. & Power, M. (2013). Accounting, organizing, and economizing: connecting accounting research and organization theory. *Academy of Management Annals*, Volume 7, pages 557–605.
27. Mitchell, R. K., Van Buren, H. J., Greenwood, M. & Freeman, R. E. (2015). Stakeholder Inclusion and Accounting for Stakeholders. *Journal of Management Studies*, Volume 52(7), pages 851–877.



28. Nonaka, I. & Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. New York: Oxford University Press.
29. Otley, D. T. (2003). Management control and performance management: whence and whither? *British Accounting Review*, Volume 35(4), pages 309-326.
30. Phillips, R. (2003): Stakeholder legitimacy. *Business Ethics Quarterly*, Volume 13(1), pages 25-41.
31. Soderstrom N., (2013). Sustainability reporting: past, present, and trends for the future, *Insights*, Melbourne Business and Economics, Faculty of Business and Economics, Volume 13, pages 31 – 37
32. The Association of Chartered Certified Accountants (ACCA), (2013) What do investors expect from non-financial reporting?, available at: [www.accaglobal.com/content/dam/accaglobal/PDF-technical/sustainability-reporting/tech-tp-wdir.pdf](http://www.accaglobal.com/content/dam/accaglobal/PDF-technical/sustainability-reporting/tech-tp-wdir.pdf) (date of access: 15.05.2017.)
33. Tushman, M. L. & Nadler, D. A. (1978). Information Processing as an Integrating Concept in Organizational Design. *Academy of Management Review*, Volume 3, pages 613–24.
34. Zadek, S., Evans, R. & Pruzan, P. (2013). *Building Corporate Accountability: Emerging Practice in Social and Ethical Accounting and Auditing*. Abingdon: Earthscan.

## NEFINANCIJSKO IZVJEŠTAVANJE KAO NOVI TREND U RAČUNOVODSTVU ODRŽIVOG RAZVOJA

### SAŽETAK RADA:

Trend nefinancijskog izvještavanja će vjerojatno nastaviti rasti budući da korporativni udioničari zahtijevaju više informacija vezanih za učinke na okoliš, društvo i upravljanje. Stoga, razumijevanje važnosti računovodstva održivog razvoja igra važnu ulogu pri pružanju informacija koje trebaju biti pouzdanije i točne. Prema podacima Instituta za upravljanje i računovodstvo 82% *S&P 500 companies* objavile su izvješća o korporativnom održivom razvoju u 2016.

Dilema tvrtke više nije imati ili nemati nefinancijsko izvješće, nego zašto, kako i koje izvješće i koju opciju tvrtka treba odabrati kako bi zadovoljila potrebe udioničara i uskladila svoje propise s pravnim okvirom. Cilj ovog rada je dati pregled nefinancijskog izvještavanja i računovodstva održivog razvoja, uključujući i povijesni pregled. Na kraju rada daje se pregled novog Europskog pravnog okvira nefinancijskog izvještavanja.

***Ključne riječi:*** *nefinancijsko izvješće, povijest nefinancijskih izvješća, računovodstvo održivog razvoja, pravni propisi o nefinancijskom izvješćivanju Europske Unije.*

Scientific Review

UDK: 657.343

*Paper received: 14/08/2017*

*Paper Accepted: 30/08/2017*

## **INDIRECT METHODS IN ASSESSING ILLEGAL ORIGIN OF INCOME AND ASSETS**

***Branko Mayr, PhD***

*VŠR College of Accounting and Finance, Ljubljana, Slovenia*

*Institute of Forensic Investigation in Finance and Accounting, Ljubljana, Slovenia*

*branko.mayr@vsr.si*

### **ABSTRACT**

The most important activity of financial investigators is the investigation of assets of illegal origin. In order to avoid the mistakes regarding the assessment of assets of illegal origin, the investigators have to respect the professional rules. As the illegal origin asset is confiscated, it should be precisely identified.

**Keywords:** *assets, illegal origin, financial investigation, forensic accounting, taxation*

### **1. INTRODUCTION**

One of the problems of modern society includes greed, manifested by obtaining the assets of illegal origin. Countries are tackling this issue in different ways. Developed countries reached the agreement on preventing the acquisition of illegal assets. Tax legislations were harmonized in all important issues: assets, on which tax has not been paid, are taxed at specific tax rates; and legal basis for illegal assets confiscation was adopted. In Slovenia, assets of illegal origin are subject to additional taxation according to tax regulations, or are confiscated in compliance with illegal assets confiscation legislations. The difficulty can be found in the assessment of the scope of non-taxed assets and the scope of assets of illegal origin. Having shortage of documentary evidence, the indirect methods are used in the assessment of the scope of illegal origin assets. We address these methods in this chapter.

## 2. BACKGROUND

When assessing the assets of illegal origin and its amount, two types of assets should be differentiated: assets, which have not been subjected to tax, and assets of illegal origin. In the first example, origin of assets is legal, but assets have not been taxed at correct tax rate. In the second example, origin of assets is illegal.

Wealth taxation that was not subject to taxes is governed by Tax Procedure Code<sup>1</sup>, describing in its Article Nr. 68 the examples on how the tax bases are set in special cases, and in Article Nr. 68a the examples, when taxpayer has not declared their incomes.

Article Nr. 68: Examples on how the tax bases are set in special cases:

This holds true for cases when taxpayer does not file tax return or submit tax return to tax authority or submit them without data, necessary for setting the tax base, as for example: natural person files no tax return; tax authority finds out that tax return is based on false or inaccurate data; tax authority finds out that estimated revenues or revenues, presented in tax return, are not proportionate to estimated expenditures or expenditures, presented in tax return, unless taxpayer specifies adequate justification; taxpayer does not submit books and records on a request by tax authority, if they are materially false or show significant formal shortcomings that justify the doubt about their material accuracy; employer does not present the information on withholding tax on income from employments.

Article Nr. 68.a examples, when taxpayer has not declared their incomes:

*Such cases occur when taxpayer – natural person:* has funds for private use at disposal, including wealth that significantly exceeds the incomes presented in tax return, and tax authority receives different information on assets possessed by taxpayer – natural person, spending of taxpayer – natural person or information on acquired wealth of taxpayer – natural person

In such cases, the valuation of taxable amount is carried out. In this declaratory proceeding, the evidences are established, helping the tax authority to lay down the most relevant taxable amount. In terms of income tax liability, Financial Administration of the Republic of Slovenia considers disproportional expenditures of natural persons, including acquisition of wealth, as extremely risky. These occurrences are clear indicator that natural persons do not file and pay their tax income in accordance to their economic power. The goal of targeted control is to verify the accuracy of incomes, filed by natural persons, using different approach, e.g. indirect, by means of information on natural person's disposal of assets for private expenditures, including wealth. Such situation shows a significant loss for state

---

<sup>1</sup> Published in <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4703>; acquired: August 1, 2017.

budget on one side, while on the other side it indicates uneven load and treatment of taxpayers<sup>2</sup>.

If tax authority has information on part of income or part of expenses at their disposal, the most relevant taxable amount can be determined on the basis of legal information and data, obtained by tax authority during the declaratory proceeding, concerning the taxpayer, their family members and associated persons, eg. number of employees, wages and other work-related remunerations, income and expenses, purchases of goods and services, value of assets and other external signs of possession of the assets, production capacities or facilities and location of commercial and residential premises, number of tenants and period of renting.

Provided that tax authority does not possess these data, it can assess the tax base using the above information through other taxpayers, having performed the same or comparable economic activities or reached similar incomes in the same tax period and similar circumstances. In such case tax authority determines tax for tax period as established by act on taxation from assessed tax base. When taxpayer has not filed their incomes, tax is levied from tax base<sup>3</sup>, equal to the identified difference between assets value, deducted for obligations from assets acquisition, assets or absorption of assets, and incomes, from which tax has been levied and charged, or non-taxable incomes.

One or more calendar years are examined in the period of last ten years before the year when the procedure commenced. In assessing the tax base, proven claims of taxpayer are considered.

Important area of work for financial investigators is to determine the volume of assets of illegal origin due to its confiscation<sup>4</sup>. Assets can be confiscated to those who acquired it illegally, or was such assets transferred to them free of charge or for payment not corresponding the actual value, or they knew or should know that the acquired assets are of illegal origin.

Assets are treated as illegal if there is no proof that it is legally acquired. It is considered that the assets were not acquired from legal incomes or legally, when there is an imbalance between its volume and incomes, less taxes and contributions, paid during the period of assets acquisition. When assessing the imbalance, tax authority takes into account the value of all wealth in the possession of person, used and disposed by person or that has been used or transferred to related persons or blended with their assets or passed on their legal

---

<sup>2</sup> More: Prijava premoženja - Ciljno usmerjeni nadzori postopkov primerjave premoženja in odmere davka v teh primerih. Ljubljana, marec 2015; source: [http://www.fu.gov.si/fileadmin/Internet/Nadzor/Podrocja/Preiskave/Opis/Podrobnejsi\\_opis\\_1\\_izdaja\\_Prijava\\_premozenja.pdf](http://www.fu.gov.si/fileadmin/Internet/Nadzor/Podrocja/Preiskave/Opis/Podrobnejsi_opis_1_izdaja_Prijava_premozenja.pdf); acquired: August 1, 2017.

<sup>3</sup> From tax base, identified according to Article 69.a of Tax Procedure Code, 70% tax is calculated and paid, which is considered a final tax.

<sup>4</sup> Confiscation of Proceeds of Crime Act (ZOPNI); Published: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO6267>; acquired: August 1, 2017.

successors. The volume of illegal assets is assessed by financial investigation, initiated when pre-trial or trial phase gives rise to suspicion that particular persons have the assets of illegal origin, acquired in catalogue crime acts, and the total value of such assets exceeds 50.000 EUR.

This crime acts are: Specifically defined crime acts as terrorism, financing of terrorism, forcing into slave labour, trafficking in human beings, prostitution, displaying, creating, possessing and distribution of pornography material, production and distribution of harmful products for healing, production and distribution of harmful foodstuffs and other goods, unauthorized production and distribution of drug precursors, doping in sports and substances frequently used in the illicit manufacture of narcotic drugs, facilitating drug abuse or doping in sport, organizing pyramid schemes and prohibited gambling, economic offences, which are punishable by imprisonment of three or more years, bribe taking, trading in influence, criminal organization, manufacture and acquisition of weapons or explosives, other offence, committed in criminal organization, or other intentional offence, which are punishable by imprisonment of five or more years, if it can be the source of assets of illegal origin (eg. tax related crime).

Republic Slovenia as applicant sues the defendants<sup>5</sup> in order to confiscate the illegal assets. Civil proceeding is independent from criminal proceeding, meaning that defendant can be acquitted of the charges in the criminal proceeding, while in the civil proceeding the defendant can be confiscated the illegal assets. Even if the court in civil proceeding identifies lower volume of illegal assets, required to initiate the investigation (50.000 EUR), civil proceeding continues. Following the court's decision, the illegally acquired assets are confiscated and become the assets of Republic of Slovenia. In taxation procedure, the procedural characteristic of taxation procedure should be considered, which differ from the illegal assets according to ZOPNI.

Financial investigation procedure is carried out by the Public Prosecutor's Office of the Republic of Slovenia, having jurisdiction in pre-trial or trial proceeding for a (catalogue) criminal offence, cooperating with competent public prosecutor, who initiates financial investigation. Request for investigation with detailed reasonable grounds for suspecting can be delivered by police, Financial Administration of the Republic of Slovenia, Commission for the Prevention of Corruption or Office for Money Laundering Prevention of Republic of Slovenia. Public prosecutor identifies the person against whom the investigation is carried out, and period for which it is carried out. Financial investigation can be carried out for the period not exceeding five years before the year of

---

<sup>5</sup> Persons, possessing illegal assets (not necessarily acquired by themselves through commission of an offence, they could be heirs, beneficiaries, etc).

commencing the alleged offence, and until the action is brought. The goal of financial investigation is to collect the evidences and data, necessary for decision on:

- freezing and sequestration of illegal assets,
- and/or opening the proceeding against which persons the confiscation proceeding should be initiated.

Financial investigation collects:

- data on volume of wealth of person concerned and the ratio between income less tax and contributions paid, and value of wealth in possession, usage or disposal in the period for which the investigation is carried out;
- data on volume of wealth set out in the previous indent, which was transferred to related persons or passed on to their legal successors in the period for which the financial investigation is carried out, and how it was transferred;
- other data, which may be relevant for proceeding, or when the circumstances of the case suggest that such data would help determine the source, volume and transfer of the wealth.

Financial investigation can also include legal measurements under the terms of the criminal proceeding, which are permitted for obtaining the data and evidences to secure the claim for confiscation of the proceeds of crime. Financial investigative team is lead by competent public prosecutor and is composed of representatives of Police, Financial Administration of the Republic of Slovenia, State Attorney's Office of the Republic of Slovenia, Office for Money Laundering Prevention of Republic of Slovenia, Securities Market Agency, Slovenian Competition Protection Agency or Court of Auditors in line with the proposal of competent public prosecutor. After financial investigation is completed, team leader prepares a report and hands it over to the head of competent public prosecutor office and to the head of Specialised State Prosecutor Office of the Republic of Slovenia, together with all the collected data. The report should include precise data and collected evidences about assets, for which it is suspected to be of illegal origin, about transfers of such assets to related persons and their assets, as well as about grounds for possible freezing or sequestration of assets of illegal origin. Financial investigation can last for a maximum period of one year, though it can be extended for no more than six months for objective reasons. Before the introduction of the action before the court, the competent public prosecutor invites the person under investigation to the prosecutor's office, which initiated financial investigation, and makes all the collected data from financial investigation available for inspection. Person under investigation has the right to make a statement regarding collected data

and submit the evidences. Burdens of proof rules are specific. The applicant in the civil procedure states facts and suggests evidences, showing the suspicion for illegal origin of property owned by person under investigation. Person under investigation can rebut it with proving that the property are not illegal or that the actual value was paid for these property. If the court in its judgement upholds the applicant's claims, property of illegal origin are confiscated from the owner. The applicant is allowed to change the claim until the end of the trial without the consent of defendant, requesting for sequestration of property that correspond to the value of illegal property or ordering the defendant to pay the amount that corresponds to the value of illegal property, if new circumstances after the action was brought made the confiscation impossible.

### **3. INDIRECT METHODS OF ASSESSING THE VOLUME OF ILLEGALLY ACQUIRED PROPERTY**

How to determine the most relevant volume of property of illegal origin? The answer is the professional challenge that the investigators deal with. Besides the professional rules in investigation the needs of civil procedure should also be considered, where parties have a right to be treated fairly, including the requirement for equitable treatment (equality of arms) and balanced positions of parties. This is also apparent from the judgement VSL0084480 of the Court of Appeal, Ljubljana, which decided<sup>6</sup>:

*»The aim of freezing the assets of illegal origin is to avoid that this assets would not be possible to be confiscated after the civil proceeding. As it is an interference with the rights to private property, court has to perform strict proportionality test and allow freezing only to the extent that enables efficient confiscation of illegal assets or prevent illegal enrichment. It should consider that substantive scope of freezing should only cover the assets that are equivalent to alleged assets of illegal origin. In the objection procedure phase, court should also consider defendant's difficult situation, who can rebut the presumption from Article 5 of ZOPNI regarding burdens of proof, as referred in Article 27 of quoted law, only if they prove that assets are not of illegal origin. It is difficult procedural position for defendant, who has to give reasons and submit evidence for assets, acquired over past several years. Freezing manner is adequate and necessary in order to avoid the real risk of subsequent enforcement of confiscation of illegal assets, action should be proportional and cover only the volume of assets that correspond to the estimated volume of illegal assets«.*

If this is not considered, there is a risk of generating procedures due to procedure itself. Nevertheless, the objectiveness of such investigation is called

<sup>6</sup> Source: <http://www.sodnapraksa.si/?q=id:2015081111397526&database%5BSOVS%5D=SOVS&database%5BIESP%5D=IESP&database%5BVD> acquired: August 1, 2017.



into question as well. Assessment of volume of illegally acquired assets is technically demanding and responsible task. Investigator has to consider the professional guidelines for investigation that, among others, require respect to the case-law of the courts, which considers adequate standard of proof and difficult position of defendant in assuring quality material evidence.

Observance of standard of proof in investigation is required by professional guidelines for financial investigation. Burdens of proof are defendant's issue. Investigators have to test the defendant's claims, and this is also required by ACFE methodological guidelines. Investigators should consider standard of proof, which will be used by court in court proceeding. In profession, standard of proof »possible« is used.

Some grounds for application of standard of proof »possible«:

- Application of »possible« standard is scientifically justified with complexity of obtaining the evidence on asset origin over past several years, from period when ZOPNI has not yet entered into force, for period when it was not required to store evidence (persons under investigation normally do not keep various documents from everyday activities) etc. Method of evidence assessment and usage of burdens of proof have to be evident from the report (reproducibility and transparency).
- Application of »possible« standard of proof also derives from explanation of Constitutional Court's decision No. U-I-91/15-2.
- Expert resources state that the court confiscate the assets when defendant is not able to convince the court with a degree of possibility, that the property has legal origin.
- Degree of possibility is also determined by professional guidelines for bookkeeping, where »more likely than not« presents more than 50% possibility.
- Standard of proof "possible" for identification of illegal assets is likewise used in other EU members (e.g. Great Britain)

This implies that investigator in their financial report considers sections, which indicate the possibility (more likely than not).

Investigators are generally linked to documentary basis. However, they might not have them or the documents lack in substance. The indirect methods<sup>7</sup> help them to overcome these shortcomings. Indirect methods aim to determine the possibility of existence of illegal assets especially when defend-

---

<sup>7</sup> OECD : Strengthening Tax Audit Capabilities: Innovative Approaches to Improve the Efficiency and Effectiveness of Indirect Income Measurement Methods; Forum on Tax Administration's Compliance Sub-group; CENTRE FOR TAX POLICY AND ADMINISTRATION; October 6, 2006. Source: [www.oecd.org/tax/administration/37590009.pdf](http://www.oecd.org/tax/administration/37590009.pdf); acquired: August 1, 2017.

ant does not possess the evidence for existence of income. Indirect methods comprehend collection of indirect proofs about income, which can be carried out based on:

- cash T account method,
- bank deposits method,
- net worth method,
- source and application of funds method.

These methods are used merely in taxation procedures, but are useful also in the process of identification of illegal assets, considering requested particularities in assessing the volume of illegal assets.

OECD strategy for strengthening tax audit mentions the following indirect methods:

- Source and Application of Funds Method, which with calculation of the amount of unknown income represents the taxable income;
- Bank deposits and cash expenditure methods is based on theory that if taxpayer receives money, it has two options: either they deposit or spend it;
- Mark up method reconstructs the income and is based on percentages of difference, added to gross income of taxpayer;
- Unit and volume method, where gross remunerations can be determined or remunerations are determined by comparison to a comparable taxpayer;
- Net worth method is based on theory of taxpayer's financial past reconstruction.

Indirect methods are used in case of reasonable grounds for imbalance between receipts and expenditures. If the existence of imbalance between receipts and expenditures (more expenditures than receipts) is identified, it is suspected that origin of assets might be illegal. Publicly accessed data and data which investigating bodies have on their disposal are used for the investigation purposes.

Most often used is Net worth method, which is the method of detection of undeclared income and includes comparison of net value of income of person under investigation at the beginning and at the end of monitored period.

For tax purposes, terminology of tax regulations (income, expenses, etc) are in use. However, the focus during investigation of volume of illegal assets lies on receipts and payments as defined by financial-accounting professionals (monitoring of the cash-flow).

The above mentioned methods are used in many countries. Most often used is Net worth method, which is based on theory of taxpayer's financial past reconstruction.

Elements of reconstructions:

- initial balance of net assets (ZNP)
- receipts during investigation period (P)
- expenditures for living during investigation period (Ž)
- end balance of net assets (KNP)

Applies:

$$ZNP+P-\check{Z}=KNP$$

When KNP is sufficiently higher than expected, imbalance exists (suspicion of existence of illegally acquired assets)

Investigators are facing several challenges when identifying individual categories. Challenges include:

- Often are, under pressure of investigation for tax purposes, referred to incomes and expenses (items included in the tax base). This is not a problem until specificities of tax items (e.g. non-monetary items that influence tax base) are also included in the financial investigation of imbalances during identifying illegal assets.
- During investigation of illegal assets it is merely focused on cash inflows and cash outflows, which are items of cash-flow statement.
- When non-monetary items influence volume of assets, they need to be identified and their influence on volume of illegal assets explained.
- One of the hardest tasks for investigator is monitoring of the cash-flow from the source to consumption. Receipts are proved by different forms of legal receipts (salaries, capital gains and other taxable receipts and non-taxable receipts). When receipts are part of tax returns, proving is easy, as they are based on official data of financial agency. When receipts are non-taxable, the grounds are often incomplete. It is mostly based on evidences of person under investigation. Such evidences are various documentary basis of bodies liable to payments, loan contracts, donation agreements, as well as statement of the person under investigation, often testified by witnesses. Professional guidelines request that all statements and evidences by persons under investigation are treated the same as other documentary basis.
- Common simplification is to monitor the cash-flow only on transaction accounts. Data from transaction accounts are generally accessible. It is necessary to be careful; as the content is often unreliable (e.g. code of payment is often stated as OTHR – others, which does not correspond to actual purpose).

- Particular problem are cash withdrawals and deposits on transaction accounts (it is possible to withdraw cash first and then deposit the unused amount of the cash again on transaction account). In some cases, the entire withdrawal is treated as spending, and redeposit as unidentified source of assets. Definitions were not explained and did not enable reconstruction. The result is duplication, which is the result of technical error. Such a mistake in investigation is later hard to reverse.
- Investigators have to be aware that in the period under investigation, cash management was not forbidden, as well as supplying documentary basis for transactions was not prescribed or usual. This especially holds true for smaller amounts. In practice we observed cases when investigators requested documentary evidence for insignificant transactions that occurred several years ago. Persons under investigation did not submit the proof (e.g. proof of exchange of trifling sum of SIT into foreign currency was requested), but they made a statement which was objected, and it was not even professionally addressed in accordance with standard of proof, used by court. There are many such cases and they do no one any honour.
- Specific challenge is identification of amount, spent by person under investigation for their living. There is no single answer. Lifestyle, habits etc. of person under investigation is analysed. Such analysis is sensitive and is generally based on comparison to comparable persons. Data should be adapted and should consider the differences in habits and lifestyle of persons under investigation and comparable subjects. Analysis is often referred to presumptions, which have to be specified, and their implementation clarified. Regardless the effort put in the analysis, the risk of arbitrariness exists. This risk is lessened by person under investigation, who is invited to comment and clarify the findings of financial investigation, to submit evidence, etc.
- Considering the data of person under investigation, investigators are often in state when they defend their investigative assumptions. Special attention should be paid to avoid being misled by this position. The mission of investigators is to reach as objective assessment of actual situation as possible and not to defend their opinions, beliefs, hypothesis... When addressing the statements of person under investigation, the standard of proof, used by court, should be consistently in use. Each definition has to be clarified and justified.
- Importance of technically correct treatment of person's statement is emphasised in many expert resources. It is best to consider the case-law, emphasising that in selecting the method, such method should be chosen which would provide the result that can be proven by standard of consid-

erable certainty. Courts also underline that cooperation of taxpayer (and this should be extended to person under investigation) is very important and that it is necessary to consider the statements of taxpayer in the procedure at the discretion of investigating body.

- Assets<sup>8</sup> are evaluated by its value at the time of acquisition and not by current market value.
- Assets at the beginning and at the end of investigated period are composed of all assets of person under investigation: real-estate, movable property, successions and presents, cars, vessels, motorbikes, dividends from shares, bonds, jewellery, furniture, funds (cash and balance on transaction accounts)<sup>9</sup> etc. On the other hand, there are liabilities like loans, credit card debts, taxes from taxable income, etc. Liabilities are deducted from value of assets. The result is net asset value.

Applicant in legal proceeding provides facts and proposes evidences, which give presumption of illegal origin of assets of defendant. This however does not imply that the investigator does not need to propose evidence or that it is no need for expertise investigation statements and findings. On the contrary, statements should be clarified very carefully and provide robustness of the procedure of illegal property volume assessment.

In the case when illegal assets were transferred to related person, applicant in legal proceeding provides facts and proposes evidence, showing that transfer was carried out free of charge or for payment not corresponding the true value; in case of closer related person or closer family member, they present facts and evidences that show a presumption of the existence of free of charge transfer. Defendant can object it if they provide proofs that assets are not illegally acquired or that the actual value was paid for the assets.

Illegally acquired assets are generally confiscated. In that part of identification of illegally acquired assets, which is confiscated, it should be based on Constitutional Court of the Republic of Slovenia's view Nr. U-I-91/15-24, which states:

---

<sup>8</sup> Assets are property and rights, which can be subject to enforcement, especially real-estate, movable property, financial assets and all other assets that have monetary value, as well as property which directly or indirectly stems from such property, in which it was modified or with which it was mixed.

Financial assets are monetary funds, claims, debt securities, shares, capital shares, other investments in legal entities and other financial instruments.

<sup>9</sup> It is important to take into account all the assets and liabilities, not only the transaction accounts (in period under investigation the cash management was technically undisputed, but in some cases money was exchanged into foreign currency due to distrust in local currency).

»Decision referred to previous paragraph of the operative part shall be implemented in the way that when asset is the sum of legally and illegally acquired assets, such asset is confiscated entirely, if defendant mixed it in order to exercise illegal activities or conceal the illegal source of assets, while the share of illegally acquired assets is not insignificant. If blending of the assets was not done with such intention and when a share of illegal assets is insignificant, the ideal share of this asset is confiscated and then established the joint ownership between state in the share, corresponding to blended illegal assets, and defendant in the share, corresponding their recorded legal investment in asset addressed. It is assumed that mixture was carried out in order to exercise illegal activities or conceal the illegal source of assets. Defendant objects the hypothesis, if they credibly demonstrate that there was no such intention in blending. «

It is clear from submissions of Constitutional Court that it is necessary to establish precise share of illegal assets in financing particular asset<sup>10</sup>. Values shall be determined in accordance with professional rules, following International Valuation Standards.

#### 4. CONCLUSION

Article identifies means of determining assets of illegal origin. The expertise particularly stresses the Net worth method. Its usage requires the consideration of the content of applied economic categories. The usage of income instead of receipt can significantly influence the outcome of investigation. The article also stresses the importance of due diligence of person under investigation and compliance with standard of proof, respected by court. Some cases show that investigators still have plenty of room to improve their skills. Special attention should be dedicated to prevention of the arbitrariness.

#### 5. LITERATURE:

1. *Fraud examiners manual*. (2014). Austin, Texas: Association of Certified Fraud Examiners.
2. OECD (2006): *Strengthening Tax Audit Capabilities*: Innovative approaches to improve the efficiency and effectiveness of indirect income measurement methods. Source: [www.oecd.org/tax/administration/37590009.pdf](http://www.oecd.org/tax/administration/37590009.pdf) [Accessed August 1, 2017].
3. *Prijava premoženja - Ciljno usmerjeni nadzori postopkov primerjave premoženja in odmere davka v teh primerih*. Ljubljana, marec 2015. Source: [http://www.fu.gov.si/fileadmin/Internet/Nadzor/Podrocja/Preiskave/Opis/Podrobnejši\\_opis\\_1.izdaja\\_Prijava\\_premozenja.pdf](http://www.fu.gov.si/fileadmin/Internet/Nadzor/Podrocja/Preiskave/Opis/Podrobnejši_opis_1.izdaja_Prijava_premozenja.pdf) [Accessed August 1, 2017].

---

<sup>10</sup> In some cases the investigators do not follow this guideline, but the identified sum of illegal asset is simply spread over assets at the end of investigation. This proved to be wrong. It is necessary to be precise when monitoring cash-flow and attribute to such asset only so much property (money) of illegal origin as it was spent for acquisition. This is particularly sensitive in capital injections, where, besides invested assets, value is created by other factors as well.

4. *Sodba VSL0084480*; 28.06.2016; Republika Slovenija, Višje sodišče v Ljubljani, z 28.06.2016. Source: <http://www.sodnapraksa.si/?q=id:2015081111397526&database%5BSOVS%5D=SOVS&database%5BIESP%5D=IESP&database%5BVD> [Accessed August 1, 2017].
5. Wells, J. T. (2011): *Fraud Fighter*. Hoboken, N. J.: John Wiley & Sons.
6. *Zakon o davčnem postopku (ZDavP-2)*. Source <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4703> [Accessed August 1, 2017].
7. *Zakon o odvzemu premoženja nezakonitega izvora (ZOPNI)*. Source: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO6267> [Accessed August 1, 2017].

## **INDIREKTNE METODE PROCJENE ILEGALNOG PORIJEKLA PRIHODA I IMOVINE**

### **SAŽETAK RADA:**

Najvažnija aktivnost financijskih inspektora je istražiti imovinu ilegalnog porijekla. Kako bi se izbjegle pogreške prilikom procjene imovine ilegalnog porijekla financijski inspektori moraju poštovati profesionalna pravila. Budući da se imovina ilegalnog porijekla plijeni, ona se mora točno odrediti.

***Ključne riječi:** imovina, ilegalno porijeklo, financijska inspekcija, forenzično računovodstvo, oporezivanje.*



Professional Paper  
UDK: 658.155

*Paper received: 11/07/2017*

*Paper Accepted: 29/08/2017*

# **TEACHING BUSINESS ENGLISH AT RRIF COLLEGE OF FINANCIAL MANAGEMENT IN ZAGREB, REPUBLIC OF CROATIA**

*Dubravka Paris, MA,*

*RRiF College of Financial Management, Zagreb, Croatia*

*dubavka@rrif.hr*

## **ABSTRACT**

The knowledge of the English language has become an inseparable part of one's education today. The English language is a universal language of understanding among most people in the world. The article explains the differences between the terms General English and Business English and stresses the importance of learning Business English in today's globalized business world, where it is used by most people when they *do business*. The article presents the 10-year-experience of teaching Business English at the RRiF College of Financial Management, comprising the syllabus, the students' questionnaire, the topics, the levels of students' knowledge of English at the beginning and at the end of their study and the corresponding teaching methods. It also stresses the motivation as one of the leading factors of learning Business English, including the students' interests in the course and the problems encountered in teaching Business English.

**Key words:** *RRiF College of Financial Management, Business English, teaching methods, syllabus, students, motivation.*

## **1. INTRODUCTION**

The knowledge of a foreign language in today's globalized world is certainly very important. English has become *lingua franca* and has to a certain extent suppressed the use of other languages. Most of the business activities are

performed in English and this is one of the main reasons why the knowledge of Business English has become essential. All the higher institutions offering study programmes in economics have therefore introduced Business English as the obligatory course. Accordingly, the syllabus should be adapted to all the students' needs, comprising not only teaching of new vocabulary, new expressions and some typical business idioms, but also a lot of cultural differences which students should become aware of. The Business English teacher is therefore faced with a lot of challenges. One of the most important tasks of the teacher is to use the appropriate teaching materials. The world of business is constantly changing, and the teacher should always be acquainted with these changes and update teaching materials. However, the primary objectives of the course should always be taken into consideration.

### 1.1. DIFFERENCE BETWEEN GENERAL ENGLISH AND BUSINESS ENGLISH

A large number of students do not actually know the difference between the terms General English and Business English. They are rarely aware of the fact that their ability to communicate in English in some everyday situation does not mean that they will be equally successful in the communication in the business world. Business English does not only comprise the differences in vocabulary and phraseology, it comprises a wide range of issues, such as business etiquette, business correspondence, reading and understanding of professional and scholar articles, listening and comprehension of communication in English by native speakers and foreign speakers with a wide variety of accents, as well as development of critical thinking in the English language.

Teaching Business English does not mean teaching a new foreign language but teaching English in the professional and business context. The skills to be mastered are in most cases the skills which are important in one's mother tongue, as well. The emphasis is actually on good communication skills, which should in most cases be acquired in a very short time.

## **2. EXPERIENCE OF BUSINESS ENGLISH TEACHING AT RRIF COLLEGE OF FINANCIAL MANAGEMENT**

Due to the fact that there is a rising number of companies which operate on the global level, the need to know Business English is also growing. Accordingly, the courses in Business English have become obligatory at every higher education institution which offers study programmes in economics. Besides, a large number of working people enrol into courses of Business English at various foreign language schools or their companies organize such courses within the organization.

The RRiF College of Financial Management offers study programmes for full time and part time (working) students. Although, both have the same need to master Business English, their environment is different. Full time students are usually younger people who have just finished their secondary education and have been learning English for more than ten years. Most of them do not have significant problems in everyday communication, since they have continuously been in contact with the English language. However, they do have problems with understanding the concept of business, since they do not have any working experience. Therefore, one of the important goals in teaching full time students is to try to make them understand *how to do business* through Business English.

Part time (working) students are usually in their thirties, which means that most of them completed their secondary education ten years ago. In the period of ten years just a few of them used the English language (possibly, only in everyday communication), and even less at work. Accordingly, they have to *recover* their knowledge of English at first, find the *courage* to speak without being afraid of making mistakes and to acquire the basic grammar rules again. There is a certain number of them who use English at their work and are fluent in English. Since most part time students have knowledge and skills in the business area, learning Business English should reflect their understanding of business practice and business reality. Therefore, one of the important goals in teaching part time students is to try to *make* them *do business* using Business English.

## 2.1. BUSINESS ENGLISH SYLLABUS

The RRiF College of Financial Management offers courses in Business English in all the three years of the undergraduate study programme in accounting and finance. The topics of the Business English courses should be adjusted to the business events which the students can encounter in their working environment. In the first two years the courses on Business English comprise various business topics, such as companies (legal types, alliances), management, business strategy, salaries, development of companies, marketing and advertising, outsourcing, accounting and finance, recruitment, communication, project management, information technology, markets, law, branding, competitiveness, banking, consulting. In the third academic year the course is focused strictly on accounting topics: basic accounting terms, jobs in accounting, CPA, financial statements (profit and loss account, cash flow statement, balance sheet, ratio analysis), types of taxes, depreciation, auditing, management accounting and investment. Since most students will or already work as accountants they should be able to use the specific accounting vocabulary at their work.

In the academic year of 2016/17 a questionnaire was conducted among the second and third-year students of the undergraduate programme of accounting and finances regarding Business English Teaching/Learning with the aim of obtaining their opinion on the course and thus improve the lectures.

**The question: What is your opinion about the students' book (Trappe/Tullis: Intelligent Business – Intermediate, Pearson Longman and Trappe/Tullis: Intelligent Business –Upper Intermediate, Pearson Longman) you use in the courses Business English?**

**The most common responses:**

- *'I like the book because it has the topics in the fields of economics and my profession.'*
- *'... interesting, good, the texts are not too difficult to comprehend, appropriate for my future profession. "*
- *'I like the book because it offers many discussion points, dialogues and interaction.'*
- *'The book should have more grammar exercises.'*
- *'The book should have more vocabulary exercises.'*
- *'The texts are intelligent, interesting, educative, but too difficult for some students.'*
- *'Although the texts are several years old, they are still up-to-date.'*
- *'You can learn many technical words and expressions from the texts.'*
- *'It is rather difficult to learn from such professional articles.'*

The sample responses have shown that most of the students are satisfied with the coursebook. The texts are the articles from the magazine *The Economist* and therefore may be challenging for some of them. Most students' responses are focused on the texts, although the coursebook offers a wide variety of topics for mastering reading, speaking, listening and writing skills.

The students were also asked to state their perception of a good coursebook for Business English.

**The question: How do you imagine a good coursebook for Business English?**

**The most common responses:**

- *'It should have more grammar exercises than the one we use.'*
- *'It should have more examples of dialogues and corresponding exercises.'*
- *'It should present more business meetings.'*
- *'It should have more topics from accountancy profession.'*

- *'It should have more interesting vocabulary exercises.'*
- *'No, idea. The coursebook we use is very good.'*
- *'More vocabulary exercises, less grammar exercises.'*
- *'Everyday situations which would provide more motivation to speak. I don't use English at work and can practice it only during the lectures.'*
- *'It should contain instructions on business correspondence.'*
- *'The texts should be more interesting than those we deal with'*
- *'Grammar should be explained in a better way.'*

The obtained responses certainly represent a great challenge to the teacher when selecting the appropriate coursebook. There is a wide selection of coursebooks for Business English on the market. The best insight into the teaching outcomes is obtained after using the same book for at least two to three years. The students are also different every academic year, their interests and expectations change constantly. Again, the teacher is the one who should adapt to the students' requirements and needs regardless of the coursebook which is used in the particular year.

## 2.2. COMMON EUROPEAN FRAMEWORK OF REFERENCE FOR LANGUAGES

According to the Common European Framework of Reference for Languages the learners of a foreign language are divided into three divisions, each of them comprising two levels. The Table below presents a simplified version of the levels indicating what a learner is supposed to be able to do in reading, listening, speaking and writing.

**Table 1.** Common European Framework of Reference for Languages

Level group	Level group name	Level	Level name	Description
A	Basic user	A1	Break-through or beginner	<ul style="list-style-type: none"> <li>• Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type.</li> <li>• Can introduce themselves and others and can ask and answer questions about personal details such as where he/she lives, people they know and things they have.</li> <li>• Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.</li> </ul>
		A2	Waystage or elementary	<ul style="list-style-type: none"> <li>• Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment).</li> <li>• Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters.</li> <li>• Can describe in simple terms aspects of their background, immediate environment and matters in areas of immediate need.</li> </ul>
B	Independent user	B1	Threshold or intermediate	<ul style="list-style-type: none"> <li>• Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc.</li> <li>• Can deal with most situations likely to arise while travelling in an area where the language is spoken.</li> <li>• Can produce simple connected text on topics that are familiar or of personal interest.</li> <li>• Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.</li> </ul>
		B2	Vantage or upper intermediate	<ul style="list-style-type: none"> <li>• Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in their field of specialization.</li> <li>• Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party.</li> <li>• Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.</li> </ul>

Level group	Level group name	Level	Level name	Description
C	Proficient user	C1	<b>Effective operational proficiency or advanced</b>	<ul style="list-style-type: none"> <li>• Can understand a wide range of demanding, longer clauses, and recognize implicit meaning.</li> <li>• Can express ideas fluently and spontaneously without much obvious searching for expressions.</li> <li>• Can use language flexibly and effectively for social, academic and professional purposes.</li> <li>• Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices.</li> </ul>
		C2	<b>Mastery or proficiency</b>	<ul style="list-style-type: none"> <li>• Can understand with ease virtually everything heard or read.</li> <li>• Can summarize information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation.</li> <li>• Can express themselves spontaneously, very fluently and precisely, differentiating finer shades of meaning even in the most complex situations.</li> </ul>

Source: Common European Framework of Reference for Languages (<https://www.coe.int/en/web/common-european-framework-reference-languages>)

Most of the students enrolled at the RRiF College of Financial Management are between the level B1 and B2, which often leads to a number of problems during the lectures. While some of them have problems with reading and understanding the text, the other ones are fluent in speaking and would like to use their knowledge in discussions and presentations, rather than analysing and explaining the new vocabulary. Unfortunately, this is usually the case when the groups are formed according to the academic year they have enrolled, not according to the level of their knowledge of English. The classes are often relatively large, with learners with widely disparate language levels and skills. Some students feel that learning English is not as high priority as other courses. They usually do not know how exactly they will be using their English in future and therefore is it difficult to focus on specific target needs.

### 3. CHALLENGES OF TEACHING BUSINESS ENGLISH

When an English teacher is faced with the fact that he/she has to teach Business English, a number of questions usually arise: "What should I teach them?", "What should be the content of the syllabus?", "What do they already know?" and various other questions, which can only be properly answered by the forthcoming years of experience in teaching Business English. In most other fields the teacher usually knows more about the subject than the learner, but in the case of business, this is mostly not the case. The teacher knows more

about the language and communication, but the learner often knows more about the job and the content. Accordingly, the teacher should adapt to a particular teaching context and be willing to learn a lot and thus help the learners to develop their English skills in a business context.

At the beginning of the course it is important to try to find out what the students want to achieve. The usual responses are to be skilful in telephone conversation, to speak fluently at presentations, to write more coherent emails, to behave *businesslike* and many other issues. After a few years of teaching Business English it turned out that, besides these general topics in Business English, the students at the RRiF College of Financial Management should learn the specific terms and expressions in the field of Accounting and Finance. Accordingly, the course Business English V taught in the third academic year is focused on these topics. Since many students work as accountants, they find this course very useful because they can immediately apply the knowledge of the new vocabulary at their work. The problem is terminology. In many cases there are terms which are not used in accounting in Croatia, which then requires additional explanations and discussions. The reasons to this are various – different regulations, different legislation and different ways of translating the same term into English and Croatian. The students then become aware that it is not always possible to directly translate a specific word either into English or Croatian.

### 3.1. MOTIVATION

One of the most important factors in learning a foreign language is motivation. Basically, there are two types of motivation: intrinsic and extrinsic.

Intrinsic motivation supports us to act in order to satisfy our physical and psychological needs, such as the need for socialising, the need for self-determination, the need to achieve a certain goal. In such a case, an individual learns in order to obtain new knowledge, to enjoy and does not expect any material rewards. Such a type of motivation enables faster acquisition of knowledge, which is easier to remember.

Extrinsic motivation encourages us to act under the influence of external factors, such as events, working conditions, working environment, culture, rewarding. The latter plays an important role in this type of motivation. However, an individual in such a case often learns superficially, achieves unsatisfactory goals, which results in the decrease of extrinsic motivation.

It is important to know which of the above types of motivation is prevailing among the students, in order to adapt the syllabus and the teaching methods to them and eventually turn the extrinsic motivation into the intrinsic motivation.



Below are some students' responses given in the questionnaire regarding motivation.

**Question: What motivates you to learn Business English?**

**Common responses:**

- *'One of the requirements when looking for a job is the knowledge of English.'*
- *'I can manage better in the world of business if I speak English.'*
- *'I can get a job in a foreign company, if I speak English.'*
- *'You can't do anything, if you don't speak English...'*
- *'If don't speak English, we cannot achieve our goals, especially those outside the Republic of Croatia.'*
- *'The knowledge of English is important in the private and business life.'*
- *'The knowledge of English has become a part of common knowledge.'*
- *'I learn English because I like it.'*
- *'I'm going to need English in the future.'*
- *'I learn Business English because it is an obligatory course at the College.'*
- *'English represents a guarantee for the safe understanding, due to the fact that we have become a part of the multi-lingual environment.'*
- *'The way of teaching is the main motivation for learning English.'*
- *'The lectures in Business English are very interesting.'*

The above stated responses point to the fact that most students have an extrinsic motivation for learning English. Obviously, their motivation for learning Business English is primarily conditioned by external factors (better job, higher salary, living in a foreign country, etc.).

#### **4. CONCLUSION**

In the past twenty years the knowledge of English has become a necessary part of education. Millions of people in the world use English in their business activities, whether they buy, sell, exchange information or exploit resources. It can thus be stated that the knowledge of Business English helps develop economy of a certain country. Accordingly, many people are interested in learning Business English because they are aware of the fact that the knowledge of General English is not sufficient if they wish to use it in the business environment. They have to know how to behave and speak *businesslike*, which comprises the specific vocabulary, the specific phraseology, business etiquette and even tactics. A Business English teacher is therefore faced with a lot of challenges, such as the content of the lectures, the specific registers used in the specific profes-

sion and at least the basic concepts of the specific profession. "English teaching can be very interesting and rewarding. Although it requires a variety of skills and techniques, it mostly boils down to good preparation and a professional approach." (Gabrielle Jones: Five Tips for Teaching Business English - <https://www.britishcouncil.org/voices-magazine/five-tips-teaching-business-english>)

## 5. REFERENCES

1. Frendo, E. (2012). *How to Teach Business English*. Harlow: Pearson.
2. Furlan i sur. (2005). *Psihologijski rječnik*. Jastrebarsko: Naklada Slap.
3. Ryan, R.M.; Deci, E.I. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1): 54-67.
4. Jones, G., *Five tips for teaching Business English*, <https://www.britishcouncil.org/voices-magazine/five-tips-teaching-business-english>
5. Brieger, N. (1997). *Teaching Business English Handbook*, York, York Associates Publications.
6. Graves, K (ed.) (1996). *Teachers as Course Developers*, Cambridge University Press.
7. Common European Framework of Reference for Languages, <https://www.coe.int/en/web/common-european-framework-reference-languages>

## **POUČAVANJE POSLOVNOG ENGLESKOG JEZIKA NA RRIF VISOKOJ ŠKOLI ZA FINACIJSKI MENADŽMENT U ZAGREBU, REPUBLIKA HRVATSKA**

### **SAŽETAK RADA:**

Znanje engleskog jezika postalo ne sastavni dio obrazovanja. Engleski jezik predstavlja univerzalan jezik sporazumijevanja u svijetu. U članku se navode razlike između pojmova općeg engleskog jezika i poslovnog engleskog jezika, te se naglašava važnost učenja poslovnog engleskog jezika u današnjem globaliziranom svijetu, gdje ga koristi većina ljudi u obavljanju svog posla. Članak predstavlja desetogodišnje iskustvo poučavanja poslovnog engleskog jezika na RRiF Visokoj školi za financijski menadžment u Zagrebu, uključujući izvedbeni plan i program, odgovore studenata iz ankete vezanoj za nastavu Poslovnog engleskog jezika, teme koje se obrađuju na predavanjima, razinu znanja studenata, kao i odgovarajuće metode poučavanja. Članak naglašava motivaciju kao jednog od glavnih čimbenika učenja Poslovnog engleskog jezika. U članku se također navode interesi studenata za kolegij i problemi prilikom poučavanja Poslovnog engleskog jezika.

***Ključne riječi:*** *RRiF Visoka škola za financijski menadžment, poslovni engleski jezik, metode poučavanja, izvedbeni plan i program, studenti, motivacija.*



Professional Paper  
UDK: 336.2

*Paper received: 26/07/2017*

*Paper Accepted: 28/08/2017*

# THE ROLE OF VAT ON CORPORATE SOCIAL RESPONSIBILITY IN CROATIA

*Ivan Petarčić, Professional Specialist for Corporate Finances  
RRiF Plus d.o.o., Zagreb, Hrvatska  
ivan@rrif.hr*

## ABSTRACT

The new Accounting Act from 2016 has transposed the Directive 2014/95/EU (The Non-Financial Reporting Directive) into Croatian national legislation. It has obligated large public-interest companies with more than 500 employees to disclose non-financial information. Companies are required to include non-financial statements in their annual reports from 2018 onwards. In this way, the question of corporate social responsibility came to the forefront in Croatia.

This paper will show how the state encourages taxable persons to act socially responsible through certain provisions of the Value Added Tax Act. The provisions to be dealt with relate to food donation and processing of used materials and waste.

**Key words:** *value added tax, corporate social responsibility, food donation, used materials, waste*

## 1. INTRODUCTION

The obligation to compile and present non-financial reports has raised awareness of corporate social responsibility in Croatia. There is no universal agreement on the definition of corporate social responsibility (hereinafter: CSR), rather, it can be defined in a variety of ways. In principle, it can be said that CSR refers to how organizations manage their business processes in order to achieve a positive impact on society. In the strict sense, CSR refers to the assumption of the organization's responsibility for the performance of its

activities on society and the environment, whereby these activities must be in accordance with the interests of society and legal regulations, provided that they are based on ethical conduct.

There is a general misconception that doing business in a socially responsible way is expensive, inefficient and wasteful of human resources and that this business approach cannot maximize profit. However, the state can certainly help companies/enterprises that want to be socially responsible through a number of different instruments and incentives. As it will be shown below, in the case of the Value Added Tax Act (Official Gazette, No. 73/13 – 115/16) the state encourages enterprises to do business in a socially responsible manner when it comes to donating food and delivering waste to authorized waste dealers.

## **2. DONATING FOOD**

Food donation is any food or animal feed donated free of charge to end recipients. The donation of food and feed in the Republic of Croatia is regulated by the Agriculture Act (Official Gazette, No. 30/15) and the Regulations on the Conditions, Criteria and Ways of Donating Food and Feed (Official Gazette, No. 119/15, hereinafter: Regulations on donation). Article 73 of the Agriculture Act provides for the donation of food and feed in order to prevent the destruction of large quantities of food, protect the environmental and provide assistance to end recipients. Only food and feed which is suitable for human and/or animal consumption and has met all safety and health requirements in accordance with both EU and national regulations can be donated.

### **2.1. BASIC FOOD SAFETY REGULATIONS**

Food safety is based on the following regulations:

- Food Act (Official Gazette, No. 81/13, 30/15)
- Act on Food Hygiene and Microbiological Criteria for Food (Official Gazette, No. 81/13)
- Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures regarding food safety
- Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs
- Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for food of animal

origin Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organization of official controls on products of animal origin intended for human consumption

- Directive 2004/41/EC of the European Parliament and of the Council of 21 April 2004 repealing certain Directives regarding food hygiene and health conditions for the production and placing on the market of certain products of animal origin intended for human consumption and amending Council Directives 89/662/EEC and 92/118/EEC and Council Decision 95/408/EC
- Regulation (EC) No 183/2005 of the European Parliament and of the Council of 12 January 2005 laying down requirements for feed hygiene

## 2.2. TERMS OF DONATION

The Regulations on donation set out the detailed conditions, criteria and methods of donating food and feed, the conditions to be fulfilled by the intermediary in the donation of food and feed (hereinafter: intermediary), as well as the content and ways of keeping the Register of intermediaries.

In accordance with Article 5 of The Regulations on donation, donors can donate food to the end recipient who is:

- a person in need who is a socially vulnerable person and / or
- a person affected by natural disasters in the sense of the Act on Protection from Natural Disasters (Official Gazette, No. 73/97 - 174/04).

The donation of food to the end recipient (i.e. a person in need who is a socially vulnerable person) includes giving food to the beneficiary of rights in the social welfare system under the Social Welfare Act (Official Gazette, No. 157/13, 99/15) and beneficiaries of social services under the general acts of local and regional government and the person who seems likely to be in need of a such donation.

The subject of donation in accordance with Article 6 of The Regulations on donation can only be food that is in accordance with Regulation (EC) No 178/2002 and the Food Act. This can include food that is not suitable for further sale due to changes in quality, packaging, labelling, weight or other similar reasons that do not compromise food safety. Also, this can include food produced or prepared in food establishments and food bars or buffets within supermarkets provided that it has not been served to the end consumer yet. Food containing the »use -by« date must be donated to the final recipient only before the expiry of that date.

Food donation is considered to be done in order to prevent its destruction, protect the environment and provide assistance to end recipients if:

- a). donated food for which it seems likely that it cannot be sold by the end of the "use-by" date, and is donated in a period of up to three months before the end of the »use -by« date
- b). donated food for which it seems likely that it cannot be sold until the expiry of the minimum durability ("best-before") date and is donated in a period from three months to at least seven days before the expiration of the minimum durability date
- c). donated food which is not suitable for sale due to changes in quality, packaging, labelling, weight or other similar reasons that do not affect or compromise food safety.

### 2.3. DOCUMENTS AND RECORDS REQUIRED

The Regulations on donation stipulates the documents that must accompany the donated food and the records by both the donor and the intermediary. According to Article 10 of The Regulations, donated food must also be accompanied by documents regarding its delivery and receipt.

The donor is obliged to keep a record of food donations, which must contain information on: delivery notes, date of delivery, name, type, quantity and expiration dates of food, purchase price (excluding VAT), VAT amount as well as information on intermediaries or end recipients in the event of direct (unmediated) donation.

The intermediary, on the other hand, is obliged to keep track of the following:

- Records of food donations from donors or citizens which must contain information on: receipts or confirmations, date of receipt, name, type, quantity and expiration dates of food as well as information on said donor or citizen.
- Records of food confiscated in misdemeanour proceedings which must contain information on: documents on the basis of which the food is assigned to the intermediary, name, type, quantity and the expiration dates of food.
- Records of food receipts from other intermediaries which must contain information on: documents (delivery notes, receipts), date of receipt, name, type, quantity and the expiration dates of food as well as information on the intermediary from which the food was received.
- Records of received and unused food which has been adequately disposed of in accordance with special regulations.



Donors and intermediaries are obliged to submit data accumulated from the aforementioned records to the Ministry of Agriculture for the period and within the deadlines prescribed for the submission of value added tax. This means, that the data collected in the previous month in case of monthly payers is due at the latest by the 20<sup>th</sup> of every month, and data collected in the previous quarter (in case of payers who pay their VAT quarterly) is due latest by the 20<sup>th</sup> of the subsequent month.

#### 2.4. TAXABLE POINT OF DONATION

Donors can be companies, dealers, family agricultural holdings and other taxpayers of profit tax or income tax, who may or may not be subject to value added tax. Therefore, donor tax liabilities should be observed from the point of view of profit tax, income tax and value added tax.

Donations from profit tax payers may be tax deductible if they are executed under certain conditions governed by Article 7 paragraph 7, of the Profit Tax Act (Official Gazette, No. 177/04 - 115/16). Namely, according to the above provision, donations are considered gifts or gifts made in the country for cultural, scientific, educational, health, humanitarian, sporting, religious, environmental and other general-purpose to associations and other persons performing these activities in accordance with Special regulations. The other persons, pursuant to Article 30 section 3 of the Regulations on Profit Tax (Official Gazette, No. 95/05 - 1/17) include the bodies of state, local and regional self-government. However, only donations of up to 2% of revenue earned in the previous year are tax deductible for enterprises; if they are higher than the percentage above, they are non-deductible.

However, in accordance with Article 30 paragraph 4 of the Regulations on Profit Tax *on donations referred to in Article 7 paragraph 7 of the Act may also include the donations of taxpayers who are producers and food retailers and who, in order to prevent the destruction of large quantities of food and to protect the environment, donate food to persons referred to in Article 7 paragraph 7 of the Law on social, humanitarian and other purposes of assistance, and to persons affected by natural disasters, provided that such donations are carried out in accordance with special regulations referred to in paragraph 6 of this Article.* Accordingly, food donations can be tax deductible even when their total amount exceeds 2% of revenue earned in the previous year, but provided that the donation was made in accordance with the special regulations of the Ministry of Agriculture, the Agriculture Act and the Regulation on the conditions, criteria and ways of donating food and feed.

The same conditions are prescribed under Article 15 paragraph 2 of the Income Tax Act (Official Gazette, No. 115/16) and Article 13 of the Income Tax Ordinance (Official Gazette, No. 10/17) for donors who are income tax payers.

When it comes to the treatment of VAT delivery, in accordance with Article 26 paragraphs 5 and 6 of the Value Added Tax Ordinance (Official Gazette, No. 79/03, 41/17)<sup>1</sup>, VAT is not included in the donated food only when it is donated to non-profit legal entities that carry out humanitarian activities in accordance with the above-mentioned legislation on the donation of food and feed and that are registered as intermediaries participating in the food donation chain. It is a condition that the donations do not exceed 2% of revenue or receipts of the previous year. In the case of natural disasters the tax-deductible shortage of goods shall also include deliveries made directly to the final recipients in accordance with the Regulations on the conditions, criteria and ways of donating food and feed. For the purpose of calculating the value of deliveries considered as a tax-deductible deficit, the purchase value of such food (excluding VAT) is taken into account. For all gifts above 2% of total revenue of the previous year, i.e. donations made to non-profit organizations and end beneficiaries, and not in accordance with the above-mentioned rules, the donor is obliged to calculate and pay VAT on the purchase value of the goods (including related purchase costs), i.e. in case the donor is a producer, the VAT must be calculated at the cost of production of the goods.

A taxpayer who donates food and feed is obliged to report to the Tax Administration on the donations made, by submitting a Report on donated food (The DONH report) in electronic form. It is required to submit this form by the 20th of the month for the previous month (quarterly – in case of quarterly payers).

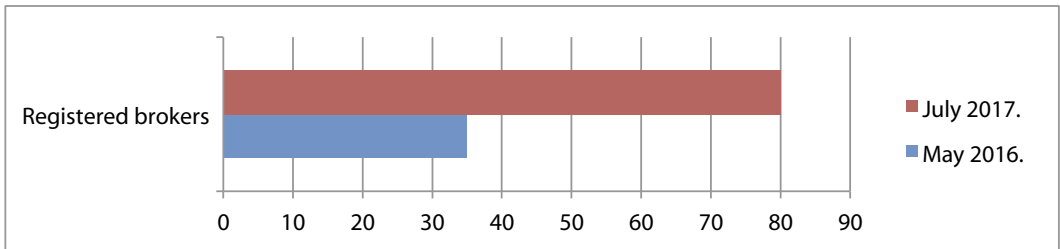
## 2.5. THE IMPORTANCE OF TAX TREATMENT FOR DONORS

Tax treatment of donated food and feed is of great importance to donors. As of December 8<sup>th</sup> 2015, donations made in accordance with the regulations above, provided that the cost of donating doesn't exceed 2% of the revenue of the previous year, are tax deductible, and supply is not subject to VAT calculation. In this way, the state encourages producers and traders to act in a socially responsible way. The only problem is that there are still very few registered intermediaries in the food donation chain.

---

<sup>1</sup> The provisions above are in force since December 8th 2015. Until then, VAT was charged on donated food.

**Chart:** An overview of registered intermediaries



*Source: Made by the author according to the data from the Intermediary Register*

Namely, in July of 2017 there are 80 intermediaries in the register. Considering that in May of 2016 there were a total of 35 registered intermediaries, it can be concluded that growth is somewhat satisfactory.

### 3. DISTRIBUTION OF RAW MATERIALS AND WASTE

Waste is any substance, object or unwanted material which has no value to the holder and which the holder discards or intends to discard. Waste is also considered to be any object whose collection, transport and processing are necessary for the purpose of protecting the interests.<sup>2</sup> Waste management in the Republic of Croatia is regulated by the Act on Sustainable Waste Management and the Regulations on Waste Management (Official Gazette, No. 23/14, 132/15). The Act lays down measures to prevent or reduce the impact of waste on human health and the environment by reducing the amount of waste generated and/or produced, regulates waste management controlling the use of substances hazardous to human health and the environment and the use of valuable properties of waste. In addition, the Act establishes a system of waste hierarchy providing a priority order in waste prevention and management, principles, objectives and methods of waste management, waste management responsibilities and obligations, as well as waste management information system, administrative supervision and inspections of waste management.

Almost all businesses, regardless of their particular type of business activity, are dealing with the process of depositing, disposing or discharging waste and used materials. Considering that waste can have a high value and waste business is becoming more and more attractive, there is a large number of waste buyers, dealers and brokers who have a common interest in selling waste and used materials.

<sup>2</sup> Article 4 paragraph 1 item 35 of the Act on Sustainable Waste Management (Official Gazette, No. 94/13).

In accordance with Article 4 paragraph 1 item 62 of the Waste Management Act, a waste dealer is a legal or natural person who, in his own name and on his own account, purchases and sells waste, including a waste dealer who does not take waste in immediate physical possession. Entrepreneurs who want to deal with waste trade must register for the purpose of carrying out waste trading, enter the End-of-Waste Register and appoint a person responsible for waste management.

In the case of the delivery of waste and used materials by the taxpayer, the provisions of the VAT Act and the VAT Regulation which regulate the taxation of these deliveries should be considered.

### 3.1. TAXATION ON THE SUPPLY OF USED MATERIALS AND WASTE

Council Directive 2006/112/EC (hereinafter: VAT Directive) provides the Member States of the European Union with the possibility to transpose into their national legislation provisions relating to the transfer of tax liability for the supply of used materials and waste. Namely, Article 199 of the VAT Directive states that Member States may provide that the person liable for payment of VAT is the taxable person to whom any of the following supplies are made:

... (d) *the supply of used material, used material which cannot be re-used in the same state, scrap, industrial and non industrial waste, recyclable waste, part processed waste and certain goods and services, as listed in Annex VI.*

Supplies of goods and services referred to in point (d) of Article 199(1) listed in Annex VI are the following:

(1) *Supply of ferrous and non ferrous waste, scrap, and used materials including that of semi-finished products resulting from the processing, manufacturing or melting down of ferrous and non-ferrous metals and their alloys;*

(2) *supply of ferrous and non-ferrous semi-processed products and certain associated processing services;*

(3) *supply of residues and other recyclable materials consisting of ferrous and non-ferrous metals, their alloys, slag, ash, scale and industrial residues containing metals or their alloys and supply of selection, cutting, fragmenting and pressing services of these products;*

(4) *supply of, and certain processing services relating to, ferrous and non-ferrous waste as well as parings, scrap, waste and used and recyclable material consisting of cullet, glass, paper, paperboard and board, rags, bone, leather, imitation leather, parchment, raw hides and skins, tendons and sinews, twine, cordage, rope, cables, rubber and plastic;*

(5) *supply of the materials referred to in this annex after processing in the form of cleaning, polishing, selection, cutting, fragmenting, pressing or casting into ingots;*

*(6) supply of scrap and waste from the working of base materials.*

All points mentioned above are implemented into Croatian legislation in the same way. This is regulated by Article 75 paragraph 3 item b) of the VAT Act and Article 152 paragraph 3 of the VAT Regulation. This means that, "when delivering used materials that cannot be used in the same state, along with waste and services related to their processing, it applies for a tax liability transfer when it comes to delivery between the two taxpayers in the Republic of Croatia."<sup>3</sup> This practice is also referred to as the domestic transfer of tax liabilities.

This means that, when delivering used materials and waste to a taxpayer in the country, the value-added tax is not charged to the seller, but instead he issues the invoice without VAT, and the buyer is obliged to determine the VAT amount in its tax records. Therefore, neither the seller nor the buyer need to pay VAT when trading in used materials

### 3.2. IMPACT OF DOMESTIC TRANSFER OF TAX DUTY ON CSR

By applying the transfer of tax liability to the supply of used materials and waste, taxpayers are encouraged, to sell waste and used materials that can no longer be used to waste dealers, without having to pay VAT on supply of goods. Thus, the value of the supply is not increased for VAT, which makes it more attractive for both the seller who does not have to calculate VAT and the customer who does not have to pay VAT and who is therefore less burdened by the cash flow.

According to the waste management hierarchy, there is a priority order in waste prevention, which is to prevent waste generation in the first place, followed by preparing for re-use, recycling, other recovery operations and disposal. Unfortunately, something like that cannot be avoided in every process. However, the socio-economic and environmental benefits are still there: the waste dealers will distribute all aforementioned goods (including goods supplied by the waste producers, and used materials that can no longer be used for their intended purpose) further to those who will use it as raw material or material in production, recycle or otherwise recover. Through these methods, materials are constantly being recovered, reused and recycled in a process called circular economy, as opposed to a linear economy which favours a 'take, make and dispose' model of production.

---

<sup>3</sup> Markota, Lj. et al. (2015). Value added tax. Zagreb: VII. changed publication, RRiF-plus

#### **4. CONCLUSION**

When it comes to food waste prevention, sustainable waste management and encouraging the circular economy, great efforts are needed in order to accomplish this, not only on national and European, but also on a global scale.

Most companies tend to maximize profits and achieve more favourable cash flow, but they should also strive to minimize negative impacts of their businesses and take into account their possible influence on society and the environment in order to be recognized as a CSR company. They can find tax treatment of certain supplies as a barrier that may adversely affect their business decisions and distract them from making choices that can bring benefits to society in the long term.

Through implementation of the VAT exemption on food donation and implementation of the transfer of tax liability on the supply of used materials and waste, the VAT Act and the VAT Regulation have proved that tax provisions and incentives can also have a positive influence on corporate social responsibility and circular economy as a whole.

#### **5. REFERENCES:**

1. Markota, Lj. et al. (2015). Value added tax. Zagreb: VII. changed publication, RRiF-plus
2. Act on Sustainable Waste Management and the Regulations on Waste Management, Official Gazette, No. 23/14, 132/15
3. Agriculture Act, Official Gazette, No. 30/15
4. Profit Tax Act, Official Gazette, No. 177/04 - 115/16
5. Value Added Tax Act, Official Gazette, No. 73/13 - 115/16
6. Income Tax Act, Official Gazette, No. 115/16

## **ULOGA PDV-a U DRUŠTVENOJ ODGOVORNOSTI PODUZEĆA U HRVATSKOJ**

### **SAŽETAK RADA:**

Novi Zakon o računovodstvu koji je donesen na temelju Direktive 2014/95/EU obvezao je na sastavljanje nefinancijskog izvještaja velike hrvatske poduzetnike koji su subjekti od javnog interesa i koji na datum bilance prelaze kriterij prosječnog broja od 500 radnika tijekom prethodne poslovne godine. Time se u Hrvatskoj istaknulo pitanje društveno odgovornog poslovanja.

U ovome radu prikazat će se kako država potiče obveznike poreza na dodanu vrijednost na društveno odgovorno poslovanje putem pojedinih odredaba Zakona o porezu na dodanu vrijednost. Odredbe koje će biti obrađene odnose se na darivanje hrane te isporuku rabljenog materijala i otpada.

***Ključne riječi:*** *porez na dodanu vrijednost, društveno odgovorno poslovanje, donacija hrane, rabljeni materijal, otpad*





## INSTRUCTIONS FOR AUTHORS

All the papers dealing with the topics of accounting and management are welcome. All the submitted papers are considered for publication and have been blindly peer-reviewed by two independent reviewers.

The papers are categorized in the scientific, professional and other papers:

- **Original scientific paper** contains previously unpublished original results of scientific research;
- **Preliminary paper** presents the primary findings of research in progress, which requires urgent publication, but without the level of deep and thorough study required for the original scientific paper;
- **Review article** contains a detailed and comprehensive critical review of a certain problem area, but with no significant originality of the obtained results;
- **Professional paper** contains the information and experience relevant for a certain profession, but without scientific characteristics.
- **Case study** contains a description and detailed information about the particular subject or small group.

The Editorial Board determines the category of the paper, based on the reviewers' proposals.

The Journal of Accounting and Management is published in two issues a year.

All the papers should be submitted by mail or email to the address of the Editorial Office. The authors are obliged to follow these instructions:

1. The manuscripts should be written in English.
2. The manuscript should be submitted in a MS Word format.
3. A cover page should be supplied, containing the title of the paper, name(s) and address(es) of the author(s), including the telephone number, e-mail address and the name and postal address of the author(s) home institution.
4. The full paper should not exceed 10 single-spaced pages of text (font: Times New Roman, size 12) including graphs, tables, endnotes and references.
5. The paper should begin with an abstract of not more than 900 characters and maximum 5 key words
6. The Editors reserve the right to make editorial changes in order to adjust the style of the paper to the Journal.
7. The manuscripts are not returned.
8. No payment is made to the authors for publication of the paper.

# **PUBLICATION ETHICS AND PUBLICATION MALPRACTICE STATEMENT FOR JOURNAL OF ACCOUNTING AND MANAGEMENT**

Our ethic statements are based on the Committee on Publication Ethics Best Practice Guidelines for Journal Editors developed by the Committee on Publication Ethics (COPE).

## **Duties of Editors**

---

### **Publication decisions**

The editorial board is responsible for deciding which of the articles submitted to the journal should be published.

The editorial board will be guided by the policies of the journal and constrained by legal requirements related to libel, copyright infringement and plagiarism. Members of the editorial board will confer and refer to reviewers recommendations in making this decision.

### **Equality**

An editor, member of the editorial board or reviewer must evaluate manuscripts for their intellectual content without regard to race, gender, political philosophy, sexual orientation, ethnic origin, citizenship, or religious belief of the authors.

### **Confidentiality**

The review process takes place in two stages. In the first stage the editor must not disclose any information about a submitted manuscript to anyone other than the corresponding author, reviewers, potential reviewers, and other editorial advisers. This stage concludes with an agreement between the author and reviewers about the continuation of their cooperation in the open reviewing forum in which issues of confidentiality do not arise.

### **Disclosure and conflicts of interest**

Unpublished materials disclosed in a submitted manuscript must not be used in an editor's, reviewer's or any other reader's own research without the express written consent of the author.

## **Duties of Reviewers**

---

### **Contribution to Editorial Decisions**

Reviewers assist the editorial board in making editorial decisions and through the editorial communications during the open review process with the author may also assist the author in improving the paper.

### **Qualification of Reviewers**

Any selected referee who feels unqualified to review the research reported in a manuscript or knows that its prompt review will be impossible should notify the editor and excuse himself from the review process. The editorial board is responsible for ensuring the competence of the reviewers

### **Promptness**

Authors will normally receive feedback about the acceptance of his/her paper for the reviewing process within three weeks and in another three weeks s(he) will normally receive the first response from the reviewers.

The editorial board is responsible for ensuring the promptness of responses in the open review process.

### **Confidentiality**

Any manuscripts received for review in the open review process are subjected to the criteria of enhancing their rationality through the mutual rational controls of critical discussion.

### **Establishing Standards of Objectivity through Critical Discussion**

Reviews should be conducted objectively. Authors are encouraged to make explicit the internal criteria they use to evaluate the validity of their contributions to knowledge. Personal criticism of the author is inappropriate. Referees should express their views clearly with supporting arguments in the spirit of enhancing the quality of the paper through the mutual rational controls of critical discussion.

### **Acknowledgement of Sources**

Reviewers should identify relevant published work that has not been cited by the authors. References to the ideas of others should be accompanied by the relevant citation. A reviewer should also call to the editor's attention any substantial similarity or overlap between the manuscript under consideration and any other published paper of which they have personal knowledge.

### **Disclosure and Conflict of Interest**

Information or ideas obtained through peer review must only be used with the explicit agreement of the participants in the peer review. Reviewers

should not consider manuscripts in which they have conflicts of interest resulting from competitive, collaborative, or other relationships or connections with any of the authors, companies, or institutions connected to the papers.

## **Duties of Authors**

---

### **Reporting standards**

Authors of reports of original research should present an accurate account of the work performed as well as an objective discussion of its significance. Underlying data should be represented accurately in the paper. A paper should contain sufficient detail and references to permit others to judge the validity of the contributions to knowledge. Authors are asked to provide the raw data in connection with a paper for editorial review, and should be prepared to provide public access to such data and should in any event be prepared to retain such data for at least two years after publication.

Fraudulent or knowingly inaccurate statements constitute unethical behavior and are unacceptable.

We believe it is important to emphasise that the editorial board is not responsible for copyrights and for any ethical consequences of the publication of any particular contribution (written or in the form of multimedia). However, we expect that all people providing sources of data for published accounts have been given informed consent and that no one in any way involved in the processes of the research has been coerced into co-operation or is unknowingly being co-opted. Authors should have written permission of parents to include photos or videos of children and juveniles into research accounts.

### **Originality and Plagiarism**

The Editorial Board of JAM recognise different cultural beliefs about the acceptability of quoting the ideas of others as if they were one's own. The documents concerning the submission of papers for JAM review recognise these different cultural beliefs and emphasise the statement that 'authors should ensure that they have written entirely original works, and if the authors have used the work and/or words of others that this has been appropriately cited or quoted.'

### **Concurrent Publication**

Submitting the same manuscript to more than one journal concurrently, constitutes unethical publishing behaviour and is unacceptable.

### **Authorship of the Paper**

Authorship should be limited to those who have made a significant contribution to the conception, design, execution, or interpretation of the reported study. All those who have made significant contributions should be listed as co-authors. Where there are others who have participated in certain substantive aspects of the research project, they should be acknowledged or listed as contributors.

The corresponding author should ensure that all appropriate co-authors and no inappropriate co-authors are included on the paper, and that all co-authors have seen and approved the final version of the paper and have agreed to its submission for publication.

### **Disclosure and Conflicts of Interest**

All authors should disclose in their manuscript any financial or other substantive conflict of interest that might be construed to influence the results or interpretation of their manuscript. All sources of financial support for the project should be disclosed.

### **Fundamental errors in published works**

When an author or reader discovers a significant error or inaccuracy in the published work, it is the author's obligation to promptly notify the journal editor and work with the editor to retract or correct the paper.





