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INNOVATION AND SUSTAINABILITY STRATEGIES IN THE FIELD OF HEALTH EDUCATION

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Abstract: The field of health is indestructibly linked to that of education, and the interdependence of these major areas for regional development supports the policy of cohesion and regional competitiveness launched by the EU. The measures to which the authorities refer in the sense of dynamic and sustainable economic development, aim at capitalizing on the regional potential. In line with this goal, regional policies aim, among other things, at developing health through investment in education and training infrastructure. The transition to a Europe connected to social needs, conducive to enhancing inclusion, is becoming an increasingly important goal for the integrated and sustainable development of each geographical area. Health promotion programs need to be limited to investing in health infrastructure by rethinking sustainable education and health systems. Maintaining the need for competitiveness generates effective good practices, which can be transferred to the implementation of modern educational management systems, generating sustainable, customer-centric health services.

Keywords: sustainable development, sustainability, innovation, health education, professional skills, good practices.

JEL Classification: 110, 121, O30, Q01.

1. Introduction

In the last two decades, more and more specialists in the field of education are paying special attention to the concept of innovation. The first researcher to use the term innovation is J. B. Taylor, categorizing the term as "a new way of doing things - with the explicit purpose of responding to a social need".

Although not neglected, a number of discoveries have led to innovation, starting with the great pedagogues and sociologists of the last century, referring to Pestalozzi, Montessori, Rousseau or Durkheim. The ideas launched during the evolution of modern education, from the second half of the twentieth century to the mid-1960s, shed light on the difficulties constantly encountered in the education system: the lack of financial resources allocated from the state budget and the inequality of opportunities. access to the right to education. Moreover, real importance is given to the qualitative and innovative dimension of education, by referring both to the privileged status of education, through which people access a socio-professional status, and to the ideal and aspirations of the school population, beyond the quantitative dimension reflected substantially, by multiplying the number of schools, the number of educators who access educational programs more and more often, as well as the number of teachers who adhere to the process of completing their teaching career.

The 1960s remain reference years in the development of the history of education systems, overlapping with the period of the establishment of the Center for Research and Innovation in Education (CERI). The mission of this center was to promote innovation in the specific field of education, a mission then perpetuated by more and more institutions and bodies that focus on education. Regarding this desideratum, in 1973, L. Huberman identifies and reproduces an aspect key to the concept of innovation: "innovation is a measurable and deliberate improvement, sustainable and unlikely to occur frequently" (Huberman, 2005), which is associated with a series of changes that resonate with current educational needs: innovations in technology, concepts, curricula and teaching methods, and, not least, bringing references to the transformative role of interpersonal relationships.

Going back to modern times, the establishment of the Council for Social Research and Technology and Social Innovation in Canada is an opportune time to highlight three key dimensions in rendering the specifics of innovation: the curricular dimension - which emphasizes rethinking the structure of school curricula, the pedagogical dimension - by inserting transformative elements at the level of the instructive process - educational and the organizational dimension - which resets the importance of the mission of the persons invested in the roles of teachers. As a quintessence of the specificity of these dimensions, innovation is defined as a "deliberate process of transforming practices, by introducing a curricular, pedagogical or organizational novelty, which is disseminated and aimed at sustainable improvement and the educational success of pupils and students" (Huberman, 2005).

Regarding the analysis of the factors that favor innovation, Jean-Pierre Bèchard points out that they generate both the triggering of an evolution of innovation and the inhibition of the innovation process, the direction in one direction or another being decided by the educational context and the ability to mediation of teachers (Béchard, 2001).

The current education system is undergoing incipient forms specific to innovation, which can be extended both inside and outside the education system.

One of the objectives of using a set of sustainable tools to support the implementation of an innovative model of educational intervention planning are:

- Correlation with government development policies and educational standards set by the European Union, by extending access to financial resources to maintain quality in education;
- Revitalization of the education system, with a role in preventing imbalances that can impact the health space of the population in a certain region;
- Reviewing proposals for decentralization of decision-making and their convergence to the regional / local community;
- Promoting a constant and active partnership between the educational actors involved in promoting a sustainable education, through the continuous training of health specialists;
- Development and implementation of educational programs in line with regional development strategies.

The preoccupation of the public bodies for the increase of the quality of the professional competences, allows the restructuring of the educational contents and the improvement of the teaching-learning-evaluation methods. Subsequent effects can be identified in the quality of public services, which can improve the quality of life in a region by increasing employment. We consider that it is necessary to structure a training module for specialists in the field of health education to support this approach regardless of the category of beneficiaries. From this perspective, the training of specialists involves a multipurpose training that will contribute to the development of the skills necessary for effective communication and that will overcome any barriers regardless of their nature. Living in an age of globalization but also as a result of rapid population dynamics, migrations and differences of a linguistic, cultural and not only nature, specialists must be prepared to work with populations of beneficiaries as diverse as possible. Just as prevention is essential in medicine, at least to a similar extent the scheduling of training sessions and the planning of activities are of real importance for the success of the formative educational approach.

2. The current context. The specificity of innovation in health education

The sustainability of programs in the field of Health Education requires essential attention, especially during the implementation period because it plays a key role in the process of sustainable development and because it must face the challenges of the globalized world (Serdyukov, 2017).

This idea supports the importance of clearly and robustly accelerating the concerns for shaping a new architecture of teaching intervention, designed to maintain a vital level of creative investment in the teaching-assessment process. The history of education strongly highlights the fact that the clear delimitation between traditional and modern is inserted slow, as well as the adaptation of new practices to previous new structures.

In this process of transition to a cohesive and harmonious cohesion with the needs of future health educators, the emphasis is on developing reforms that reduce competitiveness within the school space, by promoting cooperation and collaboration at macro and micro-institutional level. However, there is a risk factor that can be given by the decentralization of the education system and this process can encourage competition and can affect the quality of the educational process in terms of geographical coverage.

A role The key associated with sustainable development is the concern for the specialization of education professionals, due to the need to train specific skills (Romjin et al., 2021). In this sense, it is necessary to initiate, develop and carry out projects to innovate teaching strategies, in order to strengthen the teaching dimension, promoting the idea of regional educational partnership. The current situation is favorable for this field and as a result of the increasingly concrete perception of social fragility as a result of the experience gained from the Covid 19 pandemic.

Innovation in the field of health education implies a constant correlation with the specific objectives of regional education, emphasizing the process of individualization of educational intervention. Therefore, the quality of teaching is indicated by a high level of achievement of objectives, through an increasingly creative organization and use of teaching tools and means, correlated with teaching methods.

Through a series of innovation projects, education is consolidating its place in the vast system of social life, promoting tools with a role in strengthening the personalization of teaching activities, by a continuous focus on the needs of the learner, creating appropriate conditions for complementary initiatives on the transfer of skills. various disciplines, expanding the space for the expression of human freedom. Context-dependent competencies are seen as a relationship between skill, tasks, and health system design. (Epstein & Hundert, 2002). This idea is an extension of the metaphor by which C. Berge stated: "We live in a world in which, In the short term, there will be no room for innovators".

3. Factors that induce the progressive upward trend of innovation in education

In order to prevent recurring problems identified at the educational level, it is necessary to reconsider the importance of institutional and contextual factors in the restructuring of scientific knowledge and the way in which it is transmitted.

Starting from the structural and dynamic analysis of education, the assimilation of innovation to the current dimension of education, sheds light on the role of culturalpolitical factors, those in the scientific and technological sphere, to which are added both endogenous factors specific to the education system and exogenous factors - specific to the environment.

The specificity of the intervention of these factors frees the education of uniformity. by changing the reform from a psychological perspective, progressively inspiring the researches in the field, with a role in propelling the socio-economic development.

Moreover, the human factor is a quintessence of information resources, materialized in productive actions, stimulating innovative learning and, in essence, the restructuring of means with a role in relaunching innovative actions in new situations. The diversification of learning situations and the specific contexts of social interactions, highlights the reflection of the transformative meaning of learning - as an action of value formation - a true bridge of cohesion between the individual and society.

Another important role belongs to mental constructions, whose function is to model the ability to solve new, challenging situations, highlighting the student's ability to overcome uncertainty, reaching real levels of harmonization with the natural-external environment.

This desideratum is only partially realized in the space of formal education, since the substantiation of the evolutionary human processes becomes an argumentative premise for the societal learning, changing the paradigm of the self-centered intervention, towards the social finality. The improvement of the education system launches new trends in the educational structure and practice, towards a social purpose correlated to the needs of the society that generate new meanings towards regularities and legalities.

From the interaction of cultural, political and economic factors, successive waves are reflected in the sense of development, generating a series of changes, which Havelak R. highlights the importance by associating with the creativity of human resources, with the generous space of training contexts, in terms of enhancing productivity. , by resorting to equipment adequate to the didactic objectives. Moreover, the change emphasizes the need for self-training, replacing the role of authority, with the specialist, who joins the growth initiatives initiated by or towards educators. Also, the changes lead to a suite of values and tendencies, specific to the assimilated educational principles, which presuppose a transition from the level of knowledge, to the attitudinal one, observable both by an individual behavior and by a group behavior.

4. Strategies for innovation and sustainability in the field of Health Education

The history of contemporary reforms has highlighted the tendency of simultaneous changes in the structural components of education, reconfiguring the performance of the education system.

However, the literature has a limited consensus on the theoretical framework of the definitions (conceptual and operational) of sustainability. Even if the literature is not extremely extensive, we find several terms used to refer to sustainability. These terms include: "maintenance", "sustainability", "institutionalization", "incorporation", "integration", "routine", but also expressions such as "community ownership" and "capacity building". Moreover, we found in the literature the following definitions that were considered to be clarifying for the concepts that I frequently found:

We often see a concern for sustainability, and this is the ability to maintain service coverage at a level that will provide ongoing control over a health issue (see Claquin, 1989).

In addition, the sustainability of a project is defined by many economists concerned with international development as the ability of a project to continue to deliver the desired benefits for a long time after the end of an initial period. Continuity of functionality from this perspective can also be found in our concerns due to the fact that an educational system even if it is dynamic and constantly changing (adaptive to existing societal needs) is constantly based on previous experiences in its evolution (definition of Bank World in Bamberger and Cheema, 1990).

We also extract from the literature the idea that a development program is sustainable when it is able to provide an adequate level of benefits for a long period of time after the end of a period of financial, managerial and technical assistance from a donor or fund. external (US Agency for International Development, 1988).

Although often avoided, the term "institutionalization" refers to the long-term viability and integration of a new program within an organization (Steckler and Goodman, 1989). We believe that this term should not be avoided because it has a clarifying role regarding the framework in which health education should take place, it even introduces many more aspects on how the process can be carried out but also brings elements aimed at managing the training process. of health education specialists.

In terms of organizational change, as seen in the literature, it ultimately involves at the level of each process new practices and ideas that succeed in imposing themselves as values at the local level and can in some cases even become standards with benchmark and can even become essential for all organizations (Yin, 1979).

Attention to sustainability in health intervention programs is growing, but consensus is limited on the conceptual and operational definitions of sustainability. Moreover, an empirical knowledge base on the determinants of sustainability is still in the process of being developed. Sustainability planning requires, first and foremost, a clear understanding of the concept of sustainability and the operational indicators that can be used to monitor sustainability over time. Important categories of indicators include: (1) the maintenance of health benefits achieved through an initial program, (2) the level of institutionalization of a program within an organization, and (3) capacity building measures in the recipient community. Secondly, sustainability planning requires the use of programmatic approaches and strategies that favor the long-term maintenance of the program. We suggest that the potential influences on sustainability can be derived from three major groups of factors: (1) factors in the design and implementation of the initiative, (2) factors in the organizational framework and (3) factors in the wider Community environment. Future efforts to develop sustainable health intervention programs in communities can be based on the concepts and strategies proposed in this material.

For the design of a sustainable health education system we consider a number of necessary steps. Thus, we further propose a model that can be successfully applied in the process of establishing an innovative and sustainable program for health education.

Factors of design and design of the program for health education.

- 1. The process of social debate of the project. Are the approaches and objectives of the project discussed with the members of the beneficiary community, equally partners? Are the needs of the community leading the program or those of external donor agencies and technical experts? It is a stage in the whole process of negotiating or building consensus through which a compromise can be reached to address all the actors involved.
- 2. Project effectiveness. Is the project (perceived as) effective? Is it visible? This approach ensures the implementation of all the fundamental elements through which the transition to an updated level with the contemporary needs in the field of health education is achieved.
- 3. Project duration. This stage is a variable one, but considering the urgency with which the need for a well-elaborated health education is manifested, the consumption of resources being high, it can produce desired results in a shorter time interval.
- 4. The financial aspects can be assumed totally or partially by the state institutions with abilities in this direction due to the fact that health education is a strategic field.

5. Training component (professional or paraprofessional) of the human resource involved effectively and directly in the process of health education

Beyond this overview as an elaboration of logical steps to follow, there are a number of more specific factors that can concretely express how an innovative and sustainable program for health education can be built.

Specific factors at the level of the organization. These factors are representative of the institutional component needed for the success of the proposed program.

- 7. The institutional force represents the assumption of this approach at institutional level by a representative institution. Of course, this institution is also the one that is going to implement the necessary steps for the development of the previously expressed stages.
- 8. Integration with existing programs / services at the level of the organization or educational system.

Factors in the wider Community environment that are part of education and public health strategies and policies

- 9. Socio-economic and political considerations. From this perspective, the aim is how favorable the general socio-economic and political environment is for building an innovative and sustainable program for health education.
- 10. Community participation. Practically, this aspect aims at the level of community participation and the depth of social involvement.

All these elements in fact converge on the idea of sustainability, which ensures the continuity of a program and especially its resilience over time.

Sustainability is a global term often used to describe the general phenomenon of continuity of any program. The choice of the term sustainability is dictated by two considerations. First of all, sustainability is a broad term that incorporates essential notions of continuity (permanent, time) without resorting to a series of limitations or specific manifestations.

The main categories of definitions in the literature offer three radically different perspectives on sustainability. These are: (1) the maintenance of health as a result of the benefits obtained through previous experiences, (2) the continuity of the activities carried out so far and which have proved to be of real use, and (3) the permanent education of the community which will be the beneficiary of the whole process. It is necessary to develop specialized literature in this field so that the universe of knowledge can be expanded, but what is of real interest is given by the substantiation of theoretical aspects based on practical, concrete experiences, studies that effectively contribute to building an experience, international. It is of real importance in the contemporary period, as a result of globalization, that concerns about society and health can overcome physical, cultural, religious or any other barriers. The foundation of sustainable health education programs is another preventative approach that is now increasingly detached from lesser concerns.

Following the Covid 19 pandemic, most medical and educational systems reported that the main elements that proved to be good practice were prevention and the short time to mobilize the system for crisis response. These two experiences or "lessons" learned can only prove effective if there is a fundamental health education. Already many developing and developed societies are building or reforming their own education system for curricular development conducive to health education. The beneficiaries of these educational programs are getting younger and younger and this aspect corresponds to the importance and long-term strategic thinking. Of course, any educational program requires a good theoretical foundation, a flexibly constructed methodology, a framework in which it can be carried out (dedicated and properly equipped spaces) but also a human resource prepared both in terms of the content to be transmitted and and from a pedagogical perspective. This human resource can be selected from the existing specialists at the moment, but the urgency with which this global need is required to be met may also present risks regarding the quality of the delivery of the educational process.

Starting from the inferences of the American scientist R. Havelak, regarding the specifics of innovation at the level of the education system, we delimit a series of strategies that would give sustainability to the field of health education:

- the research and development strategy is specific to global intentions, by highlighting the role of development and the extension of innovations. Research thus becomes an inseparable component at the educational level, because, as E. Faure pointed out, innovation in education does not occur automatically, but requires the imagination, preparation, simulation and stimulation of interventions with an applicative role, but in accordance with the competencies. specific targets;
- the social interaction strategy that promotes the continuous connection of the educational system with the social system;
- the strategy focused on solving problems highlights the interventionist role, specific to the research-action approach, when, through ad hoc but creative treatments, a series of functional defects can be avoided, by actual improvement;
- unitary and balanced strategies, functionally synchronized, with a role in detonating resistance to change, through a single legislative issue at regional level, constantly highlighting the innovative effects or quickly establishing appropriate correction systems, in order to transform institutions;
- substitution strategies that promote the idea of replacing disruptive elements that have occurred at the level of the education system;
- reshaping strategies, by transforming already existing structures or outdated interventionist tendencies (using a single textbook or a single teaching strategy vs. a single method of didactic interaction);
- restructuring strategies that involve a redesign of the workspace and a recalibration of interpersonal relationships, reducing resistance to change.

This suite of strategies highlights the need to identify solutions to promote the sustainability of education, through an analytical mediation of the effects of the economic crisis on education.

The desire for sustainable growth and innovative growth leads to the reunification of the efforts of the educational actors involved, by creating onsite and offsite learning contexts, with a role in facilitating the pedagogical skills of future health educators. In this way, the exchange of experience, mutual learning and cooperation is facilitated, using a series of tools tested by application in the relationship with students.

These methodological resources are to be materialized through dissemination in training courses or practical workshops, which will then be analyzed by the political factors involved in the enactment of educational policies.

The constant updating of the contents and their alignment with the socio-economic needs, determine that, in the elaboration of the health policies, to sustain the sustainability of some practices that to make the educational intervention more efficient.

In the field of global health, the implementation of any educational approach emphasizes the need to structure functional and productive contexts, constantly, giving stability to the process.

The initiation of research projects supports the need to develop functional national programs in line with domestic and international labor market interests, generating a robust public health system that supports the well-being of the population in a given region.

In order to streamline these approaches, in order to overcome possible deviations from these evolutionary goals, it is necessary to support the productivity of the actions initiated by the social actors involved and, especially, to support the interventionist actions themselves, such as action research.

Education and health professionals play an important role in streamlining practices aimed at improving the lifestyle of direct and indirect beneficiaries. Studies show that health education in the field of health education is syncopated in the training and acquisition of professional skills by graduates in the field of health education. In order to reduce the gap between role and outcomes, health educators need to be able to acquire real skills in the field of educating the population to implement a positive lifestyle, in the context of the social community and the family environment.

The realization of this desideratum determines the advancement of the tendency encountered among education / health professionals, to intervene in isolation, encouraging collaborative actions, bringing together the results and conclusions of their real interventions, having a significant positive impact on individual health, in particular and the general population.

In order to generate and maintain the indicators specific to maintaining the sustainability of regional development strategies, it is necessary to highlight the indicators that have a double role in supporting the subsequent policies in the field of health education: stability and flexibility.

This educational path highlights the role and effects of social actors in their professional practice: teachers - in the process of setting up and innovating teaching methodologies, and future health educators - in the process of implementing the acquired knowledge.

Initiating and maintaining meetings between members of the research communities catalyzes the launch of evidence-based education policies - as a solid basis for action, adjusting specific factors to reach a specific end state specific to maintaining a sustainable education. Thus, those professional skills associated with the needs and requirements of the labor market, have their roots in the constructivist study of educational practices.

There is a need for an integrated and unified approach, at the level of a multidisciplinary team, thus developing ideal opportunities for the development of specific patient care documents, useful to all professionals involved in this process. This goal supports the urgent need for coordination, production and delivery of quality educational documents and resources, based on concrete evidence. The approaches described above find their meaning and importance in the conditions of dissemination of results at the level of the multidisciplinary team, thus catalyzing the efforts towards the continuous development of professional skills in the field of patient care.

This idea supports the specificity of the meaning of sustainability, as we find it described in the literature: sustainability is materialized when it is maintained beyond a certain time and place (Moore et al., 2017; Pluye et al., 2004; Shelton and et al., 2018; Tricco et al., 2015; Yang et al., 2010).

5. Conclusions

Educational initiatives can lead to the development of sustainable strategies and frameworks, with a role in effectively addressing social inequalities related to health and, implicitly, education.

In order to develop regional development strategies and policies aimed at integrating the social inequalities found in the field of health education, it is necessary:

• reviewing educational objectives, through a reorientation of the intervention towards the formation of professional skills and the implementation of new educational acquisitions, in interaction with direct and indirect beneficiaries (patients, relatives, own family etc.);

- maintaining a transparent, continuous and fluent communication between the actors actively involved in the organization, development and implementation of educational programs;
- compatibility of educational programs with current needs in the education system vs. health, calibrating the effectiveness of treatment-type intervention;
- prevention of risks by educational organizations through the development of sustainable action research programs;
- achieving a certain level of stabilization of the organizational resources actively involved in the development of sustainable education programs (trained teachers, access to funding, endowment with teaching aids and tools, training and continuing education);
- sharing educational artifacts that may occur at the level of educational organization / respectively at the level of research program;
- initiating and carrying out events / interventions treatment specific to the process of implementing sustainable education programs;
- standardization of the rules regarding research programs, by issuing appropriate policies at state level, respectively at the level of educational organization;
- balancing the relationship between the costs associated with research programs and the rewards that may adequately motivate the actors actively involved in sustainable education programs.

For a constant anchoring of educational needs to the current conditions of economic development, it is necessary to support lifelong learning, perpetuating the correlation between the education system and social requirements. In this way, education becomes an adoptive lever, by adapting the content and training of future health educators, for a proper insertion in the labor market.

The decision makers involved in implementing an innovation have to face the final challenge in planning for when the implementation phase is completed. Clearly, not all innovations need to be continued, as circumstances, people, situations and problems change. Moreover, an assessment of effectiveness may find that an innovation does not operate outside of specific controlled conditions. However, the pursuit of innovation must become a primary goal if reality shows that it meets the needs of a target population.

Thus, sustainability seems to be a multidimensional concept of the process of continuation and the term includes a variety of forms that this process can take.

References:

- 1. Béchard, J.P., 2001. L'enseignement supérieur et les innovations pédagogiques: une recension des écrits. In: Vol. XXVII, 2001. Revue des sciences de l'éducation. Volume XXVII.
- 2. Boiron, M., 2022. L'innovation en question. En ligne sur: www.leplaisirdapprendre.com/ docs/ innovation en questions.pdf.
- 3. Bush, T., 2015. Leadership și management educațional. Teorii și practici. Iasi:Polirom.
- 4. Claquin, P., 1989. Sustainability of EPl: Utopia or Sine Qua Non Condition of Child Survival. REACH, Arlington, VA.
- 5. Cojocaru, V., 2004. Schimbarea în educație și schimbarea manageriala. Chisinău, Editura Lumina.
- 6. Cristea, S., 1996. Managementul organizației școlare. București: E.D.P.
- 7. Cucos, C., 2006. Pedagogie, ed. a II-a revizuită și adăugită. Iasi: Editura Polirom.

- 8. Denzin, N. and Lincoln, Y., 2000. Handbook of Qualitative Research. Second Edition. London: Sage.
- 9. Enachescu, V.A. and Trapiel, I.R., 2014. Change management in medical university education in Romania in the context of national and European development policies. Revista de Management Comparat International.
- 10. Epstein, R.M. and Hundert, E., 2002. Defining snd assessing professional competence. *Jama*, 287(2), pp. 226-235.
- 11. Flynn, B.S., 1995. Measuring community leaders' perceived ownership of health education programs: initial tests of reliability and validity. Health Education Research, 10, pp.27-36.
- 12. Galand, B. and Gillet, M.P., 2004. Le rôle du comportement de la direction dans l'enseignement professionnel des enseignants. Cahier de recherche du GIREF, No. 26. En ligne sur: https://www.uclouvain.be/cps/ucl/doc
- 13. Hassenforder, J., 1976. Inovația în învățământ. București: Editura Didactică și Pedagogică.
- 14. Huberman, L., 2005. Rapport annuel sur l'état et les besoins de l'éducation, 2004-2005. Le dialogue entre la recherche et la pratique en éducation: une clé pour la réussite.. [online] Available at: <www.cse.gouv.qc.ca/fichiers/ documents/publications/CEBE/50-0182-01.pdf> [Accessed 22 March 2022].
- 15. Iosifescu, Ş., 2001. Managementul educațional pentru instituțiile de învățământ. București: I.Ş.E.
- 16. Jackson, C., Fortmann, S.P., Flora, J.A., Melton, R.J., Snider, J.P. and littlefield, D., 1994. The capacity-building approach to intervention maintenance implemented by the Stanford Five-City Project. Health Education Research, 9, pp.385-396.
- 17. Lefebvre, R.C., 1990. Strategies to maintain and institutionalize successful programs: a marketing framework. In: Bracht, N. (ed.), Health Promotion at the Community Level. Sage: Newbury Park, CA.
- 18. Mamon, J.A., Shediac, M.C, Crosby, C.B., Celentano, D.D., Sanders, B. and Matanoski, G.M., 1991. Development and implementation of an intervention to increase cervical cancer screening in inner-city women. International Quarterly of Community Health Education, 12, pp.21-34.
- 19. Miclea, M., Vlăsceanu, L., Potolea, D. and Petrescu, P. (coord.), 2006. Nevoi și priorități de schimbare educațională în România – fundament al dezvoltării și modernizării învățământului preuniversitar. [online] Available <www.edu.ro/index.php/ genericdocs/8246> [Accessed 22 March 2022].
- 20. Oprea, C.L., 2006. Strategii didactice interactive. București: Editura Didactică și Pedagogică.
- 21. Păcurari, O., Târcă, A. and Sarivan, L., 2003. Strategii didactice inovative. Suport de curs. București: Editura Sigma.
- 22. Perron, M. and Lessard, C., 1993. La professionnalisation de l'enseignement et de la formation des enseignants: tout a-t-il été dit? Revue des sciences de l'éducation, Vol. XIX, 1, pp.5-32.
- 23. Petrescu, I., 1993. Managementul (ediția a doua revăzută și adăugată). Miercurea-Ciuc: Tipocart Brașovia.
- 24. Règimbald, A., 2022. Innovation sociale: définitions et caractéristiques. In: Innovations sociales en Outaouais. Rapport de recherche. [online] Available at: <www.uqo.ca/observer/ OrganisationCommunautaire/DevSocial/ Innovation.pdf> [Accessed 22 March 2022].

- 25. Rifkin, S.B., Muller, F. and Bichmann, W., 1988. Primary health care: on measuring participation. Social Science and Medicine, 26, pp.931-940.
- B.R., Slot, P.L. and Leseman, P., teachers'intercultural competences in teacher preparation programs and throught professional development. A review. Teaching and Teacher Education, 98.
- 27. Serdyukov, P., 2017. Innovation in education: what works, what doesn't and what to do about it? Journal of Research in Innovation Teaching &Learning, 10(1), pp. 4-33.
- 28. Steckler, A. and Goodman, R.M., 1989. How to institutionalize health promotion programs. American Journal of Health Promotion, 3, pp.34-44.
- 29. Yin, R.K., 1979. Changing Urban Bureaucracies: How New Practices Become Routinized. D.C. Heath, Lexington, MA.
- 30. Yukl, G.A. and Gardner, W.L., 2013. Leadership in Organisations, Global Edition. Pearson Education.

MODERN MODEL FOR ANALYSIS OF PERFORMANCE IN ROMANIAN CLOTHING INDUSTRY BASED ON ECONOMIC VALUE ADDED

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Abstract: The present article aims to present the analysis of the financial performance of the clothing industry in Romania through the economic value added or opportunity cost, as it is also called in the specialized literature. We consider the model as a topical and dynamic one because it takes into account financial data in order to measure performance and improve the future financial situation. The factors of economic value added have strong links in the productivity process of the company, so that they can be considered as basic elements in the efficiency of the managerial decisions and the increase of the performance. The results of the study undertaken on the analysis of the performance with the help of the economic value added are favorable, which means that the cause-effect relationship between the foundation of the best managerial decisions and the increase of the economic value added.

Key words: economic value added, clothing industry, result of operating activities, Cost of invested capital.

JEL Classification: O12, G32, F12.

1. Introduction

The management of the basic activity of the Romanian clothing industry is characterized by the ways of organizing the production in an efficient and effective way. It is materialized in the industry studied by series production and lohn type production, which can generate commercial contracts, in the form of processing contracts on orders or in lohn type regime.

The manufacture of a relatively large nomenclature of products periodically or in manufacturing batches of different sizes: small, medium or large is a feature of serial production (www.service-winmentor.ro). Within this type of production, the degree of specialization of the jobs that the companies offer is lower, compared to mass production and even different depending on the size of the manufacturing lots.

By turning the attention to the production of clothings by lohn, by a definition given by professor Alexandru Puiu (Puiu, 2003, p. 55), it turns out that processing in lohn system consists of an "international economic deal carried out on a contractual basis between two companies from different countries, in which one executes against a remuneration in money or in kind, of a custom product, made according to the models, drawings, usually with the raw materials and materials of the other company, which retains the right to market the respective product, under its own brand."

From the analysis of the economic performance resulting from the conclusion of a lohn contract, we can find certain advantages, both to the producer (performer) and to the beneficiary. The manufacturer, by executing the production in the lohn, can maintain the volume of the production, even if he does not have from his own sources of raw materials and materials for the realization of the finished product, but has the possibility to use his own techniques of manufacturing the products, because the beneficiary is interested only in the finished product. On the other hand, the benefit of the beneficiary from the conclusion of the contact in the lohn, appears due to its opportunity to increase the volume of the business without having to invest in the actual production, because it has the possibility to use the production capacity and labor force of the executor. In this way one can only deal with the sale of clothing, managing to obtain more favorable economic results.

The economic performance is influenced in the clothing industry in Romania and by the place of activity. In most cases, the activity is carried out in rented spaces, where only the rent is required, thus exempting the financial resources necessary for investments in own constructions. The low specialized personnel who work in the companies in the clothing industry have a negative influence on the economic performance due to the need for qualification in the workplace, which leads to the increase of the operating cost.

In addition, the economic performance and its implications in the managerial product of the clothing industry is influenced by the flexibility of the production, which expresses "the capacity of the production system within it, to react to the unforeseen events that require the modification of the products offered on the market, the identification of the nature of the products used. and / or the volume of the request" (Bărbulescu and Bâgu, 2002, p. 62).

We consider that the particularities of the economic performance in the Romanian clothing industry, due to the activities of manufacturing the clothings, require modern models of analysis and based on economic value added.

2. Literature Review

Economic Value Added - EVA, has ancient origins and was first discovered by Hamilton in 1877 and Marshall in 1890 (Petrescu and Apostol, 2009, p. 118). Hamilton and Marshall have shown in their research that a company is able to make a profit if it manages to make a bigger profit than its expenses and debts.

The researches in the analysis of the added value of the economy continued a century later when in 1961 appeared the work "Dividend Policy, Growth and the Valuation of Shares" written by Franco Modigliani and Merton Miller (1961, pp. 411-433), through which have shown that investment decisions are the main way to increase the value of companies and the price of shares.

However, the economic value added becomes popular only in 1991 with the emergence of the consulting firm Stern Steward Management Service in the United States of America (Henryani and Kusumastuti, 2013, p. 173).

The various research studies that discuss the economic value added (Trandafir, 2015, p. 37; Lin and Zhilin, 2008, p. 66; Sabol and Sverer, 2017, p. 21; Van der Poll, Booyse, Pienaar, Büchner and Foot, 2011, p. 123) considers that its role is to measure the financial performance achieved by a company and involves all available resources. Continuing to define the added economic value we can say that it is given by the researchers Bernard Morard and Florentina Olivia Balu (2009, p. 2) who considers that the added economic value is a business tool, which, if used correctly, helps to improve the company's performance and produces higher returns to stakeholders.

The Romanian professor Niculai Tabără together with Roxana Manuela Dicu (2007, p. 373) considers that the economic value added a financial management tool with which to take restraint measures regarding the company's strategy or even the guidelines, therefore it can be considered an indicator for measuring the overall performance at the company level.

In another opinion, Joel Stern, John Shiely and Irwin Ross (2001) believe that economic value added is not just a measure of financial performance, but an important part of the integrated financial management system, which leads to decision making, optimal as a result of a thorough analysis.

It is considered that the economic value added would have as main advantages the following (Daraban, 2017, p. 170; Berber, Pascula and Radosevic, 2012, pp. 83-84):

encourages long-term thinking at all levels of the company, changing the mentality of managers and employees in analyzing and measuring financial performance;

- contributes to improving the decision-making of stakeholders by the stakeholders, as a result of an efficient and effective analysis;
- the analysis of the added economic value presents as the main element the cost of capital. When the company is analyzed on the basis of the classical indicators, they appear to be profitable, although in reality they are not, therefore the added economic value will correct the errors that have appeared, unless the managers already use their own capital, in which case the tests are in vain;
- helps improve the performance of stocks and also adds more informational content to explain the profitability of stocks.

According to the study undertaken by Zhen-Jia-Liu (2018, p. 305), the economic value added is used for the economic value evaluation, the evaluation of the funds, the efficient allocation of resources and implies the use of adjustment elements to reflect the economic value of a company. At the same time, the economic value added is considered to be the only criterion that calculates the value of the company in real terms.

3. Research methodology

Based on the opinion of Narcyz Roztocki and Kim LaScola Needy (1999, pp. 2-4) determining the economic value added, it can be done in the following stages: Stage 1 -Examination of the financial data of the company, Stage 2 - Identification of the company capital, Stage 3 - Determining the result from the operational activity, Step 4 - Determining the cost of the invested capital, Step 5 - Determining the actual economic value added.

The most widely used method found in the literature (Grant, 2003, p. 5; Sharma and Kumar, 2010, p. 201; Kramer and Peters, 2001, p. 41), in order to determine the economic value added it is based on the calculation of the economic profit, as part of the Result from the operational activity that can be determined over a certain period of time, from which it is necessary to reduce the Cost of invested capital:

$$EVA = RAO - CCI \tag{1}$$

Therefore we can say that the EVA determination consists of two separate but related stages. The result from the operational activity is an indicator that can be found in the Income Statement, therefore it does not present problems in the determination. The problem, however, arises when determining the Cost of the invested capital that can be calculated by multiplying the Capital invested and the Weighted average Cost of the capital:

$$EVA = RAO - (IC \times CMPC) \tag{2}$$

Professor Vasile Burja (2013, pp. 516-517) shows that by discovering the formula, the calculation relation of the economic value added becomes in these cases:

$$EVA = \left(\frac{RAO}{IC} - CMPC\right) \times IC \tag{3}$$

By analyzing formula (3), the presence of the Return rate of the invested capital is ascertained, and following the deduction of the Cost of the invested capital it is obtained which shows the increase of the profitability produced by the operational activity of the Capital invested. Under these conditions, the economic value updated becomes:

(4)

$$EVA = (ROIC - CMPC) \times IC$$

In order to establish the significance of the variables according to which the economic value added (EVA) of formula (1) and (4) is determined, we present the table 1 with their calculation method:

Table 1. Factors specific to economic value added

Indicator	Calculation formula	Explanation
Result from the operational activity (RAO)	RAO = VO - ChO	Reflects the size of the profit or loss resulting from the basic activity, disregarding the interest and taxes recorded
Capital invested (IC)	IC = Cp + DTS + DTL	Reflects the amount of equity and payment obligations
Weighted average cost of capital (CMPC)	$CMPC = (\frac{Cp}{IC}) \times CCP + $ $(\frac{DTS + DTL}{IC}) \times CD \times (l - lp)$	Reflects the discount rate as a weighted average presented at market value, specifying the costs for all financing sources
Rate of return on invested capital (ROIC)	$ROIC = \frac{Rn}{IC}$	Reflects the performance and efficiency of the investments made by the stakeholders
Cost of capital invested (CCI)	$CCI = IC \times CMPC$	Reflects the recovery rate used in the allocation of capital resources invested

Source: Burja, V., 2013. Economic Value Added and Stakeholders' Interests. Annals of Faculty of Economics, University of Oradea, Faculty of Economics, 1(2), pp. 515-517.

where: VO - Operating income

ChO - Operational expenses

Cp - Equity

DTS - Short-term debt

DTL - Long-term debt

CCP - Cost of equity

CD - Cost of debts

Ip - Income tax

Rn - Net result for the financial year

The factors of influence of the added economic value can be presented as follows and by a synoptic diagram:

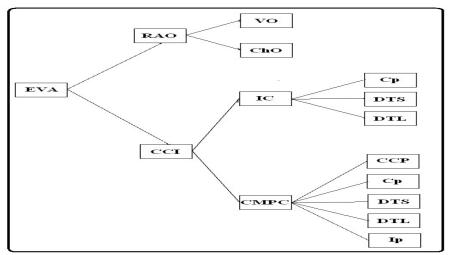


Figure 1. Factors of influence of the economic value added Source: Own processing

The measurement of the causal relation between the economic value added and the influence factors, is made on the basis of the factorial analysis. Therefore, the factors that influence the change of the economic value added are divided into two categories (Burja, 2009, p. 330):

A. The influence of the invested capital

$$\Delta EVA(IC) = \Delta IC x (ROIC_0 - CMPC_0)$$

B. The influence of debt on the return on invested capital (ÎROIC)

$$\Delta EVA(\hat{I}ROIC) = IC_I x [(ROIC_I - CMPC_I) - (ROIC_0 - CMPC_0)]$$

B.1. The influence of the average cost of the invested capital

$$\Delta EVA(CMPC) = -IC_1 \times \Delta CMPC$$

B.2. The influence of the return on invested capital

$$\Delta EVA(ROIC) = IC_I x \Delta ROIC$$

In order to present from a practical perspective how to determine the added economic value, we have chosen to study it at CONF Ltd. - the fictitious name of the company, in order to protect its identity. However, we mention that the company data is real, as it is active in the Romanian clothing industry and having CAEN - 1413 -Manufacture of other clothings (excluding underwear).

4. Results and Discussion

Using the data provided by CONF Ltd. in the following we present an empirical study to determine the economic value added, for which we have as analysis period the period 2014-2020. In order to illustrate in a detailed manner the size of the main economicfinancial indicators that influence the added economic value, present table 2:

Year Indicator symbol U.M. 2014 2015 2016 2017 2018 2019 2020 VO lei 41,870,946 36,235,389 38,372,171 32,855,138 32,441,245 37,706,603 38,352,081 ChO lei 36,616,229 33,555,040 35,256,287 32,754,849 30,785,662 36,076,600 37,716,963 Сp 8,587,267 8,793,858 9,193,284 7,140,654 7,946,399 8,799,795 8,906,532 lei CCP % 5.12 5.39 6.22 4.58 4.86 5.42 5.79 DTS 8,661,424 9,207,237 5,236,106 6,036,964 7,024,288 8,964,762 5,786,473 lei DTL 0 0 4,812,876 1,026,106 407,393 100,000 100,000 lei ChD lei 68,381 19,659 38,856 73,999 177,084 206,566 174,784 CD 2.94 % 4.98 2.01 5.39 12.04 11.92 16.48 555,360 Ιp lei 845,432 478,811 69,203 217,651 247,569 168,521 19,242,266 IC lei 17,248,691 18,001,095 14,203,724 15,378,080 17,864,557 14,793,005 CMPC % -4,918.80 -8,522.30 -1,849.80 -12,655 -20,691 -7,985.10 -21,136

Table 2. The level of economic and financial indicators at CONF Ltd.

Source: Own processing based on the financial statements of CONF Ltd.

where: ChD - Interest expenses

Following the analysis, we can observe an oscillating evolution both in the level of the operating income, the operational expenses, as well as the own capital. However, if we analyze the base period with the reference period, we find that the operating revenues decreased by 3,518,865 lei as a result of the increase of the operating expenses. We believe that the registered situation appeared due to the increase of productivity at CONF Ltd. from 2014 to 2020. The cost of equity and debt was estimated taking into account the asset valuation model - CAPM (Raquel Fonseca, 2017), using data from the financial market during the analysis period. We observe oscillating values of the capital invested in CONF Ltd. which means that it would be necessary to identify some methods that will lead to the increase of the own capital and the reduction of the debts regardless of their nature. Regarding the weighted average cost of capital, a negative percentage is observed from 2014 to 2020, which means that a sufficiently large amount has not been allocated for the financing or investment costs.

Using the financial data presented in the table 3, we determine the economic value added to the commercial company that studies the case obstruction for a period of 7 years:

Table 3. Determining the economic value added to CONF Ltd.

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Indicator				Year			
symbol	2014	2015	2016	2017	2018	2019	2020
CA	41,605,777	35,868,808	37,862,316	27.400.123	32,209,106	32,670,478	35,968,623
ROIC	0.50	0.25	0.27	0.12	0.10	0.89	0.21
RAO	5,254,717	2.680.349	3,115,884	100,289	1,655,583	1,630,003	635,118
CCI	-364,568,332,976	-88,543,786,086	-163,988,363,532	-26,274,048,655	-194,609,602,400	-369,635,548,887	-118,123,624,226
EVA	364,573,587,693	88,546,466,435	163,991,479,416	26,274,148,944	194,611,257,983	369,637,178,890	118,124,259,344

Source: Own processing based on Table 2

where: CA - Net turnover

We can see that the economic value added has values over 0 in all the 7 years analyzed, therefore we can say that the situation registered by CONF Ltd. is a favorable one. The net turnover of the trading company registered the highest value at the beginning of the analysis period, after which its fluctuations are observed as a result of the revenues from the sale of goods that were lower. However, stakeholders can be completely satisfied because the financial results of the company are positive and therefore the results of the economic value added can help them in analyzing and making investment decisions.

Comparing the economic value added with the operating profit registered by CONF Ltd. we observe a big difference equal to 118,123,624,226 lei in 2020, thus we can say that the analysis of the economic value added expresses the real situation from the perspective of the financial return to the company that is the object of the case study. The cost of the invested capital presents negative values from 2014 to 2020 which means that CONF Ltd. it does not involve the cost of not investing capital in other investments, but hopes to obtain higher incomes in the future. We believe that from the financial perspective the analyzed company is profitable, although the result from the operational activity decreased from the reference period compared with the basic one by 4,619,599 lei. The rate of return on invested capital decreased from 2014 to 2018, followed by an increase in 2019, which demonstrates a better return on invested capital. Therefore, we believe that for CONF Ltd., economic value added helps to sensitize those responsible with the operative activities regarding the global cost to the resources of financial nature made available.

As a result of determining the economic value added, we consider it appropriate to present the deviations of the specific factors of the economic value added in the table 4 in order to provide an overview of the factors of the presented model:

Table 4. The deviation of the specific factors of economic value added (±)

-lei-

Factor	Year					
symbol	2015/2014	2016/2015	2017/2016	2018/2017	2019/2018	2020/2019
RAO	-2,574,368	435.,35	-3,015,595	1,555,294	-25,580	-994,885
CCI	276,024,546,890	-75,444,577,446	137.714,314,877	-168,335,553,745	-175,025,946,487	251,511,924,662
EVA	-276,027,121,258	75,445,012,981	-137,717,330,472	168,337,109,039	175,025,920,907	-251,512,919,547

Source: Own processing based on Table 3

At first view, a fluctuating evolution of the specific factors of the economic value added can be observed. The result from the operational activity determined according to those presented in the previous section presents positive values in 3 of the analyzed periods and negative in the rest of the periods. So we can say that, CONF Ltd. in the period where the obtained values are positive they present a profit as a result of the clothing production activities. We consider it appropriate to analyze in detail the periods in which there is a loss from the operational activity, in order to identify precisely the causes that led to the existence of the operational expenses, over the size of the operating income. Regarding the cost of the invested capital, the recorded situation is approximately identical to that of the result from the operational activity, in the sense that some periods have positive values and the other negative values. We tend to believe that the analyzed trading company aims to restrict investments on assets that produce a higher return than the cost of invested capital. On the other hand, regarding the analysis of the deviation of the economic value added during the years 2014-2020, it notes that CONF Ltd. it presents negative values in three periods, which means that it records performance below the expected level, so that it fails to create value for the stakeholders.

In order to observe the mode of action of the factors that influenced the change of the economic value added to CONF Ltd., we present in detail the analysis in table 5:

Table 5. The influence of the specific factors of economic value added to CONF Ltd.

-lei-

Influences	Year					101
symbol	2015/2014	2016/2015	2017/2016	2018/2017	2019/2018	2020/2019
ΔEVA(IC)	15,903,187,146	6,105,382,208	-42,941,326,893	2,172,464,652	31,466,625,029	-63,556,216,113
ΔEVA(ÎROIC)	291,931,858,107.75	69,339,890,376.32	- 94,776,478,948.60	166,162,983,966.72	143,573,621,593.80	187,968,501,472.90
ΔEVA(CMPC)	-291,927,357,834	69,339,505,531	-94,774,348,390	166,163,230,016	143,559,580,052	-187,958,442,230
ΔEVA(ROIC)	-4,500,274	384.845	-2,130,559	-246,049	14,041,542	-10,059,243

Source: Own processing based on Table 3 and 4

From the analysis of the influence of the specific factors of the economic value added, the positive influence of all the factors is observed, only in the period 2016/2015 and 2019/2018. The influence of the cost of capital during the analysis periods illustrates increases and decreases in significant values, which are both positive and negative. We consider that this fact arises as a result of the debts that the analyzed company has during the analyzed period because it made some investments in order to modernize the work equipment. Regarding the influence of the degree of indebtedness on the return of the invested capital, it can be observed that in its turn it was affected in some periods by the average cost of the invested capital and the return on the invested capital. Therefore, we believe that the performance analysis by determining the indicator - economic value added, manages to meet the practical needs of the CONF Ltd., with the help of which new arguments can be established in order to establish the methods of increasing the financial performance.

5. Conclusions

Therefore, we have concluded that adding value within a company is the main objective of its operation, which tries to help satisfy the interests of the stakeholders. Following the reality research we have come to say that in order to achieve economic value added or created, it is necessary to properly manage the available resources so as to create a return on the invested capital, which is higher than the cost of the invested capital.

We consider the approach and debate of the financial performance analysis model based on the economic value created, as it represents a novelty in the economic perspective of the Romanian clothing industry.

The results of the empirical analysis are beneficial in presenting the image of the financial performance of the company, which according to the data presented by determining the economic value added is positive. From the analysis of the 7 years, we find that the year 2019 is the most beneficial after determining the economic value added because the lowest level of the cost of the invested capital is observed. The situation would have been even more beneficial if there had been a profit from the larger operational activity. However, there were in some period of the analysis presented some factors of influence of the economic value added that registered negative values, so the most suitable for CONF Ltd. it would be to try to reduce the cost of own capital as much as possible and to increase the size of the return on invested capital. In this way, the described trading company would be able to optimize its financial situation by maximizing the profit, which would allow to increase the company's performance.

We appreciate that all companies in the Romanian clothing industry should succeed in identifying methods that help maximize the economic value added by reorienting them to profitable activities. This mode would represent a rational investment strategy for shareholders, who will always choose investment projects that contribute significantly to increasing the economic value added. However, regarding the limitation of the model, we believe that the economic value added is an abstract indicator expressed in absolute figures, which allows it to be difficult to compare between multiple companies.

Finally, we believe that the indicator - economic value added plays an important role in companies because it helps to streamline the production process, make managerial decisions, as well as increase financial performance.

References:

- 1. Bărbulescu, C. and Bâgu, C., 2002, Managementul producției. Vol. I-II. București: Tribuna Economică Publishing.
- 2. Berber, N., Pascula, M. and Radosevic, M., 2012. Economic Value Added in Function of Determining Incentive Compensation Systems. Journal of Engineering Management and Competitiveness, 2(2), pp. 81-86.
- 3. Burja, C., 2009, Analiză economico-financiară. Aspecte metodologice și aplicații practice. Cluj-Napoca: Casa Cărților de Știință Publishing.
- 4. Burja, V., 2013. Economic Value Added and Stakeholders' Interests. Annals of Faculty of Economics, University of Oradea, Faculty of Economics, 1(2), pp. 512-
- 5. Classification of Activities in the National Economy, Code CAEN, Item 1413 -Fabricarea altor articole de îmbrăcăminte (exclusiv lenjeria de corp), 2020, Rev.
- 6. Daraban, M.C., 2017. Economic Value Added A General Review of the Concept. "Ovidius" University Annals, Economic Sciences Series, Vol. XVII, No. 1, pp. 168-173.
- 7. Fonseca, R., 2017. Capital Asset Pricing Model—A Structured Robust Approach. In: Sforza, A., Sterle, C. (eds) Optimization and Decision Science: Methodologies and Applications. ODS, Springer Proceedings in Mathematics & Statistics, Vol 217, Springer, Cham.
- 8. Grant, J., 2003, Foundations of Economic Value Added. 2nd Edition. New Jersey: John Wiley & Sons Inc. Publishing.
- 9. Henryani, F.F. and Kusumastuti, R., 2013. Analysis of Owership Structure Effect on Economic Value Added. International Journal of Administrative Science & Organization, 20(3).
- 10. Kramer, J.K. and Peters, J.R., 2001. An Interindustry Analysis of Economic Value Added as a Proxy for Market Value Added. Journal of Applied Finance, 11(2).
- 11. Lin, C. and Zhilin, O., 2008. What influence the company's Economic Value Added? *Management Science and Engineering Journal*, 2(1).
- 12. Liu, Z.J., 2018. Earings Management and Eonomic Value Added in China, African and Latinamerican Markes: A Study of Logistics Model, Support Vector Machines and Rough Set Theory. Journal of Economics, Finance and Accounting, 5(3).
- 13. Modigliani, F. and Miller, M., 1961. Dividend Policy, Growth and the Valuation of Shares. *The Journal of Business*, 34(4).
- 14. Morard, B. and Balu, F.O., 2009. Developing a Practical Model for Calculating the Economic Value Added. Journal of Economic Computation and Economic *Cybernetics Studies and Research*, 3(3).
- 15. Petrescu, S. and Apostol, C., 2009. Value Creation Analysis. Economic Value Added. *Theoretical and Applied Economics*, 5(5), pp. 118-123.
- 16. Puiu, A., 2003. Management internațional. Pitești : Ed. Independența Economică.

- 17. Roztocki, N. and LaScola, K., 1999. EVA for Small Manufacturing Companies, Society for Advancement of Management (SAM). International Management Conference, Las Vegas.
- 18. Sabol, A. and Sverer, F., 2017. A Review of the Economic Value added Literature and Application. UTMS Journal of Economics, Special Issue, 8(1).
- 19. Sharma, A. and Kumar, S., 2010. Economic Value Added (EVA) Literature Review and Relevant Issues. International Journal of Economics and Finance, 2(2).
- 20. Soft Consulting WinMENTOR, 2022. Productie în serie. [online] Available at: <www.service-winmentor.ro> [Accessed 18 January 2022].
- 21. Stern, J., Shiely, J. and Ross, I., 2001. The EVA Challenge: Implementing Value Added Change in an Organization. John Wiley & Sons.
- 22. Tabără, N. and Dicu, R.M., 2018. Indicatori de performanță în contextul reglementărilor contabile internaționale. EIRP Proceedings, Danubius University, Constanța, No. 2.
- 23. Trandafir, R.A., 2015. The Economic Value Added (EVA) A Measurement indicator of the Value Creation within a company from the Romanian Seaside Hotel Industry. Annals of the "Constantin Brâncuşi" University of Târgu Jiu, Economy Series, 1(1).
- 24. Van der Poll, H., Booyse, N., Pienaar, A.J., Büchner, S. and Foot, J., 2011. An overview of the implementation of Economic Value Added (EVATM) performance measures in South Africa. Southern African Business Review, 15(3).

UNSUSTAINABILITY OF ECONOMIC AND BUSINESS MODELS IN THE CONTEXT OF COVID-19

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Abstract: The impact of the Coronavirus pandemic on companies has highlighted the need to transform traditional supply chain models, their vulnerabilities, especially those that are highly dependent on raw materials or finished products in areas severely affected by the pandemic. The purpose of the article is to assess the negative impact of the COVID-19 pandemic, as well as the policies adopted to combat it, with a focus on the global supply chain and international trade. In this context, the pressure to which the elements of global supply chains and demand have been subjected has triggered a cross-border economic disaster due to their interconnection. Thus, this article proposes the adoption of the circular economy as a sustainable and innovative economic model, which can be used to decouple economic growth from resource consumption, waste management and create added value.

Key words: pandemic impact, resilience, global supply chain, transition, circular economy. Classification JEL: 012, Q50, Q53.

1. Introduction

The outbreak of the COVID -19 pandemic has led to the identification that various economic, public health, cybernetic, etc. systems, whose complexity and interdependence are high, become vulnerable due to their widespread use and record an irreversible and cascading failure. With the aim of achieving maximum efficiency, the design of these systems has neglected resistance to disruptions, the shocks of which may leave countries in a weak position. More specifically, the concentration of industrial capacity and economic activity in smaller and more efficient sectors, up to the international level, has produced extremely profitable but fragile supply chains and economic exchanges whose disruptions could have mature effects in unexpected areas.

The Covid-19 pandemic declared by the World Health Organization (WHO) on March 11, 2020, has spread rapidly in dozens of countries, and has led us to understand that we are part of a complex system of environmental, socio-political systems, and economic that we must constantly reconfigure generated by the non-financial business sector.

2. Literature review

A whole series of authors Baker et al., 2020; Basilaia and Kvavadze, 2020; Devakumar et al., 2020; Kraemer et al., 2020; Thunstrom et al., 2020; Toquero, 2020) showed that the effects of the pandemic ranged from a severe contraction in GDP in many countries to multidimensional environmental and social problems. In many respects, socioeconomic activities have stopped because many countries have been quarantined; borders have been closed, car / air industry, production and tourism have been paralyzed.

The COVID-19 pandemic has distorted the world's operational assumptions, revealing the lack of resilience of the dominant economic model to respond to shocks and crises (Pinner et al., 2020). She highlighted the weakness of over-centralization of complex global supply and production chain networks and the fragility of global economies, while highlighting the weak links between industries (Fernandes, 2020; Guan et al., 2020; Sarkis et al., 2020). This has had a direct impact on employment and increased the risk of food insecurity for millions of people due to roadblocks and border restrictions.

The socio-economic impact of the COVID-19 pandemic will be felt for a long time, and how severe and prolonged the recession will be depends on the depth of its socioeconomic implications. The IMF (2020) reported that in an unprecedented circumstance (except for the Great Depression), all economies, including developed, emerging and even developing, are likely to experience a recession. In the World Economic Outlook of April 2021, the IMF reversed its early forecast of global economic growth from 3.3% to -3%, an unusual downgrade of 6.3% over three months. This makes the pandemic a global economic shock that cannot be compared to any other since the Great Depression.

The cumulative loss of GDP in 2022 due to the COVID-19 pandemic could be around \$ 9 trillion, coupled with massive job losses and excessive income inequality, global poverty is likely to rise for the first time since 1998 (Mahler et al., 2020). It is estimated that approximately 49 million people could be pushed into extreme poverty due to the COVID-19 pandemic.

The United Nations Department of Economic and Social Affairs has concluded that the COVID-19 pandemic may also increase exclusion, inequality, discrimination and global unemployment in the medium and long term if not properly addressed using the most effective policy tools. The adoption of detailed universal social protection systems as a form of automatic stabilizers can play a long-term role in alleviating the prevalence of poverty and protecting workers (UN DESA, 2020).

3. The impact of the Covid-19 crisis on supply chains

The pandemic crisis has put pressure on the elements of global supply chains and demand, triggering a cross-border economic disaster due to the highly interconnected world. The concentration of industrial capacity and economic activity in smaller and more efficient sectors, up to the international level, has produced extremely profitable but fragile supply chains and economic exchanges whose disruptions could have major effects in unexpected areas. Countries with a 65% share of global production and exports (eg China, USA, Korea, Japan, France, Italy and the United Kingdom) were found to be the hardest hit by the pandemic. Also, as a result of the psychological impact of the pandemic due to uncertainties at the national level (for example, for limited equipment) and at the individual level (for example, for everyday consumer products), it was bought in a panic.

In both cases, the fragility, profitability and unsustainability of the existing supply chain model were exposed. Difficult access to goods and services are also good reasons for reassessing economic models.

Based on an analysis by the US Institute of Supply Management, 75% of companies reported disruptions in their supply chain, triggering crises that stemmed from a lack of understanding and flexibility of several elements of their global supply chain, such as and the lack of diversification in strategies. These disruptions affect both the exporting countries due to the lack of production for their local companies and the importing countries due to the unavailability of the procurement of raw materials. A first consequence of this is a significant decrease in the production of that country, region or city, which becomes a restricted area to supply anything other than essential products such as food and medicine.

This is due to the side effect of increasing China's dominance and importance in the global supply chain in the economy. As a result of the COVID-19 pandemic, the World Trade Organization (WTO) has estimated a 32% drop in global trade. For example, global trade has declined sharply due to declining imports from China and the subsequent decline in global economic activity, which is also reflected in global trade, which has fallen to more than 4%, contracting only for the second time since the middle of the year. 1980 (McKenzie, 2020). In Figure no 1 is a representation of the impact of the pandemic on global supply chains, based on different waves and levels of risk. Based on the difference between the supply delivery times subindex and the supply delivery times based on manufacturing output subindex.

Index of global supply chain disruptions (100=most disrupted) ■ Eurozone ■ U.S. ■ China ■ Emerging markets 80 60 40 20 0 -10 2019 2020 2021

Figure no. 1. The impact of the pandemic on global supply chains

Sources: IEA, 2021

Disruptions in their supply chain have triggered crises in their global supply chain, but there have also been declines in energy consumption, increases in air quality, a reduction in ambient noise and the consumption of raw materials. Thus, there have been significant decreases in energy consumption, for example in EU member states. (Figure 2). These reductions are beneficial for both the environment and human health.

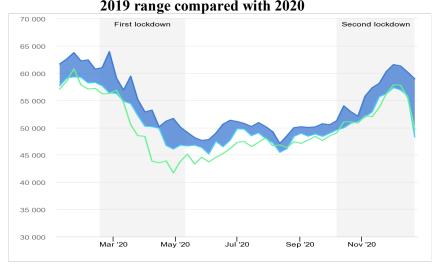


Figure no 2: Weekly electricity net generation in the European Union, 2015-2019 range compared with 2020

Sources: IEA, 2020

Ways to achieve decisive and fundamental structural changes in the current model of global economic growth

Rethinking the current model of global economic growth and moving from a system of linear economy and sustained by processes of profit generation and energy consumption, to a more sustainable model, recalibrated in the framework of the circular economy (EC), which plays multiple roles: decoupling economic growth from resource consumption, waste management and wealth creation was considered the best viable solution.

In Table no. 1 presents ways to move to a circular and viable economy, in the main sectors of activity.

Table no. 1: Ways to move to a circular and viable economy, in the main sectors of activity

Sector	Measure
Electricity	Expand and modernise grids Accelerate the growth of wind and solar PV Maintain the role of hydro and nuclear power Manage gas- and coal-fired power generation
Transport	New vehicles Expand high-speed rail networks Improve urban infrastructure
Buildings	Retrofit existing buildings and more efficient new constructions More efficient and connected household appliances Improve access to clean cooking
Industry	Improve energy efficiency and increase electrification Expand waste and material recycling
Fuels	Reduce methane emissions from oil and gas operations Reform fossil fuel subsidies Support and expand the use of biofuels
Strategic opportunities in technology innovation	Hydrogen technologies Batteries Small modular nuclear reactors Carbon capture, utilisation and storage

Consequently, in order to achieve a climate-neutral, resource-efficient, resourceefficient and waste-reducing circular economy, it is necessary to establish principles of sustainability and other appropriate ways to address the following issues:

- improving the sustainability of products and the potential for reuse, updating and repair, controlling the presence of hazardous chemicals in products and increasing the efficiency of products in terms of energy consumption and resource use;
- increasing the content of recycled materials in products, while ensuring their performance and safety;

- ensuring that products can be remanufactured and recycled at a high quality level;
- reducing the carbon footprint and the environmental footprint;
- restricting disposable products and combating premature obsolescence;
- the introduction of a ban on the destruction of durable goods that have not been sold;
- · stimulating "product-as-a-service" business models or other models in which manufacturers retain ownership of the product or are responsible for its operation throughout the entire product life cycle;
- mobilizing the potential for digitization of product information, including solutions such as passports, labels and digital watermarks;
- rewarding products based on their sustainability performance, including providing incentives for high levels of performance.

Priority will be given to electronic products, ICT products, textiles and intermediate products with a high environmental impact and high circularity potential, such as steel, cement and chemicals.

5. Conclusions

The Covid-19 pandemic crisis has shown how important it is to maintain resource reserves, given the interdependence of economies and social systems.

An integrative, circular economy helps to identify the key factors in the interactions and dynamics of the economic, social and environmental mix. Thus, the importance of the system's resistance to a variety of shocks and stresses allows the systems to regain lost functionality and adapt to new conditions.

Thus, there is a need for structural change, an acceleration of the transition to a circular economy, because the dependence on globalization and economic growth, ways of green investment and sustainable development are no longer considered viable solutions.

References:

- 1. Baker, S.R., Bloom, N., Davis, S.J., Terry, S.J., 2020. Covid-induced economic uncertainty. National Bureau of Economic Research.
- 2. Baldwin, R. and Evenett, S., 2020. Covid-19 and Trade Policy: Why turning inward won't work. London: CEPR Press.
- 3. Bauwens, T., Hekkert, M. and Kirchherr, J., 2020. Circular futures: what will they look like? Ecological Economics, 175, 106703.
- 4. Braungart, M., McDonough, W. and Bollinger, A., 2007. Cradle-to-cradle design: creating healthy emissions – a strategy for eco-effective product and system design. Journal of Cleaner Production, 15, pp.1337-1348.
- 5. Bretscher, L., Hsu, A. and Tamoni, A., 2020. The supply channel of uncertainty shocks and the cross-section of returns: evidence from the COVID-19 crisis.
- 6. IEA, 2020. Global Energy Review 2020: The impacts of the COVID-19 crisis on global energy demand and CO2 emissions. International Energy Agency, IEA Publications, pp. 1–56.
- 7. Kraemer, M.U., Yang, C.-H., Gutierrez, B., Wu, C.-H., Klein, B., Pigott, D.M., du Plessis, L., Faria, N.R., Li, R. and Hanage, W.P., 2020. The effect of human mobility and control measures on the COVID-19 epidemic in China. Science, 368, pp.493–497.
- 8. Laing, T., 2020. The economic impact of the Coronavirus 2019 (Covid-2019): Implications for the mining industry. The Extractive Industry and Society, 7(2), pp. 580-582.

- 9. Le Quéré, C., Jackson, R.B., Jones, M.W., Smith, A.J., Abernethy, S., Andrew, R.M., De- Gol, A.J., Willis, D.R., Shan, Y. and Canadell, J.G., 2020. Temporary reduction in daily global CO 2.
- 10. Temmerman, S., Meire, P., Bouma, T.J., Herman, P.M., Ysebaert, T. and De Vriend, H.J., 2013. Ecosystem-based coastal defence in the face of global change. *Nature*, 504, pp.79–83.
- 11. Thunstrom, L., Newbold, S., Finnoff, D., Ashworth, M. and Shogren, J.F., 2020. The benefits and costs of flattening the curve for COVID-19.

HOW THE MOST PROFITABLE COMPANIES OPERATING IN **ROMANIA EVOLVED IN THE PERIOD 2017-2020**

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Abstract: After the fall of the Berlin Wall, the former East-European communist countries made significant efforts to shift from a centrally planned economic system to a market economic system. The challenge of surpassing their economic backwardness in comparison with the Western countries imposed the design and implementation of several key processes such as privatisation or liberalisation. The objectives of the paper are to briefly define the concepts of company and profit and analyse the evolution of the most profitable companies operating in Romania in the period 2017-2020. To reach these objectives the authors used a quantitative research methodology based on secondary data research. The results of the paper show the existence of strong competition among Romanian and foreign companies for economic supremacy in terms of profit.

Keywords: company, profit, business, Romania.

JEL Classification: L29, M00.

1. Introduction

Signed in 1939, the Ribbentrop-Molotov pact had tremendous effects on European history. Several countries suffered the loss of territories, such as Poland and Romania (Gross, 1989). The end of the Second World War consecrated the clear distinction between two separate economic systems and political regimes: capitalism and communism. The communist system was seen as "an exchange process between two partners: the communist leaders and the people" (Yong, 1992). It provided few of the main civil liberties (e.g., an independent press, free speech) specific to the capitalist system but offered its citizens a rather high level of social welfare (White, 1986).

In Central and Eastern Europe (CEE), the populations of several countries (e.g., Poland, Romania, Hungary, Czechoslovakia) were constrained to live behind the so-called "Iron Curtain" (Naimark and Gibianskii, 2018). The Union of Soviet Socialist Republics (USSR) imposed political leadership in all these countries. However, there were different levels of totalitarianism that held captive significant masses of people in these countries and specific postwar paths of economic reforms and social modernization (Batt, 1991).

At the end of 1947, the Romanian government led by the communist Petru Groza forced King Michael of Romania to resign. Soon thereafter a new constitution was adopted in 1948 and the Romanian People's Republic was proclaimed. As in the USSR, the communists took political power and rapidly introduced a totalitarian regime in Romania. The Romanian Communist Party (RCP) became the single political party in Romania. Gheorghe Gheorghiu-Dei, appointed the leader of RCP by Joseph Vissarionovich Stalin, designed and began the implementation of a policy of industrialization and, therefore, endured later virulent criticism from the part of the USSR (Stanciu, 2013).

In 1965, a new constitution heralded the new name of the country, the Socialist Republic of Romania. Under Nicolae Ceausescu's rule, Romania made huge efforts to pass from an agricultural country to an industrialized one. In this respect, approximately 50% of the total investments were designated for the industrial sector at the end of the 1970s (Staar, 1982). The central planning economic system was designed to develop the industrial base of the Romanian economy as rapid industrialization constituted a strategic aim of the communist regime. This is why impressive levels of investment growth were sustained by the communist regime (Pop, 2006). Thus, "the "command economy" model proved itself to be a successful vehicle for mobilizing resources for the transformation from agricultural to industrial society" (Crowther, 1988, p.148).

After the breakdown of the communist regimes in CEE and the fall of the Berlin Wall the capitalist system became quasi-omnipresent all over the world. However, many problems arise with regard to restructuring the economy and privatising the state-owned enterprises in the former communist countries (Williams and Reuten, 1993). The deteriorating economic situation was inherent in the early stages of the transition to democratic capitalism (Duch, 1995) and a market economy.

In Romania, the violent collapse of the Ceausescu regime in December 1989 contrasted with the "velvet revolutions" from other countries located in CEE. The process of consolidating political democracy and creating a market economy proved to be slower than in other former communist countries. It is said that after the first post-communist decade Romania found itself "lagging behind other CEE countries in implementing the reforms necessary to complete the transition from a one-party state and command economy to a pluralist democracy and a fully functioning market economy" (Light and Phinnemore, 2001, p.5). In its endeavour to overcome significant economic backwardness in comparison with the Western countries, Romania finally understood the need to follow the path of privatisation and liberalization. Consequently, private business organizations, especially small and medium-sized enterprises (SMEs), emerged and developed in various domains, such as commerce, construction, services and industry. At the end of 1990, around 100,000 SMEs operated in Romania (Ben-Ner and Montias, 1991) alongside big companies.

The objectives of the paper are to briefly define the concepts of company and profit and analyse the evolution of the most profitable companies operating in Romania in the period 2017-2020. In this view, a quantitative research method was used. The structure of the paper is as follows. The literature review is illustrated in the next chapter. The third chapter presents the research methodology. Results and discussion are displayed in the following chapter. The last part of the paper exhibits the conclusions.

2. Literature review

During the time, the concept of company has gained attention from a plethora of people such as researchers and practitioners. It has emerged a long time ago and been studied from various perspectives. Without an agreed-upon definition, the company is:

- "a form of organizing a business, with a legal personality distinct from the individuals taking part in it" (Black, 1997, p.69).
- "a business organization, a group of people organised to buy, sell or provide a service, usually for profit" (Collin, 2006, p.73).
- "a formal business enterprise that is set up to make a profit" (US AG 24, 2008, p.11).
- "a corporate enterprise that has a legal identity separate from that of its members; it operates as one single unit, in the success of which all the members participate" (Law, 2016, p.1).
- "the legal entity that is used when people set up a business" (British Council, 2019, p.1).
- "a legal entity formed by a group of individuals to engage in and operate a business- commercial or industrial- enterprise" that "may be organized in various ways for tax and financial liability purposes depending on the corporate law of its jurisdiction" (Kenton, 2021, p.1).

- an association of persons for carrying on a commercial or industrial enterprise" (Merriam-Webster Dictionary, 2022a, p.1).
- a business organization that makes, buys, or sells goods or provides services in exchange for money" (The Britannica Dictionary, 2022a, p.1).

In short, the term "company" is defined in various ways as it seems to be a rather complex notion. Based on these above-mentioned definitions several of its features may be underlined as follows:

- As a business organization, a company makes products and/or provides services, sells or buys them.
- Through the deployment of commercial activities a company makes money and aims at obtaining profit.
- As an association of people, a company has a legal personality and identity distinct from that of its members.

In its turn, profit is defined as:

- "the income which accrues to the entrepreneur, i.e. residual left after payment of all opportunity costs to the inputs he employs" (Bannock et al., 1977, p.331).
- "an excess of the receipts over the spending of a business during any period" that "includes (Black, 1997, p.373).
- "money gained from a sale which is more than the money spent on making the item sold or on providing the service offered" (Collin, 2006, p.318).
- the excess of returns over expenditure in a transaction or series of transactions" or "the compensation accruing to entrepreneurs for the assumption of risk in business enterprise as distinguished from wages or rent" (Merriam-Webster Dictionary, 2022b, p.1)
- "money that is made in a business, through investing, etc., after all the costs and expenses are paid: a financial gain" (The Britannica Dictionary, 2022b, p.1).

In essence, the term "profit" designates the financial gain of a company after the selling of products and/or services and the payment of all its costs and expenses.

The roots of the market economy appeared in Romania at the beginning of the 1990s. New values and ideas about "privatisation, restructuring, market orientation, strategic management, individual responsibility and entrepreneurialism" (Kelemen, 1999, p.200) became predominant (Marinescu and Toma, 2013; Toma et al., 2015; Grădinaru et al., 2017; Marinescu et al., 2017a; Marinescu et al., 2017b; Tohănean et al., 2018; Grădinaru et al., 2020a). Inspired by illustrious American businessmen and leaders like Sam Walton, Larry Page, Jeff Bezos and Mark Elliott Zuckerberg (Toma, 2013; Săseanu et al., 2014; Toma et al., 2017; Grădinaru et al., 2020b; Catană et al., 2020; Catană et al., 2021), a plethora of entrepreneurs, from both Romania and abroad, established numerous businesses in different fields of activity.

The joint-stock companies and limited liability companies are predominant in the Romanian economy (Toma and Catană, 2022). Alongside the indigenous companies, several subsidiaries of multinational and transnational corporations are operating within the Romanian economic landscape. The evolution of the most profitable of them in the period 2017-2020 is analysed in this paper.

3. Research methodology

In order to attain the objectives of the paper, the authors carried out a quantitative research method through desk research. Thus, they identified, collected, analysed, and synthesized diverse information from numerous secondary sources of data, such as articles, and books found in both electronic databases and libraries.

4. Results and discussion

This chapter of the paper analyses the evolution of the ten most profitable companies operating in Romania during the period 2017-2020. In 2017, OMV Petrom dominated the top of the largest companies operating in Romania by profit (Table no. 1). Located in Bucharest, it is part of the former Österreichische Mineralölverwaltung Aktiengesellschaft (ÖMV Aktiengesellschaft, renamed OMV in 1995), an Austrian company established in 1956.

Table no. 1. The ten largest companies operating in Romania by profit in 2017

No.	Company	Profit (Mlei)
1	OMV Petrom	2,399.9
2	Romgaz	1,854.7
3	Hidroelectrica	1,359.7
4	Dedeman	889.1
5	Continental Automotive Products	697.5
6	Kaufland România	670.3
7	Transgaz	582.1
8	Automobile-Dacia	539.1
9	Rompetrol Rafinare	418.3
10	Lidl Discount	352.8

Source: Ciriperu, 2019

The above-mentioned ten largest companies operate in different domains as follows:

- five companies (OMV Petrom, Romgaz, Hidroelectrica, Transgaz, Rompetrol Rafinare) are from the energy production and distribution sector;
- three companies (Dedeman, Kaufland România, Lidl Discount) are from the retailing sector;
- two companies (Automobile-Dacia, Continental Automotive Products) are from the automotive industry.

In 2018, OMV Petrom remained the largest company operating in Romania by profit (Table no. 2). It was followed by two Romanian state-owned companies: Hidroelectrica and Romgaz.

Table no. 2. The ten largest companies operating in Romania by profit in 2018

No.	Company	Profit (Mlei)
1	OMV Petrom	3,879.7
2	Hidroelectrica	1,939.3
3	Romgaz	1,360.5
4	Dedeman	1,013.1
5	Continental Automotive Systems	852.5
6	Kaufland România	788.7
7	Automobile-Dacia	752.4
8	Continental Automotive Products	581.6
9	Transgaz	495.7
10	Engie România	455.9

Source: Ciriperu, 2021

The above-mentioned ten largest companies operate in different domains as follows:

- five companies (OMV Petrom, Hidroelectrica, Romgaz, Transgaz, Engie România) are from the energy production and distribution sector;
- three companies (Continental Automotive Systems, Automobile-Dacia, Continental Automotive Products) are from the automotive industry;
- two companies (Dedeman, Kaufland România) are from the retailing sector. In 2019, OMV Petrom kept its first place at the top of the largest companies operating in Romania by profit (Table no. 3). It was followed by two Romanian companies: Hidroelectrica and Dedeman.

Table no. 3. The ten largest companies operating in Romania by profit in 2019

No.	Company	Profit (Mlei)
1	OMV Petrom	3,563.6
2	Hidroelectrica	1,386.5
3	Dedeman	1,282.3
4	Romgaz	1,046.4
5	Kaufland România	847.7
6	Automobile-Dacia	662.7
7	Nuclearelectrica	535.7
8	J.T. International România	500.1
9	Lidl Discount	491.4
10	OMV Petrom Marketing	442.8

Source: Ciriperu, 2022

The above-mentioned ten largest companies operate in different domains as follows:

- four companies (Dedeman, Kaufland România, Lidl Discount, OMV Petrom Marketing) are from the retailing sector;
- four companies (OMV Petrom, Hidroelectrica, Romgaz, Nuclearelectrica) are from the energy production and distribution sector;
- one company (Automobile-Dacia) is from the automotive industry;
- one company (J.T. International România) is from the tobacco industry.

The year 2020 witnessed a change of the leader: Dedeman became the largest company operating in Romania by profit (Table no. 4). It was followed by Hidroelectrica and OMV Petrom. Located in Bacău, Dedeman activates in the retailing sector. This private company was founded in 1992.

Table no. 4. The ten largest companies operating in Romania by profit in 2020

No.	Company	Profit (Mlei)
1	Dedeman	1,454.4
2	Hidroelectrica	1,451.6
3	OMV Petrom	1,381.6
4	Romgaz	1,278.9
5	Kaufland România	970.4
6	Lidl Discount	756.4
7	Nuclearelectrica	699.3
8	J.T. International România	690.5
9	Engie România	498.4
10	Continental Automotive Products	465.4

Source: Ciriperu, 2022

The above-mentioned ten largest companies operate in different domains as follows:

- five companies (Hidroelectrica, OMV Petrom, Romgaz, Nuclearelectrica, Engie România) are from the energy production and distribution sector;
- three companies (Dedeman, Kaufland România, Lidl Discount) are from the retailing sector;
- one company (J.T. International România) is from the tobacco industry;
- one company (Continental Automotive Products) is from the automotive industry. In sum, the analysis of the evolution of the ten most profitable companies operating in Romania in the period 2017-2020 leads to the following main results:
 - Multinational and transnational corporations (e.g., OMV) dominated the Romanian economic landscape.
 - OMV Petrom preserved its first position during the period 2017-2019. It was dethroned by Dedeman in 2020.
 - The companies from the energy production and distribution sector and the retailing sector dominated the top. They were followed by the companies from the automotive industry and the tobacco industry.

5. Conclusions

Since the collapse of the communist regime in December 1989, the Romanian economy has passed through several phases on its way to a market economy. In this regard, numerous private companies appeared and developed in Romania.

The paper shows that the top of the largest Romanian companies operating in Romania in the period 2017-2020, in terms of profit, has been dominated by the subsidiaries of multinational and transnational corporations. Thus, OMV Petrom, part of OMV Group, has maintained its first position during the period 2017-2019. However, Dedeman succeeded in holding the first position in 2020.

References:

- 1. Bannock, G., Baxter, R. E., Rees, R., 1977. The Penguin Dictionary of Economics. Harmondsworth: Penguin Books.
- 2. Batt, J., 1991. The end of communist rule in East-Central Europe: A fourcountry comparison. Government and Opposition, 26(3), pp.368-390.
- 3. Ben-Ner, A. and Montias, J. M., 1991. The introduction of markets in a hypercentralized economy: The case of Romania. Journal of Economic *Perspectives*, 5(4), pp.163-170.
- 4. Black, J., 1997. Dictionary of Economics. Oxford: Oxford University Press.
- 5. British Council, 2019. 100-word entrepreneurial glossary. [online] Available https://lafabrica.umayor.cl/images/entrepreneurship-glossary.pdf [Accessed 11 April 2022].
- 6. Catană, S., Grădinaru, C. and Toma, S.-G., 2020. Sam Walton, a visionary entrepreneur. Network Intelligence Studies, 16, pp.113-117.
- 7. Catană, Ş., Toma, S.-G. and Grădinaru, C., 2021. Larry Page and Internet entrepreneurship. Ovidius University Annals: Economic Sciences Series, XXI(2), pp.239-243.
- 8. Ciriperu, D., ed., 2019. Top 1000 cele mai mari companii din România. Bucharest: Mediafax Group.
- 9. Ciriperu, D., ed., 2021. Top 1000 cele mai mari companii din România. Bucharest: Mediafax Group.
- 10. Ciriperu, D., ed., 2022. Top 1000 cele mai mari companii din România. Bucharest: Mediafax Group.

- 11. Collin, P. H., 2006, *Dictionary of Business*, 4th edition, London: A & C Black, Available [online] <file:///C:/Users/Admin/Downloads/Dictionary of Business.pdf> [Accessed 10] April 2022].
- 12. Crowther, W. E., 1988. The Political Economy of Romanian Socialism. New York, NY: Praeger.
- 13. Duch, R. M., 1995. Economic chaos and the fragility of democratic transition in former communist regimes. *The Journal of Politics*, 57(1), pp.121-158.
- 14. Grădinaru, C., Toma, S.-G. and Papuc, R., 2017. Entrepreneurship in the world: The analysis of the Global Entrepreneurship Index in the period 2015-2017. Ovidius University Annals: Economic Sciences Series, XVII(2), pp.14-18.
- 15. Grădinaru, C., Toma, S.-G., Catană, S. and Zainea, L. N., 2020a. The National Entrepreneurship Context Index in the period 2018-2020: An overview. Annals of Constantin Brâncuși University of Târgu Jiu, Economy Series, 20(5), pp.222-227.
- 16. Grădinaru, C., Toma, S.-G., Catană, Ş. and Andrisan, G., 2020b. A view on transformational leadership: The case of Jeff Bezos. Manager, 31(1), pp.93-100.
- 17. Gross, J. T., 1989. Social consequences of war: Preliminaries to the study of imposition of communist regimes in East Central Europe. Eastern European *Politics and Societies*, 3(2), pp.198-214.
- 18. Kelemen, M., 1999. The myth of restructuring, 'competent' managers and the transition to a market economy: A Romanian tale. British Journal of Management, 10, pp.199-208.
- 19. Kenton, W., 2021. What is a company? Investopedia, 10.09.2021. [online] Available at: < https://www.investopedia.com/terms/c/company.asp> [Accessed 3 April 2022].
- 20. Law, J., ed., 2016. A Dictionary of Business and Management. 6th edition. Oxford: Oxford University Press. [online] Available https://www.oxfordreference.com/view/10.1093/acref/9780199684984.001.000 1/acref-9780199684984-e-1312?rskey=CwmN7J&result=1363> [Accessed 4 April 20221.
- 21. Light, D. and Phinnemore, D., eds., 2001. Post-Communist Romania: Coming to Terms with Transition. Basingstoke: Palgrave.
- 22. Marinescu, P. and Toma, S.-G., 2013. Training programs- Training and development alternatives for students. Procedia Economics and Finance, 6, pp.306-312.
- 23. Marinescu, P., Toma, S.-G., Miulescu, G.-F. and Grădinaru, C., 2017a. Entrepreneurship: from education to innovation. *Manager*, 26, pp.146-156.
- 24. Marinescu, P., Toma, S.G., and Dogaru, I., 2017b. Acquiring leadership skills through extracurricular activities in the academic environment: The case of the Faculty of Administration and Business, University of Bucharest. European Conference on Management, Leadership & Governance, pp.306-312. [online] Available https://www.proquest.com/openview/22dae04f4114faa00517545b58b54532/1. pdf?pq-origsite=gscholar&cbl=1796418> [Accessed 2 April 2022].
- 25. Merriam-Webster Dictionary, 2022a. Company. [online] Available at: https://www.merriam-webster.com/dictionary/company [Accessed 1 April 2022].

- 26. Merriam-Webster Dictionary, 2022b. *Profit*. [online] Available at: https://www.merriam-webster.com/dictionary/profit [Accessed 2022].
- 27. Naimark, N. and Gibianskii, L., eds., 2018. The Establishment of Communist Regimes in Eastern Europe, 1944-1949. London: Routledge.
- 28. Pop, L., 2006. Democratising Capitalism? The Political Economy of Post-Communist Transformations in Romania, 1989-2001. Manchester: Manchester University Press.
- 29. Săseanu, A.-S., Toma, S.-G., Marinescu, P., 2014. Feminine leadership and organisational culture. *Manager*, 19(1), pp.144-150.
- 30. Staar, R. F., 1982. Communist Regimes in Eastern Europe. 4th ed. Stanford, CA: Hoover Institution Press.
- 31. Stanciu, C., 2013. Communist regimes and historical legitimacy: Polemics regarding the role of the Red Army in Romania at the end of the Second World War. European Review of History, 20(3), pp.445-462.
- 32. The Britannica Dictionary, 2022a. Company. [online] Available at: https://www.britannica.com/dictionary/company [Accessed 7 April 2022].
- Britannica Dictionary, 2022b. *Profit.* [online] Available https://www.britannica.com/dictionary/profit [Accessed 7 April 2022].
- 34. Tohănean, D., Toma, S.-G. and Dumitru, I., 2018. Organizational performance and digitalization in industry 4.0. Journal of Emerging Trends in Marketing and Management, 1(1), pp.282-293.
- 35. Toma, S.-G., 2013. Economia Întreprinderii. Bucuresti: Editura Universitătii din Bucuresti.
- 36. Toma, S.-G., Marinescu, P. and Grădinaru, C., 2015. Strategic planning and strategic thinking. Revista Economică, 68(5), pp.168-175.
- 37. Toma, S.-G., Marinescu, P. and Grădinaru, C., 2017. Successful entrepreneurs: Mark Eliott Zuckerberg. Manager, 26, pp.157-162.
- 38. Toma, S.-G. and Catană, Ş., 2022. The evolution of the largest companies operating in Romania in the period 2016-2020. Strategii Manageriale, XIV(2), pp.155-162.
- 39. US AG 24, 2008. Business Law Dictionary. [online] Available at: https://www.usag24.com/doc/Business Law Dictionary 2008.pdf [Accessed 2 April 2022].
- 40. Yong, H., 1992. An economic approach to communist regimes. Kyklos, 45(3), pp.393-406.
- 41. White, S., 1986. Economic performance and communist legitimacy. World Politics, 38(3), pp.462-482.
- 42. Williams, M. and Reuten, G., 1993. After the Rectifying Revolution: The contradictions of the mixed economy? Capital & Class, 49, pp.77-112.

EFFECTS OF INTERNAL CONTROL SYSTEM ON CREDIT RISK AND FINANCIAL PERFORMANCE OF THE MOLDOVAN BANKS

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Abstract: The research represents a microeconomic investigation of the control system in the Republic of Moldova's banking sector. The objective of this work is to examine the relationship between the internal control system, credit risk and financial performance of banks from the Republic of Moldova. The study is carried out based on the data of eleven banks that are part of the Moldovan banking system, for the period 2017 - 2021, being analyzed three different regression models. This study includes a strong quantitative research in which the dependent variables represented by the share of non-performing assets in total loans, return on equity and return on assets are used to test the relationship with the independent variables. Therefore, the independent variables considered are representative indicators of the five elements of the internal control (control environment, risk assessment, control activities, monitoring, information and communication systems), according to the Committee of Sponsoring Organizations of the Treadway Commission. The results identified the formation of relationships between the internal control system and credit risk, as well as its impact on the financial performance of the Moldovan Banks, thus accepting the alternative hypotheses of the study. Concomitantly, the results were compared with studies related to the subject investigated by other researchers.

Keywords: financial performance, credit risk, banking system, internal control. JEL Classification: G21, M42.

1. Introduction

The stability of the Republic of Moldova's banking system is essential for the well functioning and sustainable development of the country's economy. Currently, the highly competitive financial sector forces banks to make the most efficient use of their resources. This fact urges bank management and decision-makers to compare bank activities with the other competing banks' activities (Dogan, 2013). Based on the internal control objectives, the bank's stability and profitability depends to a large extent on its ability to manage its assets, the amount of equity and the probability of incurring losses (Amissah, 2017). Banks' equity capital is often insufficient to operate efficiently, especially to make a profit. Given the high level of interbank lending, ensuring a sufficient level of profitability of banking activities becomes particularly relevant. In the context of the many challenges faced by the Moldovan banking system over the past few years, it has continued to record a satisfactory financial performance, and has maintained strong profitability and solvency positions. However, the subject addressed is of major importance and topical relevance to the Republic of Moldova, as the banking internal control system requires continuous development. A poorly developed internal control system may affect banks' ability to detect fraudulent activities and subsequently lead to a decline in their performance (Adeyemi, and Adenugba, 2011). However, the appropriate internal control management models and practices will significantly mitigate potential risks. Therefore, could be avoided various problems such as: loss of investor funds, loss of employee welfare, customer dissatisfaction, disputes over company growth, reputational damage and insolvency (Gamage, Lock and Fernando, 2014). Financial performance, however, represents a measure of the bank's strategic risk management, which also characterizes the implementation of bank's the plans that have been developed to achieve its strategic objectives (Yushkova, 2017). It should be noted that there has not been identified any research on the impact of the internal control system on the financial performance of the Republic of Moldova's banking sector, which is to be investigated primarily in this study. However, the scope of the research does not provide findings that could be generalized. In addition, the study provides suggestions on how the financial performance of banks could be improved. Thus, the purpose of this paper is to examine the relationship between the internal control system, credit risk and financial performance of banks in the Republic of Moldova through the financial indicators: return on assets (ROA) and return on equity (ROE). Limitations of the research include methodology and data, affected by the fact that only a part of banks have published detailed aspects of the internal control system which complicates the creation of comprehensive databases. Another aspect that limits the study is the period used, which covers five years (2017-2021), thus the paper cannot be used to generalize the effects of internal control systems on financial performance and credit risk of banks. Nevertheless, the application of the study can contribute to the literature related to the financial performance and credit risk of the Moldova's banking system from a theoretical and practical point of view.

2. Literature approach and research hypotheses

The banking efficiency is largely determined by the proper organisation of internal control, which, according to the COSO definition, represents a structured system designed and controlled by the entity's governing bodies whose purpose is to increase the efficiency and effectiveness of activities, ensuring compliance of activities with the regulatory framework and improving the reliability of financial reporting. The internal control system is vitally important for the institution to achieve its ultimate objectives and enables banks to foresee potential problems that may cause financial losses and thus prevent or minimise any future losses (Gundogdu, 2013). The National Bank of the Republic of Moldova defines internal control activity in banks as a system that ensures efficient operations, adequate risk control, prudent conduct of business, credibility of reported financial and non-financial information, both internally and externally, as well as compliance with the legal and regulatory framework, supervisory requirements and the bankts internal rules and decisions." (Regulation on Banking Activity Management Framework, approved by the Decision of the Executive Board of the National Bank of Moldova, no. 322/2018). According to Adeyemi and Adenugba (2011) the role of internal control is to ensure that financial, operational and compliance controls are properly carried out (Adeyemi and Adenugba, 2011).

An important internal control element is the bankts risk management system, which is a set of methods and techniques of bank staff to ensure a positive financial result and bank performance in case of uncertainty in the operating environment, as well as to estimate the occurrence of risk events and take action to exclude or reduce negative effects (Lavrushina and Valentsova, 2016). According to Babatunde and Olaniran (2009) there are three levels of determinants of institutional performance. The first is related to external factors that cannot be controlled within the organisation and are economy wide. The internal factors that are directly controlled by organisations is the next level and include managerial efficiency, corporate governance structure, etc. Therefore, other factors such as scope of activity, size and leverage also affect the performance of entities (Babatunde and Olaniran, 2009; Sobhy, Ehab and Hussain, 2017). Defining performance, the time interval and the benchmark are important aspects that need attention, as there may be differences between previous and future performance. There are studies such as those by Santos și Brito (2012) that demonstrate that previously generated outperformance does not guarantee future outperformance (Santos and Brito, 2012).

Most of the existing studies on assessing the relationship between the internal control system and banks' financial performance is based on correlation methods, which consequently leads to inconclusive findings. Correlation analysis is not suitable to identify the magnitude of variables that influence or estimate the outcome of the other, but only to assess associations or relationships between variables (Fink, 2013). Similar studies had been carried out by various researchers (Tseng, 2017; Dineshkumar and Kogulacumar, 2013; Chebungwen and Kwasira, 2014; Muraleetharan, 2011) being based on analysis of participants in industries other than banks, which stated that there existed a relationship between internal control and financial performance. Likewise, Ejoh and Ejom (2014) demonstrated in their research that there is no significant relationship between financial performance and the internal control system (Ejoh and Ejom, 2014). The assessment of the impact of control on financial performance in banks had also been studied by Otoo, Asumah, Peprah-Amankona, and Andzie, (2021) addressing quantitative research on Ghanaian banks using primary data, stating that if management make appropriate decisions related to internal control management, bank performance will eventually increase (Otoo et al., 2021). Umar H. and Umar D. M. (2018), assessed the effects of the control system in Nigerian banks on their performance using primary data, finding a positive and significant link between elements of internal control and bank performance (Umaru and Muhamed, 2018). Qualitative research conducted by Niyonsenga and Abuya (2017) related to financial institutions, shown that internal control not only influences profitability and capital growth, but also contributes to the risk management process (Niyonsenga and Abuya, 2017). Assessing the impact of internal control on the financial performance of banks in Kenya had been also studied by Asiligwa and Rennox (2017), on primary data collected from 43 banks, demonstrating that banks achieve good financial efficiency if they implement and maintain their internal control system, including five components according to COSO (Asiligwa and Rennox, 2017). Koutoupis and Malisiovas (2019) in their research, had analyzed the impact of internal controls on profitability, credit risk and compliance based on primary data collected from 210 of the largest banks in the United States of America's banking system over a 5-year period. As a result, they demonstrated that the elements of internal control i.e. control environment, risk assessment, control activities, monitoring, reporting and communication affect as credit risk and financial performance as well as the compliance of banks (Koutoupis and Malisiovas, 2019). However, the relationship between internal control and credit risk based on the Spanish banking system was studied by Akwaa-Sekyi and Moreno (2016), which had identified that all elements of internal control have a strong impact on credit risk. The same researchers also found that internal control has a significant impact on credit risk in European banks, using variables such as return on assets, bank size, inflation, interest rates and GDP growth (Akwaa-Sekyi and Moreno, 2016; Pham, 2021). To examine the impact of correlations between financial performance and internal control on the Jordan's banking sector, Pakurár, Haddad, Nagy, Popp and Oláh (2019) identified a significant link between internal control and financial performance (Hanoon, Rapani and Khalid, 2020; Pakurár et al., 2019).

Taking into considerations the literature approach and the researches taken on the subject, the null form of the working hypotheses established for this study has been formulated as follows:

 H_01 : The internal control system does not have a significant impact on the financial performance of banks in the Republic of Moldova;

 H_02 . The internal control system does not have a significant impact on the credit risk of banks in the Republic of Moldova.

3. Methodology of research

The research methodology used is predominantly quantitative, based on deductive statistical analysis to test the formulated hypotheses and identify cause-effect relationships. The information support of the study consists exclusively of secondary data: published information and annual reports of the eleven licensed banks from the Republic of Moldova, statistical data from the official website of the National Bank of Moldova observed during the period 2017 – 2021 yeasr, which represent a total number of 55 observations included in the analysis.

Furthermore, information resources from the normative acts of the Republic of Moldova and results of scientific research have been used. The study contains resource constraints due to difficulties in accessing data. The data are organized into panel data as both time series and cross-sectional were included, and this method , reduces the multicollinearity of the explanatory variables and also increases the efficiency of the econometric estimates" (Hsiao, C., 2003).

The assessment of the impact of the internal control system on financial performance was performed by developing a multiple regression equation using the least squares method. In order to collect the data, centralize the indicators and perform the calculations, Excel spreadsheet software was used, however, the analysis of the relationships between the variables studied and the statistical tests were performed using the econometric analysis program EViews 12 Student Version.

3.1 Description of variables

The dependent variable used in this study, which reflects credit risk, is represented by the rate of non-performing loans in the bank's total loan portfolio (fig. nr.1), similar to representations found the researches of Koutoupis and Malisiovas (2019) and Akwaa-Sekyi and Moreno (2016). At the same time, the dependent variables reflecting relevant financial performance indicators to be explained in the models are return on assets (fig. 2) and return on equity (fig. 3). According Capraru, Petria și Ihnatov (2015), banks' financial performance is generally quantified using return on assets and return on equity. Return on assets as a proxy for profitability has also been used by Naceur (2003) si Ozili (2015) in order to assess the profitability of the banking sector in Tunisia and Nigeria but Sergi, Choudhry, Davidovic and Fidanoski (2018), in the analysis of the banking sector in Croatia. Whilst attempting to define the factors affecting the effectiveness of internal controls Wang si Wang (2015) demonstrated the relationship of ROA dependence on the asset size of a United States bank holding company. Aladwan (2015) identified that while asset volumes are increasing, profitability is decreasing in Jordan's banking sector.

The use of ROA is appropriate as it assesses the efficiency of the use of assets in terms of the profit achieved, calculated as the ratio of net profit to total assets. ROE, however, is one of the main and most important indicators of efficient investment of shareholders' money, being calculated as the ratio of net profit earned to shareholders' equity. At the same time, this indicator can assess the risk level of a bank's loan portfolio which is determined by the borrower's credit risk level (Borovykh, 2018). Xu and Gao (2015) prooved that the asset size of organisations negatively affects ROE and positively affects the reliability target.

Following an in-depth study of the literature, it was considered appropriate to use the independent variables comprising the elements of internal control (control environment, risk assessment, control activities, monitoring, reporting and communication) according to the COSO model and their representative indicators. The description of the variables used in the analysis as well as their symbol, calculation and definition are explained in Table 1.

Control

variables

Variable **Internal control Definition** Representative indicators Acro elements type nym CR R Credit risk Non-performing loans / Total loans **Dependent ISK** variables Net profit / Shareholder's equity ROE Return on equity ROA Net profit / Total assets Return on assets Control environment DIM Size of the Bank Total number of Bank Board members at the end of the financial CB Board year. PD I Bank Board Share of independent members in the total number of Bank Board ND Independence members. Risk assessment ANV Asset utilization Non-income producing assets / Total TA efficiency CAP Capital adequacy (Tier I capital + Tier II capital) / Risk ADE ratio Weighted Assets 0 CR T Control activities Ensuring credit Loans/Total assets Independen limits Α t variables CR_D Compliance and Loans/Deposits EP prudence Binary variable that takes the value Monitoring **AUD** Using one of the top 6 audit "1" when the audit of the financial entities statements has been performed by one of the top 6 audit entities and the value "0" otherwise. Communication and **FRF** Reliability of Binary variable that takes the value information systems financial "1" when the bank has adhered to international standards and submitted reporting financial reports on time and the

Table 1. Description of varibles

Source: Developed by the authors, based on review of scientific literature

DIM B

In order to highlight the dependence between variables expressing internal control (dependent variables) and those expressing financial performance (independent variables), the following form of multiple regression models were used:

Bank size

Figure 1. Model 1 (Dependent variable - credit risk)

 $CR_RISK_{it} = \beta_0 + \beta_1 \times DIM_CB_{it} + \beta_2 \times PD_{IND_{it}} + \beta_3 \times ANV_{TA_{it}} + \beta_4 \times CAP_{ADEQ_{it}} + \beta_5 \times CR_{TA_{it}} + \beta_5$ $\beta_6 \times CR_{DEP_{it}} + \beta_7 \times AUD_{it} + \beta_8 \times FRF_{it} + \beta_9 \times ln(DIM_B_{it}) + \epsilon_{it}$ (1)

Figure 2. Model 2 (Dependent variable - ROA)

$$ROA_{it} = \beta_0 + \beta_1 \times DIM_{CB_{it}} + \beta_2 * PD_{IND_{it}} + \beta_3 \times ANV_{TA_{it}} + \beta_4 \times CAP_{ADEQ_{it}} + \beta_5 \times CR_{TA_{it}} + \beta_6 \times CR_{DEP_{it}} + \beta_7 \times AUD_{it} + \beta_8 \times FRF_{it} + \beta_9 \times ln(DIM_{B_{it}}) + \varepsilon_{it}$$

Figure 3. Model 3 (Dependent variable - ROE)

$$\begin{aligned} \text{ROE}_{it} &= \beta_0 + \beta_1 \times \text{DIM_CB}_{it} + \ \beta_2 \times \text{PD}_{\text{IND}_{1t}} + \ \beta_3 \times \text{ANV}_{\text{TA}_{1t}} + \ \beta_4 \times \text{CAP}_{\text{ADEQ}_{it}} + \ \beta_5 \times \text{CR}_{\text{TA}_{1t}} + \\ \beta_6 \times \text{CR}_{\text{DEP}_{it}} + \ \beta_7 \times \text{AUD}_{it} + \ \beta_8 \times \text{FRF}_{it} + \ \beta_9 \times \ln(\text{DIM_B}_{it}) + \ \epsilon_{it} \end{aligned}$$
(3)

value "0" otherwise.

total assets.

Variable quantified by logarithm of

The models consider the following equation:

Figure 3. The regression equation

 $Y_{i\epsilon} = \beta_0 + \beta_1 \times X_{1\epsilon} + \beta_2 \times X_{2\epsilon} + \beta_n \times X_{n\epsilon} + \epsilon_{i\epsilon}$ (4) where, Y_{it} is the dependent variable; β_0 is the constant variable; β_1 , $\beta_1...\beta_n$ are the coefficients of the independent variables; X_{1i}, X_{2i},..., X_{nt} denote the independent variables; ε_{it} is the stochastic error term for banks, which shows the risk that other factors which not included in the econometric model influence banks' financial performance; i denotes the unit in the cross-sectional series and t denotes the size of the time series.

4. Research results

This section of the paper presents the analysis and discussion of the data obtained from the data collection process.

4.1 Descriptive statistics

In order to ensure the validity of the results, has been conducted a descriptive individual-level analysis and an overview of the dependent, independent and control variables used in the study over the period 2017 - 2021.

According to the results in Table 2, the average credit risk was 10.6%, with a standard deviation of approximately 7.6%. The minimum value of the indicator is 2,1%, while the maximum recorded 34.1%, which indicates that there is a significant difference in credit risk in Moldovan banks. The reason for this difference stems from the fact that banks have made efforts to reduce the share of non-performing loans from their loan portfolio. The average ROE was 9.1%, with a standard deviation of approximately 6.1%. The minimum value of the indicator is -8.7%, and the maximum constitutes 23.1%, which indicates that there is a significant difference in the ROE of banks in the Republic of Moldova. This difference may be due to the fact that banks have financially outperformed. The average ROA was 1.6%, with a standard deviation of approximately 0.9%. The minimum value of the indicator is -2.2%, and the maximum is 3.7%, which indicates that there is a significant difference in the return on investment of banks in the Republic of Moldova. This difference may result from the banks' asset size and financial performance and thus reflects the bank's profitability (Bani-Khaled, 2021).

Table 2. Descriptive statistics

Table 2. Descriptive statistics									
Variabile	Mean	Median	Maximum	Minimum	Std. deviation	Skewness	Kurtosis	Jarque- Bera	
CR_RISK	0,106	0,081	0,341	0,021	0,076	1,671	5,268	37,377	
ROE	0,091	0,083	0,231	-0,087	0,061	-0,069	3,383	0,380	
ROA	0,016	0,017	0,037	-0,022	0,009	-1,193	6,961	49,013	
DIM_CB	5,146	5,000	8,000	2,000	1,458	-0,255	2,527	1,107	
PD_IND	0,869	1,000	1,333	0,250	0,244	-1,058	3,238	10,393	
ANV_TA	0,215	0,217	0,414	0,094	0,074	0,572	3,148	3,054	
CAP_ADEQ	0,353	0,328	0,981	0,189	0,147	1,681	7,316	68,581	
CR_TA	0,428	0,421	0,665	0,188	0,105	0,074	2,736	0,211	
CR_DEP	0,618	0,590	1,230	0,260	0,217	1,207	4,534	18,747	
AUD	0,691	1,000	1,000	0,000	0,466	-0,826	1,683	10,235	
FRF	0,946	1,000	1,000	0,000	0,229	-3,923	16,391	552,025	
LOG(DIM_B)	22,371	22,101	24,340	20,461	1,037	0,219	1,823	3,614	

Source: Prepared by the authors based on results obtained using the econometric analysis program EViews 12 Student Version.

With regard to the independent variables, it should be noted that, from the perspective of the control environment, the average number of bank board members is

about 5, while it is characterised by a high degree of independence, with an average value of 86.9%. According to Albouy and Aissa (2009), bank board size exceeding nine members is considered large (El Idrissi and Alami, 2021). The risk assessment component is described by the efficiency of asset utilisation and the capital adequacy ratio. Therefore, an average share of non-income producing assets in total assets of 21.5%, with a standard deviation of 7.4%. Thus, a high degree of this indicator indicates that the efficiency of asset utilisation is low, but the difference between the maximum value recorded (41.4%) and the minimum (9.4%) could be explained by the changes in the shareholder structure and governing bodies of banks, respectively. The minimum value of the indicator for bank capitalisation was 18.9% and the largest 98.1%. However, the average of 35.3 % indicates a good capitalization and a ratio that is above 10% i.e. is the minimum requirement for the risk-weighted capital adequacy ratio under the new Basel III calculation. Therefore, it can be mentioned that there is no possibility of executing operations with increased risk of financial losses and the banking system of the Republic of Moldova is overcapitalized having the possibility to meet its payment obligations. Another variable that is a representative element of control activities is the ratio of loans to total assets, which is defined by the provision of credit limits. This, over the years 2017-2021 have recorded a rate of 42.8%, fluctuating between 18.8% and 66.5%, thus, higher values indicate higher exposure to credit risk. The standard deviation clearly shows some volatility related to this variable differs from each other at 10.5%. The study records an average value of 61.8, the minmum amount of 26.0 and the maximum of 123.0 related to the loans to deposits ratio. This shows both the likelihood of liquidity problems arising from delays in credit management and the degree of dependence of credit on deposits. The standard deviation also manifests that the degree of absorption of loan deposits are different from bank to bank by 21.7%.

Analysing the binary variable expressing the use of one of the top 6 audit entities as the variable of the monitoring component, the average use of their services is 69.0%. The use of this variable should denote the quality of the audit, which in turn would influence the reduction of bank risks and the improvement of the internal control system.

From the point of view of the information and communication element, the banks from the Republic of Moldova show a high degree of reliability of financial reports, adhering to international standards, therefore, about 94.6% of them submitted financial reports on time. Moreover, the distribution of the variables used in the econometric analysis shows positive skewness, since positive values of the skewness indicator are observed, with the exception of the variables representing financial performance (ROA, ROE), control environment (DIM CB și PD IND) and information and communication systems (AUD si FRF). The fact that the variables represent positive skewness has shown an increasing trend. Analysing the statistical information related to kurtosis, it can be seen that the variables CR RISK, ROA, ROE, PD IND, ANV TA, CAP ADEQ, CR DEP și FRF have a coefficient greater than 3, implying a leptokurtic distribution (the distribution is more skewed than the normal distribution), i.e. the probability of occurrence of an extreme event is greater than the probability of occurrence of that event implied by a normal distribution. The other variables have a flattening distribution (the distribution is flatter than the normal distribution) because the value of the flattening coefficient is less than 3 (Manta, Badircea and Pirvu, 2018).

Following the analysis of the Jarque-Bera test results, it is observed that all variables have a probability greater than 0,05, which means that the series are normally distributed.

4.1 Analysis of relationships between financial performance variables, credit risk and internal control system of banks from the Republic of Moldova

The correlation analysis conducted aims to explain the positive or negative relationship between the dependent variables and the independent variables in the study, the results of which are presented in Table 3. The diagonal of the matrix represents a set of 1, being symmetric, since the correlation between the same variable is always 1.

Tabel 3. Correlation matrix of variables

	THOU OF COLLEMNION MINUTES OF THE MOTOR											
Variab	CR_RI	ROE	ROA	DIM_	PD_IN	$ANV_{_}$	CAP_	CR_T	CR_D	AUD	FRF	DIM_
ile	\mathbf{SK}^{-}			CB _	D _	TA _	ADEQ	A	EP			В
CR RI												
SK -	1,000	-0,007	-0,029	0,182	0,244	0,598	0,261	-0,500	-0,406	-0,373	0,079	0,160
ROE	-0,007	1,000	0,935	0,280	0,037	-0,208	-0,654	0,402	0,199	-0,119	-0,012	0,626
ROA	-0,029	0,935	1,000	0,171	-0,063	-0,148	-0,512	0,319	0,142	-0,270	-0,035	0,450
DIM												
СВ -	0,182	0,280	0,171	1,000	-0,100	0,217	-0,293	-0,023	-0,126	-0,069	0,080	0,599
PD IN												
D _	0,244	0,037	-0,063	-0,100	1,000	-0,161	0,139	-0,079	0,025	0,225	0,002	0,086
ANV												
TA	0,598	-0,208	-0,148	0,217	-0,161	1,000	0,208	-0,510	-0,347	-0,416	0,071	-0,169
CAP_												
ADEQ	0,261	-0,654	-0,512	-0,293	0,139	0,208	1,000	-0,499	-0,234	-0,106	0,080	-0,512
CR_T												
A	-0,500	0,402	0,319	-0,023	-0,079	-0,510	-0,499	1,000	0,599	0,314	-0,174	0,092
CR_D												
EP	-0,406	0,199	0,142	-0,126	0,025	-0,347	-0,234	0,599	1,000	0,291	-0,196	-0,149
AUD	-0,373	-0,119	-0,270	-0,069	0,225	-0,416	-0,106	0,314	0,291	1,000	0,013	0,084
FRF	0,079	-0,012	-0,035	0,080	0,002	0,071	0,080	-0,174	-0,196	0,013	1,000	0,093
DIM												
В –	0,160	0,626	0,450	0,599	0,086	-0,169	-0,512	0,092	-0,149	0,084	0,093	1,000
										-		

Source: Prepared by the authors based on results obtained using the econometric analysis program EViews 12 Student Version.

The credit risk variable shows the strongest correlation with the risk assessment component (asset utilization efficiency of 0,598 and capital adequacy ratio of 0,261); there is also a positive correlation with the control environment (bank board size of 0,182 and share of independent members in the total number of bank board members of 0,244); a non-significant positive credit risk relationship of 0,079 is recorded for communication and information systems. On the other hand, credit risk shows a negative correlation with control activities (loans to total assets ratio of -0,5 and loans to deposits ratio of -0,406). The financial performance indicator ROE shows a significant positive correlation with bank size of 0,626 and ROA of 0,450. The direction of the relationships of the performance indicators (ROE and ROA) with the independent variables is the same, being positively correlated with the representative indicators of the internal control components: control environment and control activities. The results indicate that, in for the banking system of Moldova, for the period 2017-2021, an increase in these indicators generates an increase in the level of financial performance.

A moderate negative correlation was identified with the monitoring component and a non-significant positive relationship was recorded with communication and information systems. High correlation coefficients (e.g. greater than 0,8) indicate high collinearity, which can cause problems in econometric estimations. Therefore, the correlation matrix analysed indicates that most of the correlations between variables are low, indicating that there is no multicollinearity problem and the data can be processed further.

4.2 Analysis of the internal control system effects on credit risk and financial performance of banks in the Republic of Moldova

The least squares regression analysis was tested by considering three dependent variables (Credit Risk, ROA and ROE) presented in Table 4. R² of Model 1, Model 2 and Model 3 are 0,641, 0,507 and 0,820 respectively reflecting that there is a strong positive relationship between internal control system, credit risk and banks' financial performance. R² is a signal of the goodness of fit of the data, and the higher the R² value, the higher the fit of the data to the regression model. Therefor, R² of 0,641 implies that the specified model fits the data well. Thus, the results indicate that independent variables consisting of representative indicators of internal control could explain changes in credit risk with 64.1%, ROA with 50.7% and ROE with 82.0%. This has also demonstrated that the alternative hypotheses of the study were accepted. Also, for all three models, the probability of the F-statistic test is zero, indicating that the models are statistically significant at the 1% threshold and have no omitted specifications.

Tabel 4. Estimated regression of credit risk and financial performance (ROA and ROE)

1	KOE)									
	Model 1 Model 2 (CR_RISK dependent variable) (ROA dependent variable)				ariable)	Model 3 (ROE dependent variable)				
Variabile	Coef	Std. error	t- Statistic	Coef	Std. error	t- Statistic	Coef	Std. error	t-Statistic	
C	-0,873	0,247	-3,537	-0,066	0,035	-1,876	-0,627	0,188	-3,327	
DIM_CB	-0,007	0,007	-1,117	-0,001	0,001	-1,214	-0,006	0,005	-1,267	
PD_IND	0,098	0,033	2,991	0,002	0,005	0,440	0,029	0,025	1,174	
ANV_TA	0,659	0,140	4,699	0,001	0,020	0,032	0,017	0,107	0,154	
CAP_ADEQ	0,157	0,075	2,101	-0,014	0,011	-1,294	-0,136	0,057	-2,387	
CR_TA	0,130	0,291	0,447	0,039	0,041	0,938	0,158	0,222	0,713	
CR_DEP	-0,063	0,120	-0,526	0,006	0,017	-0,340	0,012	0,091	0,129	
AUD	-0,032	0,017	-1,924	-0,009	0,002	-3,766	-0,043	0,013	-3,359	
FRF	-0,008	0,031	-0,264	0,001	0,004	0,127	0,009	0,023	0,383	
LOG(DIM_B	0,033	0,011	3,094	0,004	0,002	2,407	0,032	0,008	3,882	
\mathbb{R}^2		0,641			0,507		0,673			
Adjusted R ²		0,570		0,409 0,607						
F-statistic		8,939		5,147 10,279						
Prob(F-stat)		0,000			0,000		0,000			
	•		•			•				

Source: Prepared by the authors based on results obtained using the econometric analysis program EViews 12 Student Version.

According to the table above, an inverse relationship between credit risk and control environment is observed from the perspective of bank board size. However, the risk assessment element has a considerable effect on credit risk, especially from the perspective of asset utilisation efficiency. Thus, holding all other factors constant, a 1% increase in the share of non-income producing assets in total assets leads to a 0.66% increase in credit risk, while a 1% increase in the capital adequacy ratio leads to a 0.16% increase in credit risk. The increase of the share of independent bank board members by 1%, increases credit risk by about 0.10%. Control activities, in terms of the share of loans in total assets, also show a direct relationship with the dependent variable, contrary to the results of the research carried out by Akwaa-Sekyi and Moreno (2016) [4]. Therefore, an increase e of their share by 1% would increase credit risk by 0.13%. Therefor, lowering the deposit coverage of loans by 1% would increase the credit risk by 0,06%. The internal control elements that have an inverse relationship with the credit risk of the banks analysed over the period 2017-2021 are monitoring and communication and information systems, thus, the model suggests that the use of one of the top six audit entities leads to an decrease in credit risk by 0.03% and timely financial reporting by 0.008% respectively, while the other variables remain constant. Thus the results are similar to those obtained by Zhang, Zhou and Zhou (2007) and García-Sánchez, García-Meca and Cuadrado-Ballesteros (2017) in their researches. The control environment, likewise has an inverse relationship with credit risk, where an increase in the number of bank board members leads to a decrease in credit risk, similar to the conclusion of Koutoupis and Malisiovas (2019). In the meanwhile, the positive relationship between banks' financial performance (ROA and ROE) and the control environment is observed in terms of the share of independence of bank board members. Thus, if the other factors remain constant, increasing the share of independent members by 1% increases ROA by 0.002% and ROE by 0.029% illustrating a higher safety in placing resources in banks, while increasing the number of bank board members leads to a decrease of ROA by 0.001% and ROE by 0.006%. Different researchers, however, show negative effects of the share of independent members in the bank's board on financial performance, thus, according to them, financial performance will decrease if the number of independent members increases (Coles, McWilliams and Sen, 2001; Erickson et al., 2005).

Risk assessment from an asset utilization efficiency perspective shows a positive relationship with both financial performance proxies, while a 1% decrease in capital adequacy ratio increases ROA by 0.014% and ROE by 0.136%. Similar to risk assessment, control activities, in terms of the share of loans in total assets, also have a direct relationship with banks' financial performance. Thus, increasing their share by 1% would increase ROA and ROE by 0.039% and 0.158%, respectively. Moreover, decreasing the loan-to-deposit ratio by 1% would increase ROA by 0.006% and decrease ROE by 0.012%. Therefore, the monitoring component of internal control shows a positive relationship with financial performance and the communication and information systems show an inverse relationship with it. Khandwalla (1972) found that the sophistication of the organisation's internal control (monitoring) system is strongly correlated with the intensity of competition, from which it follows that an appropriate match between competition in the banking system and the risk management system could have an impact on the relationship between the risk management system and financial performance [24, 40]. Therefore, the aggregate impact of internal control elements on bank performance is similar to the research results Hanoon, Rapani, Khalid, Aljajawy, and Al-waeli (2021) [22] where the impact of internal control elements based on primary data in the Iraqi banking system was assessed.

5. Conclusions

The results of the study illustrate that the aggregate influence of internal control elements is positive in terms of credit risk and financial indicators ROA and ROE. Thus, based on the research conducted, it was concluded that in the case of the banking sector in the Republic of Moldova, an effective internal control system implies better financial performance and lower credit risk. According to the results obtained, by testing the null hypothesis H₀1, the alternative hypothesis was accepted, which states that the internal control system exerts a significant impact on the financial performance of banks in the Republic of Moldova. Also, by testing the null hypothesis H₀2, the alternative hypothesis was accepted, according to which the internal control system has a significant impact on the credit risk of banks in the Republic of Moldova. The control environment showed a negative relationship on both financial performance and credit risk. On the other hand, it was observed that risk assessment has a positive relationship with credit risk, which implies that increasing the value of the item's proxy variables affects the increase in credit risk and vice versa. As well, credit risk assessment also has a positive relationship with financial performance indicators, in terms of bank board independence and efficiency of asset utilization, with a negative relationship only with capital adequacy ratio. Based on the results obtained, it is recommended that banks from the Republic of Moldova adopt advanced risk assessment procedures, which will contribute both to the efficiency of risk assessment and to the increase of financial performance. While carrying out their activities, banks should organise an effective internal control system that not only ensures the bank's compliance with legal and regulatory requirements but, most importantly, helps to assess, manage and control the risks related to the transactions they carry out. Control activities and communication and information systems, although negatively related to credit risk, have shown a positive relationship with financial performance. It is therefore recommended that banks strengthen their communication and information systems by providing qualitative information to support the other elements of internal control, which will lead to the other elements of internal control becoming more effective and improving performance. Particular attention needs to be paid to monitoring, which reflected a positive relationship with all the dependent variables of the study. In this context, it is recommended to organise independent process reviews as well as continuous assessment of control activities through regular internal reviews. Limitations of the research include methodology and data, affected by the fact that only a proportion of banks publish detailed aspects of their internal control system which complicates the creation of comprehensive databases. Another aspect that limits the study is the time period, which covers five years (2017-2021), thus the paper cannot be used to generalize the financial performance and effect on credit risk of banks. Anyway, the application of the study can contribute to the literature related to the financial performance and credit risk of the Republic of Moldova's banking system from a theoretical and practical point of view.

References:

- Asiligwa, M. and Rennox, G., 2017. The Effect of internal controls on the financial performance of commercial banks in Kenya. IOSR Journal of Economics and Finance, 8(3), pp.92-105.
- Amissah, A., 2017. Effect of internal control systems on performance of companies in the insurance industry in Ghana. Master's Dissertation, Department of Accounting and Finance of the School of Business, College of Humanities and Legal Studies, University of Cape Coast. Available at: http://ir.ucc.edu.gh/xmlui/handle/123456789/3086 [Accessed 10.04.2022].
- Adeyemi, B. and Adenugba, A., 2011. Corporate governance in the Nigerian financial sector: the efficacy of internal control and external audit. In: The Institute for Business and Finance Research, Global Conference on Business and Finance. San Jose. Costa Rica. 24-27 May 2011. Hilo: The Institute for Business and Finance Research.
- Akwaa-Sekyi, E.K. and Moreno, J., 2016. Effect of internal controls on credit risk among listed Spanish banks. Intangible Capital, [e-journal] 12(1), pp.357-389. http://dx.doi.org/10.3926/ic.703
- Aladwan, M.S., 2015. The impact of bank size on profitability "an empirical study on listed Jordanian commercial banks. European Scientific Journal, 11(34), pp.217-236.
- Albouy, M. and Aissa, M., 2009. Le fonctionnement des conseils d'administration des entreprises tunisiennes. Gestion 2000, 26,(4), pp.131-158.
- Babatunde, M.A. and Olaniran, O., 2009. The effects of internal and external mechanismon governance and performance of corporate firms in Nigeria. Corporate **Ownership** & Control, [e-journal], pp.330-342. 7(2),https://doi.org/10.22495/cocv7i2c3p1

- 8. Borovykh, Y.F., 2018. Factors affecting the increase in the profitability of RAROC. Vektor ekonomiki, [e-journal] 5(3). Available through: eLibrary website: http://www.elibrary.ru [Accessed 12.04.2022].
- 9. Bani-Khaled, S.M., El-Dalabeeh, A.R.K., Al-Olimat, N. H., and Al Shbail, M. O., 2021. Relationship Between Corporate Social Responsibility Expenditures and Performance in Jordanian Commercial Banks. The Journal of Asian *Finance, Economics and Business*, 8(3), pp.539-549.
- 10. Coles, J.W., McWilliams, V.B. and Sen, N., 2001. An Examination of the Relationship of Governance Mechanisms to Performance. Journal of *Management*, 27(1), pp.23-50.
- 11. Chebungwen, N., and Kwasira, J., 2014. An Assessment of Internal Control System on Financial Performance in Tertiary Training Institutions in Kenya: A Case Study of African Institute of Research and Development Studies. *International Journal of Science and Research*, 3(3), pp.571-573.
- 12. Dineshkumar, S. and Kogulacumar, P., 2013. Internal Control System and Its Impact on the Performance of the Sri Lanka Telecom Limited in Jaffna District. *International Journal of Advanced Computer Technology*, 2(6), pp.56-64.
- 13. Doğan, M., 2013. Measuring Bank Performance with Gray Relational Analysis: The Case of Turkey. *Ege Academic Review*, 13(2), pp.215-225.
- 14. Ejoh, N. and Ejom, P., 2014. The Impact of internal control activities on financial performance of tertiary institutions in Nigeria. Journal *Economics and Sustainable Development*, 5(16), pp.133-143.
- 15. El Idrissi, I. and Alami, Y., 2021. The financial impacts of board mechanisms on performance: The case of listed Moroccan banks. International Journal of *Financial, Accounting, and Management*, 3(2), pp.93-113.
- 16. Erickson, J., Park, Y.W., Reising, J. and Shin, H., 2005. Board composition and firm value under concentrated ownership: the Canadian evidence. Pacific-Basin Finance Journal, 13(4), pp.387-410.
- 17. Fink, A., 2013. Conducting Research Literature Reviews From the Internet to Paper. [e-book] London: SAGE Publications Inc. Available at: Google Books http://books.google.com [Accessed 09.04.2022]
- 18. Gamage, C.T., Lock, K.L. and Fernando, A., 2014. A Proposed Reaserch Framework: Effectiveness of Internal Control System in State Commercial Banks in Sri Lanka. International Journal of Scientific Research and Innovative *Technology*, 1(5), pp.25–44.
- 19. Gundogdu, A., Hayali, A., Dinç, Y., Sarılı, S. and Dizman, A.S., 2013. Importance of internal control system in banking sector: Evidence from Turkey. In: Lupcon Center for Business Research, Finance and Economics Conference 2013. Frankfurt am Main. Germany. 4-6 July 2013. Muenchen: Lupcon Center for Business Research.
- 20. García-Sánchez, I.M., García-Meca, E. and Cuadrado-Ballesteros, B., 2017. Do financial experts on audit committees matter for bank insolvency risk-taking? The monitoring role of bank regulation and ethical policy. Journal of Business *Research*, 76(C), pp.52-66.
- 21. Hanoon, R.N., Rapani, N.H.A. and Khalid, A.A., 2020. The correlation between internal control components and the financial performance of Iraqi banks a literature review. Journal of Advanced Research in Dynamical and Control Systems, [e-journal], 12(4), pp.957-966.
- 22. Hanoon, R.N., Rapani, N.H.A., Khalid, A.A., Aljajawy, T.M. and Al-waeli, A., 2021. The Impact of Internal Control Components on the Financial Performance,

- in the Iraqi Banking Sector. Journal of Contemporary Issues in Business and Government, 27(3), pp.2517-2529.
- 23. Hsiao C., ed., 2003. Analysis of panel data, 2nd ed. Cambridge: Cambridge University Press.
- 24. Khandwalla, 1972. Environment P.N., and its impact organization. International Studies of Management & Organization, 2(3), pp. 297– 313.
- 25. Koutoupis, A.G. and Malisiovas, T., 2019. The Effects of Internal Control Systems on Risk, Profitability and Compliance of the US Banking Sector: A Quantitative Approach. [online]. Available through: SSRN Electronic Journal http://ssrn.com/abstract=3435626 [Accessed 22.03.2022].
- 26. Lavrushina, O.I. and Valentsova, N.I., ed., 2016. Bankovskie riski, 3rd ed. [ebook] Moscow: Knorus Available through: BOOK.ru Library website http://book.ru [Accessed 15.03.2022].
- 27. Manta, A.G., Badircea, R.M. and Pirvu, R., 2018. The Correlation between Corporate Governance and Financial Performances in the Romanian Banks. Current Issues in Corporate Social Responsibility, [online] Available at: https://ideas.repec.org/h/spr/csrchp/978-3-319-70449-4 11.html> 17.03.2022].
- 28. Muraleetharan, P., 2019. Impact Internal Control on Efficiency of the Organizations in Jaffna District. International Journal of Accounting and Financial Reporting, [e-journal], 9(4),pp.313-321. http://dx.doi.org/10.5296/ijafr.v9i4.15992
- 29. Niyonsenga, E. and Abuya, J., 2017. Internal control system and financial performance in financial institutions in Rwanda: A Case of I & M Bank Ltd Rwanda. African Journal of Business and Industry, 2(3), pp. 46-58.
- 30. Naceur, S., 2003. The Determinants of the Tunisian Banking Industry Profitability: Panel Evidence. Frontiers in Finance and Economics, 5(1), pp.106-130.
- 31. Ozili, P., 2015. Determinants of Bank Profitability and Basel Capital Regulation: Empirical Evidence from Nigeria. Research Journal of Finance and Accounting, 2(6), pp.124-131.
- 32. Otoo, I.C., Asumah, S., Peprah-Amankona, G. and Andzie, A.T., 2021. Impact of Internal Control Systems on Performance of Universal Banks: Evidence from Ghana. Journal of Financial Risk Management, 10, pp.473-486.
- 33. Pakurár, M., Haddad, H., Nagy, J., Popp, J. and Oláh, J., 2019. The Service Quality Dimensions that Affect Customer Satisfaction in the Jordanian Banking Sector. Sustainability, 11(4), pp.1-24.
- 34. Petria, N., Capraru, B. and Ihnatov, I., 2015. Determinants of Banks' Profitability: Evidence from EU 27 Banking Systems. Procedia Economics and *Finance*, 20, pp.518-524.
- 35. Pham, H.N., 2021. How Does Internal Control Affect Bank Credit Risk in Vietnam? A Bayesian Analysis. The Journal of Asian Finance, Economics and Business, 8(1), pp.873–880.
- 36. Regulation on Banking Activity Management Framework, approved by the Decision of the Executive Board of the National Bank of Moldova, no. 322/2018.
- 37. Sobhy, A., Ehab, M.K.A. and Hussain, M.M., 2017. Corporate Governance and Bank Performance: Experience with Ten Asian Countries. Available through:

- SSRN Electronic Journal https://ssrn.com/abstract=2900333 [Accessed 22.03.2022]
- 38. Santos, J.B. and Brito, L.A., 2012. Towards a Subjective Measurement Model for Firm Performance. Brazilian Administration Review, [e-journal], 9, pp.95
 - http://dx.doi.org/10.1590/S1807-76922012000500007
- 39. Sergi, B., Choudhry, M., Davidovic, M. and Fidanoski, F., 2018. What does affect profitability of banks in Croatia? Competitiveness Review, 28(4), pp.338-367.
- 40. Tseng, C.Y., 2007. Internal Control, enterprise risk management, and firm performance. PhD dissertation. University of Maryland. Available at: https://drum.lib.umd.edu/handle/1903/7287 [Accessed 30.03.2022].
- 41. Tseng, S.M., 2017. Investigating the moderating effects of organizational culture and leadership style on IT-adoption and knowledge-sharing intention. Journal of Enterprise Information Management, 30(4), pp.583–604.
- 42. Umaru, H.U. and Muhamed, U.D., 2018. The effect of internal control on performance of commercial banks in Nigeria. International journal of management research & review. International Journal of Management Research & Review, 8(6), pp.13-32.
- 43. Wang, R., and Wang, X.L., 2015. What determines the profitability of banks? Evidence from the US. Master of Science in Finance Program. Simon Fraser University. Available http://summit.sfu.ca/system/files/iritems1/15820/Wang%2C%20Ruochen%20a nd%20Wang%2C%20Xuan.pdf> [Accessed 31.03.2022].
- 44. Xu, X. and Gao, L., 2015. An empirical study on the factors affecting the effectiveness of internal control of listed corporation-based on the perspective of corporate governance. The Fourteen Wuhan Intonational Conference on e-Busines. Wuhan, China. 9 June 2015. Canada: University of Calgary Press.
- 45. Yushkova, S.D., 2017. Vzaimodeystvie system kontrolya bankov I zaemshikov v kreditnih procesah. PhD. Orenburg State University.
- 46. Zhang, Y., Zhou, J. and Zhou, N., 2007. Audit committee quality, auditor independence, and internal control weaknesses. Journal of Accounting and Public Policy, 26(3), pp.300–327.

DEVELOPMENT OF THEORETICAL APPROACHES OF CIRCULAR BUSINESS MODELS

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Abstract: The rapid exhaustion of natural resources has created the need to reconsider business in the direction of extending products life by reuse, repair and recycle. Thus, it was necessary to adopt new business strategies to create circular and sustainable economic systems. This study aims to help describe the concept of circular business model in order to help entrepreneurs to apply them in practice. The article analyzes the latest scientific papers, which have developed this concept. The differences between traditional and circular business models are identified. This study clarifies which are the specific modalities of value proposition, value creation and value capture in a circular business model. By conceptualizing circular business models, the study contributes to theoretical approaches development and effective application of this concept in a circular economic system.

Key words: business model, circular economy, circular business model. JEL Classification: Q5, M2.

1. Introduction

A few decades ago, people were carrying out their activities and businesses, believing that natural resources could be used indefinitely. The basic concept was "take, make, waste" and this led to the depletion of resources, large quantity of waste and environmental pollution. Aware of these problems, people have started to look for solutions to change things. Therefore, there was a need to change behavior and apply new business models that would ensure the circulation of resources and reduce the impact on the environment.

In 2012, the Ellen MacArthur Foundation outlined the idea of the circular economy as a new business opportunity (Ellen MacArthur Foundation, 2012). This study has provoked a natural scientific interest in business models that can be used effectively in a circular economy. Thus, various studies have appeared that aimed to encourage entrepreneurs to adopt the concept of business circularity (Accenture, 2014; Geissdoerfer et al., 2017).

Since the emergence of the circular economy as a major policy issue in Europe (EC, 2015, 2020), interest in the potential of circular business models has grown strongly among decision-makers, companies, entrepreneurs and other stakeholders.

The implementation of circular business models could help achieve the Sustainable Development Goals, the goals of the Paris Climate Agreement, the ambitions of the European Green Pact and achieve carbon neutrality in Europe by 2050.

2. Literature Review

For this study, more than 20 scientific papers were analyzed, including: articles published in Scopus journals, monographs, studies and reports prepared by international organizations specializing in the circular economy, as well as international statistics.

Over the years, more and more knowledge has become available about the opportunities for implementing circular business models, as well as the barriers and risks associated with this implementation. With the growth of research field, variations in definitions and typologies of circular business models have increased. As a result, there is no clear and unique definition of the concept, but rather a variety of scientific interpretations.

Following the Ellen MacArthur Foundation, 2012, many important works have emerged that established the basic concepts of the circular economy. Among them is Accenture, 2014 that presented a comprehensive study on circular business models and represent the conceptual framework of these models to which many authors still refer today.

A conceptualization derived from the most important scientific papers is presented by Alhawari et al. They describe the circular economy "as the set of organizational planning processes for creating, delivering products, components, and materials at their highest utility for customers and society through effective and efficient utilization of ecosystem, economic, and product cycles by closing loops for all the related resource flows" (Alhawari et al., 2021).

Important scientific studies that have approached the development and implementation of business models in recent times are conducted by teams led by A. Osterwalder, M. Moreno, N Boken, J.L.K. Nubholz. In this paper, we will refer to the works of these authors.

One of the fundamental works on which our study is based is the work of Osterwalder and coauthors (Osterwalder et al., 2005) which defined business models as "the rationale of how an organization creates, delivers, and captures economic, social, and other forms of value."

3. Research Design and Methodology

In this study, we started from the definition of the concept of circular economy in order to analyze the business models that could be applied in such an economy. In order to present a theoretical substantiation of the circular business models, we analyzed and systematized multiple researches, which we reflected in the "Results" section of the paper.

The research was based on academic studies that explicitly referred to the concept of circular business model. An example of this is the work of Lewandowski (Lewandowski, 2016) in which the substantiation of the term "circular business model" is found. In addition, studies on implementation or transition to circular business models were analyzed, here we can mention Linder and Williander, 2015 (Linder and Williander, 2015), but also PA Consulting in collaboration with Ellen MacArthur Foundation who developed a practical guide in this regard. Our searches were limited to the terms "circular business model", "closed loop business models" and "circular business types". Other terms such as "circular business case" were omitted for research purposes in our further studies.

In the study we analyzed all the classifications of circular business models that we found and we presented (in the section "Types of circular business models") a systematization of them.

The main reference sources used are the journals indexed within Scopus database, such as Sustainability, Journal of Cleaner Production, Business Strategy and the Environment, Harvard Business Review and others. Since the research is focused on the theoretical approach of the concept of circular business models, no timeframe was applied.

For the theoretical and practical substantiation of the circular business models, we investigated the elements of these models and we described the stages of implementation of one of the models in Figure 2 of the paper.

The author believes that the applied research methodology were appropriate to realize the aim of this study and capture the current understanding of circular business models in academic discourse.

4. Results

Based on the reasoning of the authors Magretta, 2002; Osterwalder et al., 2005; Bocken et al., 2014 et al. we find it necessary to establish what a traditional business model is in order to drift towards circular models. Thus, in 2002, Magretta (Magretta, 2002) argued: "A business model is a conceptual tool that describes how business is conducted." It explains how an organization creates, delivers and captures value (Osterwalder et al., 2005).

Authors concerned with describing business models (Bocken et al., 2014; Osterwalder and Pigneur, 2010; Richardson, 2008), identify three main elements:

- value proposition: the product or service offer and the target customer what value is offered to whom;
- value creation and delivery: specific characteristics of the product or service and distribution channels - how value is provided; resources, suppliers and partners;
- value capture: cost structure and revenue streams how does the company generate value?

In traditional business models, the emphasis is on capturing the economic value expressed by turnover and profit (Teece, 2010; Osterwalder et al., 2005). For sustainable business models, the idea of value capture is extended to the level of environmental and social value (Nußholz, 2017; Bocken et al., 2016, 2014).

A generally accepted way of structuring a business model was developed by Osterwalder in 2005 and then in 2010 with his colleague Pigneur (Osterwalder, 2010). They identified the elements on which a company creates value: Business Model Canvas. This model is a functional tool for developing new business models or structuring existing businesses. This model consists of 9 elements that come to describe the key factors of a business (Figure 1).

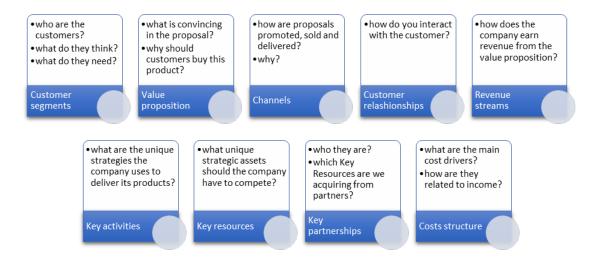


Fig. 1. Business Model Canvas Source: Adapted from (Osterwalder, 2010)

By answering the questions in the Business Model Canvas, the design of any business, including a circular business, can be created. It is only necessary to determine the specific elements of circular business models.

The main difference between traditional business and circular models is that companies are starting to look at their business through a much wider lens. By evaluating

the full potential life of a commodity, companies discover ways to extract more value through previously unknown revenue streams, while reducing their dependence on a steady stream of virgin commodities.

Therefore, circular business models require a business vision that aims to reduce, reuse and recycle as much as possible. All of these elements are found in Julia's L.K. Nußholz: "A circular business model is how a company creates, captures, and delivers value with the value creation logic designed to improve resource efficiency through contributing to extending useful life of products and parts (e.g., through long-life design, repair and remanufacturing) and closing material loops." (Nußholz, 2017).

Types of circular business models

The analysis of the scientific literature carried out by us in this study allowed us to find that, at the current stage, there are several types of circular business models. Their classification is done in various ways, depending on the views of the authors. We present below a synthesis of the typology of circular business models.

The British organization Forum for the Future, which specializes in identifying and solving the challenges of sustainability, has developed a guide to 10 business models based on the principles of the circular economy. In addition, the multinational company Accenture, which offers business support services worldwide, has outlined 5 circular business models that, in practice, are the most commonly used.

In scientific articles published in Scopus journals we find classifications of circular business models in Moreno et al. (2016), Bocken et al. (2016) and Bakker et al. (2014). Julia L. K. Nußholz (2017), (Table 1), made a systematization of these classifications

Authors		Circular b	ousiness mod	lel types			
Moreno et al.				Circular	Product life-extension	Resource value	
(2016)				supplies	Extending product value		
					Sharing platforms		
Boken 6 (2016)	8 3		biosis	Access and performance model	Extending resource value		
					Classic long-life		
					Extending product value		
Bakker	et al.				The access model		
(2014)		The perform		The performance model			
					The hybrid model		
					The classic long-life model		
					The gap-exploiter model		
Life stages	cycle	Material extraction	Material extraction	Production	Use phase	End-of-life treatment	

Table 1. Classification of circular business models

Source: Based on Nußholz, 2017.

In April 2019, the OECD published one of the latest global policy documents in this area - "Business Models for the Circular Economy: Opportunities and Challenges for Policy" (OECD, 2019).

In our subsequent studies, we took the OECD report as a benchmark and consider it correct to divide circular business models into 5 following categories:

- 1. Circular supplies
- 2. Resource recovery

- 3. Extending the product life cycle
- 4. Sharing platforms
- 5. The product as a service

To illustrate how value is created, proposed, and captured in a circular business model, we will focus on the Circular Supplies Business Model (Figure 2).

The main feature of the Circular Suppliers business model is the replacement of traditional material and energy inputs used in the production process with renewable, recoverable or biodegradable ones.

Therefore, the Circular Supplies Model assumes that a business can become more circular if it is reoriented from the use of limited resources to those whose value can be reexploited in new production cycles. For example, by using a renewable energy source or a recycled and reused raw material from other production cycles during the production process.

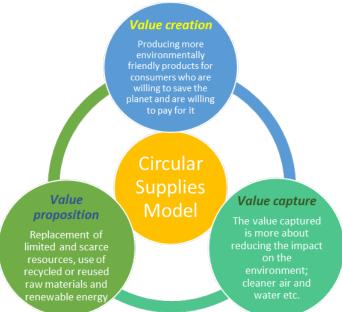


Fig. 2. Description of the Circular Supplies Business Model in terms of value creation and delivery, value proposition and value capture

Source: prepared by the author

One of the main factors for companies that adopt the Circular Supplies model is the reduction of environmental impact. Under this model, they become sustainable and can attract consumers who require harmless and less polluting technologies and who are willing to pay for more expensive green products.

5. Discussions on the applicability of circular business models

In recent decades, the interest in researching innovative business models in the context of the circular economy has been accentuated. Businesses are facing the need to refocus their business to the use of renewable, recyclable and reusable materials. Adopting circular business approaches has become more than just a fashion that adds value to a company's image. This is often a requirement of the law in countries that adopt the circular way of conducting economic activities. This study allowed us to discover that there are some limitations against circular business models implementation. Among them, we can mention the aspects related to the education of consumers and the responsibility of producers. The most important step towards circularity is to learn to think differently, to

see good materials for reuse in everything, to design products taking into account the impact on the environment. Therefore, the applicability of new business models focused on circularity depends largely on awareness and change in consumer behavior.

Another barrier in implementing circular business models are investment costs. In order to replace traditional energy resources with renewable ones, it is necessary to invest in equipment such as photovoltaic systems, wind installations, etc. These investments are very large and have a much longer return on investment than traditional energy investments. In this context, we go back to the change of way of thinking, namely the orientation towards the impact on the environment and not towards the term of recovery of the investment.

Another contradictory element is the use of recyclable raw materials, which sometimes reduces the life of the product and therefore increases the quantity of waste. For example, boots with soles made from recyclable materials wear out faster and the consumer has to buy a new pair, which is contrary to the idea of repairing or reducing consumption. It is important to use the raw material rationally, choose the most sustainable one, but also track the waste.

All these contradictory aspects represent the future research direction that we will focus on in our further research.

6. Conclusions

As a result of this study, our goal to contribute to the development of theoretical approaches to circular business models was achieved. The final purpose was to help entrepreneurs to understand what circular business models are, what their elements are and how they can be implemented in practice. We believe that by analyzing the concept of circular business model and especially by systematizing the types of existing models, we have contributed to a better perception of them not only by businessmen, but also by decision-makers at the government level.

Scientific studies in the field of circular economy have a fairly short history, as this concept was scientifically recognized a few decades ago. Thus, there are no unique definitions and classifications of the concepts of circular economy or circular business model. For this reason, we presented in the paper our vision on the mentioned concepts that was based on the existing research previously carried out by experts and scientists.

We consider important the development of the theoretical approach of the concept of circular business model because the lack of unique vision in this field creates the risk that the concept is used arbitrarily, and the importance of efficient use of resources is not fully realized.

The main difference between traditional and circular business models is changing the way resources are used, ie their use until the value of those resources is completely exhausted. The main pillars of circular business become: reuse, recycling, ecodesign and use of renewable energy. Companies that will be able to reorient their processes in the direction of circularity will be in line with the new requirements and legislation approved at European level and will be able to align with new global trends to reduce environmental impact.

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References:

- 1. Accenture, 2014. Circular Advantage Innovative Business Models and Technologies to Create Value in a World without Limits to Growth. [pdf] Available https://www.accenture.com/t20150523t053139 w /usat: en/ acnmedia/accenture/conversionassets/dotcom/documents/global/pdf/strategy 6/accenture-circular-advantageinnovative-business-models-technologies-value-growth.pdf> [Accessed February 2022].
- 2. Alhawari, O., Awan, U., Bhutta, M.K.S. and Ali Ülkü, M., 2021. Insights from circular economy literature: A review of extant definitions and unravelling paths to future research. Sustainability, 13(2), 859.
- 3. Bakker, C., Den Hollander, M., Van Hinte, E. and Zlilstra, Y., 2014. *Products* That Last: Product Design for Circular Business Models. Delft: TU Delft Library.
- 4. Bocken, N.M.P., Short, S.W., Rana, P. and Evans, S., 2014. A literature and practice review to develop sustainable business model archetypes. Journal of Cleaner Production, 65, pp.42–56.
- 5. Bocken, N., De Pauw, I., Bakker, C. and Van der Grinten, B., 2016. Product design and business model strategies for a circular economy. Journal of *Industrial and Production Engineering*, 33(5), pp.308–320.
- 6. Ellen MacArthur Foundation, 2012. Towards the Circular Economy: Economic and Business Rationale for an Accelerated Transition. Cowes: Ellen MacArthur Foundation. [online] Available https://ellenmacarthurfoundation.org/towards-a-circular-economy-business- rationale-for-an-accelerated-transition> [Accessed 7 February 2022].
- 7. European Commission, 2015. Circular Economy Action Plan. COM(2015) 614 final. [online] Available at: https://ec.europa.eu/transparency/documents- register/detail?ref=COM(2015)614&lang=ro> [Accessed 7 February 2022].
- 8. European Commission, 2020a. A new Circular Economy Action Plan For a cleaner and more competitive Europe. COM(2020) 98 final. [online] Available https://eur-lex.europa.eu/legal- content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN> [Accessed 7 February 2022].
- 9. European Commission, 2020b. New Circular Economy Action Plan The Green Deal. [online] European Available at: https://ec.europa.eu/environment/strategy/circular-economy-action- plan en#:~:text=The%20EU's%20new%20circular%20action,cleaner%20and% 20more%20competitive%20Europe.&text=It%20targets%20how%20products %20are,for%20as%20long%20as%20possible> [Accessed 7 February 2022].
- 10. Geissdoerfer, M., Savaget, P., Bocken, N.M.P. and Hultink, E.J., 2017. The Circular Economy - A new sustainability paradigm? Journal of Cleaner Production, 143, pp.757–768.
- 11. https://www.accenture.com/gb-en
- 12. https://www.oecd.org/environment/business-models-for-the-circular-economyg2g9dd62-en.htm.
- 13. Lewandowski, M., 2016. Designing the Business Models for Circular Economy—Towards the Conceptual Framework. Sustainability, 8, 43.
- 14. Linder, M. and Williander, M., 2015. Circular Business Model Innovation: Inherent Uncertainties. Business Strategy and the Environment, 26, pp.182–196.

- 15. Magretta, J., 2002. Why Business Models Matter. Harvard Business Review, 80(5), pp.86–92.
- 16. Moreno, M., De los Rios, C., Rowe, Z. and Charnley, F., 2016. A Conceptual Framework for Circular Design. Sustainability, 8, 937.
- 17. Nußholz, J.L.K., 2017. Circular Business Models: Defining a Concept and Framing an Emerging Research Field. Sustainability, 9(10), 1810.
- 18. Osterwalder, A. and Pigneur, Y., 2010. Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Wiley.
- 19. Osterwalder, A., Pigneur, Y. and Tucci, C.L., 2005. Clarifying Business Models: Origins, Present, and Future of the Concept. Communications of the for Information Systems, 15. [online] https://www.kth.se/social/files/546b8d75f276546614d2dffc/Osterwalder+(200">https://www.kth.se/social/files/546b8d75f276546614d2dffc/Osterwalder+(200") 5).pdf> [Accessed 7 February 2022].
- 20. PA Consulting, 2022. Circular Business Model Design Guide. [online] Available at: https://www2.paconsulting.com/Sustainability-EMFBDG-2020- 11 LP-download.html? ga=2.239392259.1250902504.1611318585-978887778.1606939987> [Accessed 7 February 2022].
- 21. Richardson, J., 2008. The business model: an integrative framework for strategy execution. Strategic Change, 17(5–6), pp.133–144.
- 22. Teece, D.J., 2010. Business Models, Business Strategy and Innovation. Long *Range Planning*, 43(2–3), pp.172–194.

ISSUES REGARDING THE ESTABLISHMENT OF SIMPLIFICATION MEASURES AT THE LEVEL OF THE CENTRAL **PUBLIC ADMINISTRATION**

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Abstract: Public institutions and specialized bodies of the central public administration are prohibited from requesting individuals or legal entities, in order to resolve requests for the provision of a public service, copies of notices or other documents that have been issued by public institutions or specialized bodies of the central public administration. The public institutions and the specialized bodies of the central public administration request from the entities that issued the respective documents, in electronic format, copies or extracts of them, based on the express consent of the beneficiary of the public service, and the latter entities have the obligation to make them available.

Keywords: public authority, institution, public service, taxpayer.

JEL Classification: K10.

1. Introduction

An express requirement of large sections of society, which is increasingly expressed in the public sphere, refers to debureaucratization and administrative simplification. In this context, it seemed imperative that urgent measures be taken, in the public interest, to reduce document procurement efforts in order to obtain public services, as well as to facilitate the interconnection of databases between public institutions and authorities.

The non-adoption of the measures proposed and established by normative acts has generated blockages, inefficiency and losses, as well as the further affectation of a large part of the Romanian population that is facing the phenomenon of excessive bureaucracy in the public administration. Under these conditions, it was not possible to ensure the implementation of the Government Program and the fulfillment of the main role of the Government to carry out the internal and foreign policy of the country and to exercise the general management of the public administration. public interest and constitute emergency and extraordinary situations.

2. Simplification measures at the level of the central public administration

Public institutions and specialized bodies of the central public administration requesting a physical copy on paper after the identity document as a condition for providing a public service are obliged to accept the copy in electronic format after the identity card, sent by e-mail, ensuring the conditions provided by the legal regulations on the protection of individuals with regard to the processing of personal data (Emergency Ordinance no. 41 of June 28, 2016).

Thus, within 30 days from the date of entry into force of the Emergency Ordinance no. 41/2016, all public institutions and specialized bodies of the central public administration had the obligation to publish an e-mail address for receiving in electronic format the copy of the identity card, on the single electronic contact point and on its own website.

Also, each public institution and specialized body of the central public administration became obliged to eliminate the requirement to submit legalized copies of documents to the provision of public services, replacing them with the certification of conformity with the original by the competent official.

If the person presents a certified copy of the document, in order to provide the public service, the institution or specialized body of the central public administration is obliged to accept it.

Public institutions and specialized bodies of the central public administration are obliged to accept documents issued by legal persons of public or private law in electronic format, which have a qualified or advanced electronic signature.

The personal data necessary for the provision of a public service, which are collected, held or managed by another public authority or institution, are taken directly from that authority or institution if this has been expressly requested by the beneficiary of the public service or if there is consent its express.

The beneficiary of the public service, the citizen, can return to the consent at any time, enjoying all the rights deriving from the legal regulations on the protection of individuals with regard to the processing of personal data and the free movement of such data.

The public institutions and the specialized bodies of the central public administration are obliged to specify on their own forms the duration of completing each one and the reason for collecting the information. Each public institution and specialized body of the central public administration will prepare its methodology for calculating the duration of completing a form, within 30 days from the date of entry into force of the emergency ordinance, respectively the date of June 28, 2016, methodology available on its website and approved by order of the head of the institution.

Public institutions and specialized bodies of the central public administration are obliged to use mainly electronic means for communication with the beneficiaries of public services, where the beneficiary has and agrees to provide an e-mail address.

Public institutions and specialized bodies of the central public administration are obliged to develop their capacity to provide electronic public services. The plan for the development of electronic public services will be elaborated within 90 days from the entry into force of the emergency ordinance; the model is set out in the Annex and shall be adopted by order of the Head of the Institution. Very few institutions have complied with this normative act, as there is no sanctioning regime.

Public institutions and specialized bodies of the central public administration have the obligation to explicitly stipulate in the specifications and in the contracts related to the initiated public procurement procedures, which include the development of computer programs at the request of the institution or authority, that all patrimonial copyrights all works created by the contractor or the members of the association, related to the delivered product or service, shall be transferred to the contracting authority.

In order to use these records, all the police units and subunits, the other structures and institutions from the defense system, public order, national security and justice, the public institutions and the specialized bodies of the public administration, as well as the competent structures will be connected to the computerized system, of the Ministry of Foreign Affairs.

In order to implement the provisions of these normative provisions, within 30 days from the date of entry into force of the emergency ordinance, public institutions and specialized bodies of the central public administration shall issue orders or instructions to modify the procedures for providing public services.

At this moment, the need for a coherent and integrated digital infrastructure at the level of the Romanian public administration, which would offer quality digital services to the citizens, has become a certain one. The lack of interoperability of public administration IT systems is a major obstacle to the development of end-user-centered digital services. Existing systems are generally fragmented, being designed and developed in isolation by various state institutions, outside an integrated national framework. In order to achieve the milestones assumed by the National Recovery and Resilience Plan (PNRR), Component C7 - Digital Transformation and to develop the integrated architecture of digital services infrastructure, it is necessary to adopt the Law on data exchange between information systems and create the national interoperability platform. This law guarantees the "onetime" principle and the centering of disparate and winding public services around the end user.

Law no. 267/2021 is in line with the provisions of the European Interoperability Framework and will be implemented through technical rules that public entities will apply for the migration and integration of all data into existing data structures, so that they support the real-time operation of services provided.

The main objectives of the law are to facilitate the provision of quality public services, permanently available, designed according to the needs of the beneficiaries of these services, to promote the widespread use of information and communication technology in public administration and to increase the traceability and transparency of the administrative act. offering the data holder the possibility to know how to access and process his data. Increasing the interconnection of information systems of public institutions and authorities, facilitating the exchange of data between public institutions and simplifying administrative processes, will increase the efficiency and effectiveness of the administrative act by implementing the principle "only once".

In addition, it aims to promote interoperability in central government and between local government and central government, but also to facilitate the access of private institutions to data held by public institutions and vice versa, ensuring the security and confidentiality of data exchanges.

According to art. 2 index 1 of Law no. 267/2021 on the establishment of simplification measures at the level of the central public administration, it is forbidden for public institutions and specialized bodies of the central public administration to request individuals or legal entities, in order to resolve requests for the provision of a public service, copies of notices or other documents that have been issued by public institutions or specialized bodies of the central public administration. The public institutions and the specialized bodies of the central public administration request from the entities that have issued the necessary documents, in electronic format, copies or extracts of them, based on the express consent of the beneficiary of the public service (Law no. 267 of November 9, 2021).

Therefore, Law 267/2021, published in November 2021 and which aims to complete GEO no. 41/2016 on the establishment of simplification measures at the level of central public administration, thus aims to debureaucratize the administrative system by facilitating the obtaining of copies of various documents that may be needed to resolve a request by a simple e-mail between institutions, with the agreement express of the person who made the request.

In addition, it is mandatory for public institutions and authorities to use the interoperability platform to access the data needed to provide public services. This law also offers the possibility of data exchange between public institutions and authorities on the one hand, and users of private legal entities or natural persons exercising regulated liberal professions, on the other hand, which may take place on a contractual basis., by a data exchange contract which is for a fee.

Now, after the entry into force of the measure, respectively from 1 January 2022, at least theoretically, as the initiators say, the relationship between the state and the citizen is simplified, especially in terms of interaction with state institutions in certain specific cases,

such as buying a housing, change of identity card, registration in the tax records of a means of transport and other such steps.

As a result of the law, public institutions and authorities are obliged to ensure the provision of services without requesting additional documents containing only information available through the interoperability platform. Institutions and public authorities no longer have the right to ask individuals and legal entities for evidence or certification of data already collected, but the data used in the provision of public services must be taken exclusively from the registers available through the platform.

The data provided through the national interoperability platform shall have the same legal value as the data contained in the physically submitted document, which contains or confirms that data, a copy conforming to the original or a signed electronic document with a qualified electronic signature.

Citizens will benefit from a connected and efficient public administration, with simplified procedures, reduced bureaucracy and minimal waiting time. By ensuring the interoperability of existing basic registers at the level of public institutions and authorities, this law opens new opportunities for the provision of electronic services and the alignment of national identification and authorization infrastructures, according to the European norms established by the eIDAS regulation. Once the existing gaps are eliminated, aggregate services will be set up by grouping a number of basic public services that can be accessed in a secure and controlled way.

By simplifying and debureaucratizing, the citizen is given predictability, and this contributes to increasing the public's confidence in the activity of public administration. In addition, the public administration would demonstrate that it can solve citizens' requests more easily and quickly, and this will increase the satisfaction with the act of governing and administering the country.

At least in the first period of application of these normative acts, as stipulated in their content, the measure applies to central institutions (ministries, central authorities, etc.), but not to town halls, local services, local taxes and duties. This will be possible only after the publication of a normative act establishing the rules for inter-institutional data queries.

3. Conclusions

The law on the exchange of data between information systems and the creation of the national interoperability platform has as its ultimate goal the provision of public services by public institutions and authorities efficiently, with a significant reduction in bureaucracy and time spent on obtaining public services.

At the same time, the supporting documents currently required to be submitted by the citizen or business representative will no longer be required, and the necessary information will be obtained directly between the institutions and public authorities that administer the basic registers.

Also, the automatic communication between the public authorities and institutions will determine in time the possibility for the provision by the public institutions and authorities of the electronic services that will eliminate the physical presence of the citizen at the counter.

References:

1. Law no. 267 of November 9, 2021 for completing the Emergency Ordinance Government no. 41/2016 on the establishment of simplification measures at the level of the central public administration and for the modification and

- completion of some normative acts. Published in the Official Gazette no. 1076 of November 10, 2021;
- 2. Government Emergency Ordinance no. 41 of June 28, 2016 regarding the establishment of some simplification measures at the level of the central public administration and for the modification and completion of some normative acts. Published in the Official Gazette no. 490 of June 30, 2016.

SUSTAINABILITY AND INNOVATION FOR ECONOMIC PERFORMANCE: WHAT IS THE NEXT STEP FOR EDUCATION?

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Abstract: The importance of education is undeniable. No matter what we want to do or what sector we want to rebuild, we need specialists. And specialists need solid knowledge that can stand the test of time. Another demand of the 21st century is the speed with which knowledge is acquired, so from the beginning of 2020, we live in a "new world" in which online courses have become a reliable help. Young people in poor countries have faced greater difficulties participating in online education, mainly due to a lack of technology and the necessary equipment. Universities and governments around the world have taken steps to make the specialization curriculum more attractive and to improve the teaching-learning process. Online learning demands the use of new and effective teaching tools, so blending online with traditional learning may be the desirable outcome. However, online learning requires clear regulation, and teachers believe that it is appropriate for a limited number of courses, primarily in the Humanities disciplines.

Keywords: online education, learning, digital transformation, Great Learning. JEL Classification: 121, 124, 125.

1. Introduction

Even before the covid-19 pandemic, the world faced a learning crisis, with 258 million youth not frequenting school. 53% of young people up to the age of 10 in poor countries were unable to read and understand a 20-line text close to their age. Sadly for many of the world's children and youth, schooling is not the same as learning. The pandemic affected 1.6 million student learning carriers, but online education tried to mitigate the effects of school closures. Remote learning received great appreciation between 2019 and 2022 and continues to gain territory. In September 2021, 27% of education systems remained fully or partially closed. We must not forget that 124 million people were pushed into poverty as an effect of the pandemic. In this challenging time the World Bank, UNICEF, and UNESCO tried to build more equitable, efficient and resilient learning systems.

2. Research methodology

The research in this article is quantitative type. This involves the study of national and international specialized literature, as well as the analysis conducted by international organizations about education. The approach was meant to highlight the changes in learning and show the places that experienced major learning loss. The years 2020 and 2021 were crucial because the learning loss experienced in this time will be felt later. Reports and forecasts from organizations such as the World Bank, UNICEF, and UNESCO are pessimistic about the consequences. This article also aims to show the solutions proposed by the countries so that the education system becomes more efficient and can respond to the challenges of the future.

3. Literature review

Pravat presents how the Indian Govt. and different stakeholders of education have explored the possibility of Open and Distance learning (ODL) in the Covid-19 pandemic (Jena, 2020). Daniel concluded that providing practical distance learning is possible but requires special arrangements, and the use of asynchronous learning gives teachers and students more freedom (Daniel, 2020). Tadesse and Muluye consider that students from poor families with lower educational levels and children with poor learning motivation suffer most during the coronavirus pandemic (Tadesse and Muluye, 2020). In Aristovnik opinion the lack of computer skills and the perception of a relatively higher workload prevented students from perceiving a higher performance while adapting to the 'new normal', namely, education from a distance (Aristovnik et al., 2020).

4. The global situation

Educational reports in Mexico show that students between the ages of 10 and 15 have suffered significant learning losses in reading and math between February 2020 and April 2021. Although in most Mexican states since the beginning of the covid-19 pandemic, lessons for preschool, elementary and secondary levels have been given on television (Dominguez, 2021). Replacing qualified teachers is never easy, but in a pandemic, many parents have been forced to take on the role of teachers to help their children. And the hard part is when parents don't have adequate education. In Russia, school closures had heterogeneous impacts on learning, thus, the reports do not show a more affected age group. The situation in South Africa is not a positive one, as young people in 2020 lost 60% of their school days. Schools in South Africa represent also safety and support for children, and time away from that represented deepening and widening inequality (Soudien, 2021). In Kenya during the pandemic, the online Math-Whizz tutoring platform became popular, which was a reliable help for those who wanted to develop their knowledge followed by their deepening through practical exercises (www.whizz.com). During this period, the inequality in access to education among young people living in rural and urban areas has become even more pronounced in Ethiopia. Private universities in Ghana faced serious cash flow challenges due to reduced admission numbers and the little assistance received from the government (Tamrat, 2021). In some countries, teachers did not receive targeted training and support for online instruction. And this was later seen in the performance of the pupils and students. In Brazil, young people learned 28% less during the pandemic than in 2018. Even in Norway, where the education system has been supported by countless nonprofit organizations was a 20% learning loss. Among the challenges of the Norwegian education system since the beginning of the pandemic, we can mention the problem of curriculum overload, the application of knowledge in realworld situations, and insufficiently prepared students for the future (Hilt and Riese, 2021). In the United States, the highest learning losses were recorded in states such as California, Colorado, Tennessee, North Carolina, Ohio, Virginia, and Maryland. Youth from South Asia, Latin America and The Caribbean felt the closure of schools the most, and the lack of equipment to be able to participate in online courses.

186 countries around the world implemented remote learning programs, but highincome countries managed to do it better than low-income countries. Online platforms were the most preferred solution, but we must not forget that almost 1.3 billion youth did not have access to the internet. West and Central Africa, Eastern and Southern Africa, and South Asia are the territories under which most young people do not have access to the internet. In poor countries, mathematics training programs have been launched on popular television and radio channels, trying to mitigate the consequences of school closures. The situation in Saharan Africa is also aggravated by the fact that only 47% of the population has access to electricity. Students with disabilities had difficulty participating in remote learning because of the lack of sign language interpretation, closed captioning, or braille. Different apps like Zoom, Google meet, Facebook, Youtube, and Skype was used in European countries to help students in their learning process. The unclear situation heavily influenced the emotional well-being and mental health of students, many of them experienced unbearable psychological pressure.

Graduation ratio from tertiary education between 2015 - 2020

In Afghanistan, this percentage has increased in 2018 from 9.62% to 10.85% in 2020. Albania achieved a gradual increase from 2015 to 2018, but from 2019 (45.23%) there is a gradual decrease. In Argentina, the changes implemented in 2013 started to show efficiency, so from 2018 to 2019, there is an increase of 11.43% in the graduation ratio. Percentages in Australia show an upward trend from 59.29% in 2015 to 66.41% in 2019, which demonstrates the effectiveness of policies that support students. The Austrian education system is also showing stability through the steady increase in the percentage of university graduates. The increase in Belgium is significant, from 27.98% in 2016 to 50.15% in 2019, and this is not surprising as the Belgian education system is receiving increased attention and financial support. Over five years, there has been a 6.65% increase in China and a 21.25% increase in the Macao Special Administrative Region. Despite the difficult situation faced by Colombia, the percentages have a growth trend between 2015 (20.61%) - and 2020 (26.55%). In contrast, numbers in Croatia show a declining trend from 2015 (45.95%) to 2020 (42.62%). Finland's growth in five years is 7.23%, in Germany 5.03%, Hungary 0.96%, India 2.29%, in Italy 5.61%. The situation in the countries that have made great efforts in the last eight years as we can see in figure 1 is regarded with student choice expressed as a percentage.

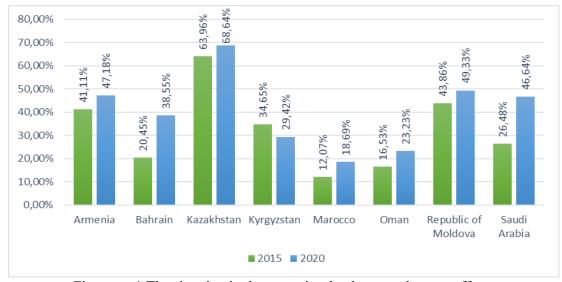


Figure no.1 The situation in the countries that have made great efforts Source: created by the author, based on information collected from UNESCO

5. Designing programs for the transformed students

Greater belief in global connections is just the first step in the spreading of virtual global education. The Great Learning online platform is an example of how online education can transform people's lives and careers overnight. This online platform with 3.5 Million learners in 170 countries offers relevant programs in technology, data and business. He has collaborated with top universities, including Northwestern University, The University of Texas at Austin, and the McCombs School of Business to provide quality programs for students (www.mygreatlearning.com). With 2 million learning hours, the platform has ensured the professional retraining of 66% of its students in the last two years. The courses have become more dynamic in the last two, and for many in India, these courses have been the stepping stone to a successful career. Career mentoring was introduced, with an expert mentors guide, LIVE online sessions with experienced industry

professionals, and continued learning and networking opportunities to help learners to find a new "professional path". The majority of courses have adopted a new structure that allows participants to take part in projects organized by top companies, apply skills, build solutions, and gain experience that adds value to their resumes. They also serve to build an Industry Ready Portfolio, are compact, and well thought out to be practical allowing students to acquire the useful and practical knowledge they need. The courses are divided into two main categories, as we can see in figure number 2.

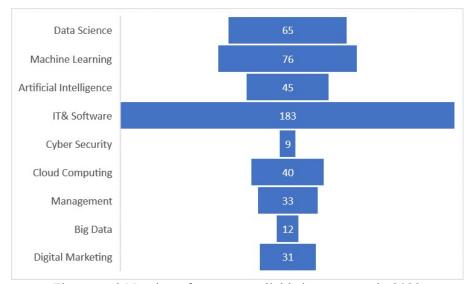


Figure no.2 Number of courses available by category in 2022 Source: created by the author, based on information collected from Great Learning

From now on artificial intelligence will play a very strong role in education, material testing and teaching. In line with Nelson Mandela's belief that "education was the most powerful weapon, you can use to change the world" we must do everything in our power to convince young people that a successful life is based on a solid education.

6. Conclusions

Unfortunately, the covid-19 pandemic exacerbated inequalities in education. Even this confusing situation has brought some benefits: the re-invention of teaching, learning, and focus on value, not just quality. In-person education is very different from online education because teachers provide the emotional support that students need. For the past two years, countries have struggled to rethink their education system. The Great Learning educational platform was the ideal solution for those in India to develop knowledge cheaply. New educational policies are trying to harmonize 'new curriculum' suggestions with existing models, creating a sense of unity. During the pandemic crisis, it was seen that the education system is not programmed to produce skills and competencies that make it easier for humans to participate in the global economy.

References:

Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N. and Umek, L., 2020. Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. Sustainability, 12(20), 8438.

- Arora, A.K. and Srinivasan, R., 2020. Impact of pandemic COVID-19 on the teaching-learning process: A study of higher education teachers. *Prabandhan*: *Indian journal of management*, 13(4), pp.43-56.
- 3. Batubara, B.M., 2021. The Problems of the World of Education in the Middle of the Covid-19 Pandemic. Budapest International Research and Critics Institute (BIRCI-Journal). *Humanities and Social Sciences*, 4(1), pp.450-457.
- Bullock, J.G., 2021. Education and attitudes toward redistribution in the United States. British Journal of Political Science, 51(3), pp.1230-1250.
- Chick, R.C., Clifton, G.T., Peace, K.M., Propper, B.W., Hale, D.F., Alseidi, A.A. and Vreeland, T.J., 2020. Using technology to maintain the education of residents during the COVID-19 pandemic. Journal of surgical education, 77(4), pp.729-732.
- Daniel, S.J., 2020. Education and the COVID-19 pandemic. *Prospects*, 49(1), pp.91-96.
- Dominguez-Vergara, N. and Dominguez-Perez, D.N., 2021. Effects and consequences of covid-19 to higher education in Mexico. Journal of Higher *Education Theory & Practice*, 21(3).
- El Masri, A. and Sabzalieva, E., 2020. Dealing with disruption, rethinking recovery: Policy responses to the COVID-19 pandemic in higher education. *Policy Design and Practice*, 3(3), pp.312-333.
- 9. Gomes, C.A., Sá, S.O., Vázquez-Justo, E. and Costa-Lobo, C., 2021. Education during and after the pandemics. Ensaio: Avaliação e Políticas Públicas em Educação, 29, pp.574-594.
- 10. Great Learning, 2022. Home. [online] Available at: <www.mygreatlearning.com> [Accessed 26 March 2022]
- 11. Hilt, L. and Riese, H., 2021. Hybrid forms of education in Norway: a systems theoretical approach to understanding curriculum change. Journal of Curriculum Studies, pp,1-20.
- 12. Jena, P.K., 2020. Impact of pandemic COVID-19 on education in India. International Journal of Current Research, 12.
- 13. Krishnamurthy, S., 2020. The future of business education: A commentary in the shadow of the Covid-19 pandemic. Journal of Business Research, 117, pp.1-5.
- 14. Math-Wizz, 2022. Home. [online] Available at: https://www.whizz.com/en-nath-wizz, 2022. Home. [online] Available at: https://www.whizz.com/en-nath-wizz, 2022. Home. us/> [Accessed 6 March 2022].
- 15. Online Learning Consortium, 2022. Home. [online] Available https://onlinelearningconsortium.org/ [Accessed 3 March 2022].
- 16. Rashid, S. and Yaday, S.S., 2020. Impact of Covid-19 pandemic on higher education and research. Indian Journal of Human Development, 14(2), pp.340-343.
- 17. Soudien, C., Reddy, V. and Harvey, J., 2021. The impact of COVID-19 on a fragile education system: The case of South Africa. [online] Available at: https://library.oapen.org/bitstream/handle/20.500.12657/50965/978-3-030- 81500-4.pdf?sequence=1%23page=376%C2%A0#page=299> Accessed 3 March 2022].
- 18. Tamrat, W., 2021. Enduring the impacts of COVID-19: experiences of the private higher education sector in Ethiopia. Studies in Higher Education, 46(1), pp.59-74.
- 19. Tarkar, P., 2020. Impact of COVID-19 pandemic on education system. International Journal of Advanced Science and Technology, 29(9), pp.3812-3814.

- 20. Tadesse, S. and Muluye, W., 2020. The impact of COVID-19 pandemic on education system in developing countries: a review. Open Journal of Social Sciences, 8(10), pp.159-170.
- 21. Toquero, C.M., 2020. Challenges and opportunities for higher education amid the COVID-19 pandemic: The Philippine context. *Pedagogical Research*, 5(4).
- 22. Ventayen, R.J.M., Estira, K.L.A., De Guzman, M.J., Cabaluna, C.M. and Espinosa, N.N., 2018. Usability evaluation of google classroom: Basis for the adaptation of gsuite e-learning platform. Asia Pacific Journal of Education, Arts and Sciences, 5(1), pp.47-51.
- 23. Violante, M.G. and Vezzetti, E., 2014. Implementing a new approach for the design of an e-learning platform in engineering education. Computer *Applications in Engineering Education*, 22(4), pp.708-727.
- 24. Zhao, D., 2011. E-learning platform and modern education. *International* Journal of e-Education, e-Business, e-Management and e-Learning, 1(2), 139.

GENERATIONAL THEORIES AS A WAY OF UNDERSTANDING THE STRUCTURE OF WORK POTENTIAL

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Abstract: The subject of workplace generations is to attract the interest in academic and management sectors. In a context of renewal of populations of working age, the study of the behavior and relationship to work of different generations becomes particularly interesting, sometimes raising the question of ways of organizing work. International competition, globalization, the financing of companies and technological changes have led to unprecedented social change and the emergence of new types of workplace behavior. Indeed, the cohabitation of generations at work places new difficulties for the management of human resources for several reasons; divergent values and expectations, intergenerational cohabitation is longer, organizational management methods are increasingly unpredictable and the professional trajectory of individuals is no longer as linear as before.

Keywords: generations, theory of generation, generational analysis, generational characteristics. JEL Classification: J62.

1. Introduction

Today, the theory of generations has gained great popularity in the field of marketing and organizational management. At numerous lectures, trainings and publications, we are encouraged to consider the particularities of "millennials" when working with staff and clients, when planning the educational process at universities and schools, when advertising and promoting goods. Sometimes the impression is made that the theory of generations today claims the status of a new management paradigm, in fact, under the banner of sociological knowledge.

Before proceeding to the verification of generational theories, it is necessary to consider more precisely the boundaries and the content of the very concept of "generation". First, it is important to separate his sociological interpretation from his biological and genetic counterpart, that is, from understanding generations as genealogical tribes within the same family. In addition, the concepts of generation and age should be clearly distinguished, especially when conducting field research and management practices. In this article, a simple generalization is made, from the position of most representatives of the theory of generations, age is a concept rather psychological and biological, reflecting the characteristics of the human psyche and physiology at different stages of his life, while the generation is a social concept. This is an important distinction, which shows that generational traits are always unique, while age traits are repeated in the lives of people of different generations.

K. Mannheim in his essay "The Problem of Generations" proposed a sociological approach to understanding generations, which served as the foundation for all further research on this topic. And although K. Mannheim's work was purely theoretical (it did not describe certain generations and did not analyze the conditions of their socialization), this approach was further developed by other authors.

The main source of the version of the theory of generations that is circulating in the modern scientific and quasi-scientific literature is the work of the Americans W. Strauss and N. Howe. It should be noted that the authors are not academic scientists. Thus, W. Strauss is known as one of the founders of the American satirical group "Capitol Steps", as well as the head of the international program of exchange of educational experience for teenagers passionate about theater and journalism. N. Howe is a Demographic Manager at Hedge Investment Company, President of Sakilium and Lifecourse. However, the lack of authorship of academic circles did not prevent their creation from becoming one of the most cited versions of the theory of generations of our time.

2. Generation theories

Generational differences have been studied since the 1950s and have their early origins in sociology, especially in the work of Karl Mannheim (1893-1947). Mannheim (1970) emphasized the importance of generations as a guide for understanding the structure of social and intellectual movements. Mannheim identifies the main features of our generational society: the appearance and disappearance of cultural agents, the continuity of change, the importance of transmission and memory, etc., and calls for the study of each of his features. It also specifies how social groups contribute to defining generations; because it is often a concrete sub-group which, by formulating the issues facing their generation, strives to make it exist as such. The generation does not need the mutual knowledge of their members, nor a common will. We do not adhere to these formations: we come under them, and we cannot leave them, except when the situations they designate lose their relevance.

What appears in Mannheim is above all the genesis of generations: he insists on the "factors of socialization", the "structuring principles", these "founding events" capable of making a "generational whole" a form of "community of destiny".

It is a question of questioning both the limits and the perspectives opened up by "the problem of generations". Thus Mannheim insists more on the founding moment of a generation than on its mode of being - the bahitus? - and on the interaction of the generations in the social domain. In addition, beyond the "generational set", to push the analogy with class further, the "generational conflict" can be revisited in the light of the differentiated founding moments from which the generations are socialized.

Howe and Strauss's theory is based on the assertion that the key element in determining the time frame of any generation is the category of values.

The allocation of generational groups in this concept is due not only to the date of birth, but also to a set of similar core values formed under the influence of certain social, economic and political conditions in which a person grows up to about 12 years family education, characteristic of that period. Common value attitudes are those that explain the identity of the way of thinking, motives and behaviors of groups of people, representatives of the middle class belonging to the specific generation.

In general, the theory is based on the cyclical nature of the development of society, taking into account the regular alternation of the stages of ascension and crisis. At the same time, each generation is considered during the average life span of a human being (80-90 years), during which time, at one age or another, it goes through four different stages, alternating with a frequency of 20-25 years) - awakening, ascension (flowering), destruction and crisis. And with the same frequency, a new generation appears in the world, which is raised in a situation corresponding to a certain stage of the social environment, which means that it has a different set of value characteristics, different from the attitudes of previous generations. Moreover, it is these differences in values that make the next generation the driving force of society in the next stage of its development.

These four stages of the cycle, which determine the current type of social relations, are designated by analogy with the seasons - spring, summer, autumn and winter. In turn, generations are also divided into four value archetypes, corresponding to a certain stage and also being replaced successively throughout the historical development of society, they

• prophets (idealists) - optimists who aim to create a brighter future; they appear during the awakening period, ie in the "spring" stage;

- nomads (wanderers) cynical reactionaries, disappointed by the realities of the existing system; increased during ascension (flowering) - "summer";
- heroes self-confident and active fighters, who defend existing values; increased during the stage of destruction - "autumn";
- artists who are insecure and prefer to adapt to the existing system; children of the crisis period - the "winter" stage.

That is, depending on the basic scenery of the scene, these archetypes in their social orientation can be dominant (raised during the awakening and destruction - prophets and heroes) or recessive (raised during ups and downs and crises - nomads and artists).

Initially, the viability of this generational concept was confirmed by the authors on the example of American history. However, its validity in its original form for other regions has been shown to be questionable, despite the general universality of many key aspects of the theory. Of course, the process of forming the value characteristics of generations in the national context would be appropriate to consider only on the basis of specific historical characteristics and the regional socio-economic and political situation. In this sense, I adapted the theory of generations to the realities of the development of the Romanian society. Thus, based on the analysis of the main events in the Carpathian-Danubian-Pontic space, five generations have been identified and characterized, currently living in Romania. (see table 1)

Table 1. Adapting the theory of Howe and Strauss generations to the Romanian context

Generation	Tymes/	Impact of social events	Main collective
Generation	Type/	impact of social events	
	Archetype		characteristics
Silent	Winter /	The bourgeoisie dominates	Loyalty, obedience to
generation	artists	society, economy, politics;	rules, laws and orders,
(broken, lost)		period called La Belle	respect for position and
1928–1945		Epoque; The onset of the	status, obedience and
		Great Depression of 1929:	sacrifice, honor,
77-94 years		declining production, mass	patience, temperance.
		unemployment (especially	
		the United States;	
		Germany), the triumph of	
		Nazism; World War II	
		(1939-1945), Soviet	
		occupation of Bessarabia	
		and Northern Bukovina on	
		June 23, 1940.	
Baby boomers	Spring /	Beginning of the Cold War	Idealism, optimism,
(1946-1964)	prophecies	(1947); Communization of	collectivism and team
	(idealists)	Romania; Nationalization	spirit, involvement,
58 - 76 years		of enterprises;	_
		Collectivization of	in personal growth,
		agriculture (1949-1962);	
		Anti-communist resistance.	cult of youth and health,
			emphasizing image and
-	<u> </u>		The state of the s

			attractiveness, nostalgia and religiosity.
Generation X (13th generation, "permissive" generation, "latchkey generation") 1965-1980	Summer / nomads (wanderers)	The Western Sexual Revolution (changing family life and media, removing taboos on sex, drugs, and rock music); The Anti-Abortion Decree of 1966; The Prague Spring of 1968; 1972 Helsinki Conference; Total	Preparing for change, individualism, choice, global awareness, technical literacy, lifelong learning, information, emotion seeking, pragmatism, survival and self-confidence, gender
Generation Y (Millennials, Next, Zero) 1981-1996 26 - 41 years old	Autumn / heroes	deficit; Energy crisis. The collapse of communist regimes in Central and Eastern Europe, the collapse of the USSR; Reunification of Germany; The transition to a market economy Biotechnology, New epidemics, Military conflicts.	equality. Preparation for change, civic duty and morality, responsibility, optimism, sociability and self-confidence, desire for diversity, flexible thinking, naivety and obedience, focus on achievement and immediate reward, devotion to fashion and brand awareness, high level of technical competence.
Generation Z (Alpha, Digital Generation, Generation XD) 1997-2012 10-25 years	Winter / painters	Globalization, Business Consolidation, World Economic Crisis, Information Society, Terrorist Attacks); Romania 's accession to the EU in 2007.	Rapid maturation, a high level of digital competence, communication in the virtual space.

For a broad comparative assessment of the main characteristics of the generations considered, one can use the parametric model of "Cultural Dimensions" by G. Hofstede, which aims to identify the socio-cultural characteristics of the representatives of different social groups. Although the Hofstede approach has been developed to understand the characteristics of people in different countries to build effective relationships when working together in international activities, this model is also applicable to the study of generational groups, as it is based on identifying differences in value attitudes. It allows you to understand and compare the main "standards" of human behavior by describing the following six parameters (Hofstede, 2011):

• Power distance - based on different attitudes towards the issue of inequality, which may be more or less acceptable in the eyes of representatives of a certain generation;

- Individualism / collectivism means the level of relationship between the individual and the team, including the preparation of people for teamwork and the degree of integration in groups;
- Masculinity / femininity describes the inclinations of the gender group associated with the emphasis on emotional roles: for example, "masculine" values correspond to a competitive-aggressive orientation (including confidence, ambition, desire for competitiveness and gains), and "feminine" values are characterized by moderation (importance of relationships, personal priorities and quality of life);
- · Avoidance of uncertainty indicates the level of tension in a situation of uncertainty, including the willingness of group members to take risks;
- Long-term / short-term orientation determines the focus of people's attention on past, present or future events;
- Indulgence / restraint shows the degree of self-control compared to focusing on meeting basic pleasure-related needs.

Table 2. Comparison of the value parameters of generations X. V and Z.

Table 2: Com	Jarison of the value pa	rumeters or generation	115 71, 1 111111 22
Generation	X	Y	Z
Parameters			
Power distance	Significant distance	Average distance	Short distance
Individualism / collectivism	Individualism	Collectivism	Individualism
Masculinity / femininity	More masculinity	Intermediate	More femininity
Avoidance of uncertainty	Low level	Intermediate	High level
Long-term / short-	Short-term	Medium-term	Long-term
term orientation	orientation	orientation	orientation
Indulgence / restraint	Restraint	Indulgence	Intermediate

The qualities listed above are recognized and used in the periodization of generational theory. It is easy to see that the features listed above are distinctive for each generation. However, some researchers have set out to identify the cyclicity of the repetition of generational features. Indeed, the contradictions between "parents and children", ie the first and second generation, mean the opposition of the priorities of the second with the priorities of the first. But the next (third) generation, rejecting the experience and qualities of the second generation, must inevitably regain the features of the first generation. Even the fact that the first generation is opposed to the second, as well as the third to the second, is their common feature. Therefore, generations must have common qualities.

In order to demonstrate the repeatability of the character traits of individuals of different generations as a regularity and as a result of social impact, Minakov (2014) compared the data curve on population dynamics by age groups in different years. It is important to note that the environment itself and, consequently, its impact on humans, also has repetitive properties and similarities. This applies to periods of crisis, stagnation, recession, followed by periods of global economic growth. The same is true for the time intervals between economic and political systems.

Consequently, the legitimacy of the periodization of generations is demonstrated on the basis of the frequency with which the dominant features appear. It is this periodization

that reflects, for example, the dominance of one's own interest over the community's interest in the modern world at the beginning of the 21st century, as it manifested itself at the beginning of the 20th century. This domination was followed by the global crises of 1929 and beyond (the Great Depression), as well as the global crisis of 2008. Such periods were followed by the domination of social priorities, integration and the creation of global integration unions.

Thus, the reappearance of dominant character traits displayed by generations has the same repetitiveness as the appearance of their unique traits. Among the recurring qualities and priorities: the pragmatism of the millennial generation and, on the contrary, the romance of baby boomers, personal and public interests. Among the unique ones is the use of innovative technologies of the time to achieve success.

3. Conclusion

It is very important to actively implement and introduce the knowledge we have gained from studying the theory of generations, then we can bring to a qualitatively new level of communication and relationships between managers and subordinates, between companies and customers, as well as to predict people's behavior more efficiently and effectively. In fact, there is nothing complicated about it, so this study and theory shows that we are still connected with previous generations, but it is possible that our conscience today does not accept this.

Even though theories of generation is clearly not enough to explain the age differences in people's axiological systems, however, the application of generational theory developments in the tasks of developing job potential is a good tool to consider, which corresponds to the main purpose - to provide the country with a workforce that has a set of such qualities and job opportunities necessary for the effective development of the national economy.

References:

- 1. Costanza, D.P. and Finkelstein, L.M., 2015. Generationally based differences in the workplace: Is there a there there. Industrial and Organizational Psychology, 8, pp.303–323.
- 2. Gurova, I. and Evdokimova, S., 2016. Generation Theory: A Modern Developments and Applied Aspects. Central Problems of innovation *Economics*, 14, pp.78-86.
- 3. Hofstede, G., 2011. Dimensionalizing Cultures: The Hofstede Model in Context. Online Readings in Psychology and Culture, 2(1).
- 4. Howe, N. and Strauss, W., 1997. The Fourth Turning: What the Cycles of History Tell Us About America's Next Rendezvous with Destiny. New York: Broadway Books.
- 5. Mannheim, K., 1970. The problem of generations. Psychoanalytic Review, 57(3), pp.378-404.
- 6. Minakov, V.F., 2014. Differences and similarities in the periodization of the theory of generations. *International Research Journal*, 2(31), pp.122-124.
- 7. Pilcher, J., 1994. Mannheim's Sociology of Generations: An Undervalued Legacy. The British Journal of Sociology, 45(3), 481.
- 8. Spitzer, A.B., 1973. The Historical Problem of Generations. The American Historical Review, 78(5), 1353.

SOCIAL RESPONSIBILITY IN ROMANIAN COMPANIES – **CASE STUDIES**

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Abstract: Corporate social responsibility is a concept regulated by various international programmatic documents, based on the voluntary compliance of organizations with the requirements of sustainable social development. The concept involves adapting the structure and operations of companies to meet their social responsibility goals. The international concern to secure natural resources for future generations through their preservation is now an ambitious goal, but which international organizations did not want to regulate too strictly from a legal point of view. The aim is to make every individual and the society as a whole aware of the importance of sustainable development and to comply with the objectives set out in their own right. The study will present the overall understanding of social responsibility, the regulation of the concept and will analyse cases on how Romanian companies adapt to this concept and the implications of the adaptation to CSR for the management.

Key words: social responsibility, sustainable development, organizational management, compliance. JEL Classification: H10, M14.

1. **Social Responsibility**

A market trend, which has become increasingly important for companies, is that of involvement in society, the so-called "social responsibility" (Hereinafter referred to as CSR).

The Lisbon Strategy (2000) set several objectives "to strengthen employment, economic reform and social cohesion as part of a knowledge-based economy". Among these objectives, the European Council made a "special appeal to companies' corporate sense of social responsibility regarding best practices on lifelong learning, work organisation, equal opportunities, social inclusion and sustainable development". This is what we know as Corporate Social Responsibility (CSR).

In 2001, the European Commission adopted the Green Paper: "Promoting a European framework for Corporate Social Responsibility" (European Commission, 2001), where CSR is considered to be "essentially a concept whereby companies voluntarily decide to contribute to a better company and a cleaner environment", part of the company's identity.

The European Council also adopted the Resolution on Corporate Social Responsibility (2003/C 39/02) which sets out the strategy to promote CSR. The Council reiterates that the CSR is voluntary in nature and must be credible and transparent. The strategy aims, among other things, at developing managerial skills in the field of CSR as well as facilitating the convergence and transparency of CSR practices and tools.

Furthermore, the European Parliament resolution of 20 February 2008 on the input for the 2008 Spring Council as regards the Lisbon Strategy (2009/C 184 E/06) "calls for agreed rules and practices in world trade that are compatible with the Millennium Development Goals and with the responsibility for leading the fight against climate change and promoting health".

The concept of CSR, as defined by the EU Green Paper, implies that organizations contribute, on a voluntary basis, to a better society and a cleaner environment. It must be borne in mind that the objective of each company is to generate profits, but according to the Green Paper, companies must integrate CSR into their management and operational processes, and thus contribute to social and environmental objectives.

Of course, CSR can also have a direct economic value, on the one hand through the investments that the company has to make, on the other hand, through the benefits that the company may have, as there are already many concerns of the beneficiaries of goods and services or of the authorities in this area, investors are concerned about CSR, the public communication of CSR activities can influence the perception of the stakeholders, who are paying increasing attention to this field, etc. CSR can and must also be integrated into the strategic management of the company and, at the same time, into the management of operations.

Issues related to operations management and CSR should take into account the fact that there are several benefits of social involvement, such as:

- -competition in technology leads to identifying more sustainable solutions;
- -natural resources and raw materials are becoming increasingly expensive, leading companies to act innovatively;
- -corporate social responsibility must envisage cooperation with non-governmental organizations and the public sector in order to achieve the objectives.

The European Union considers that adapting a company's operations to CSR should not be considered an additional cost, but an investment and high quality management.

The management of operations in the context of CSR should consider that all aspects of finance, trade and social inclusion are embedded in a long-term strategy that minimizes the risk of uncertainty.

The Lisbon Strategy defines CSR as a concept "by which companies integrate social and environmental concerns into their business operations and their interaction with stakeholders on a voluntary basis".

Increased social responsibility beyond complying with legal requirements is considered to increase productivity by providing better working conditions for employees, training, management-employee networking, etc. The integration into operations of environmentally-friendly business technologies and practices is also part of social responsibility.

In terms of sustainable development, the United Nations 2030 Agenda for Sustainable Development 1 has been adopted at the global level, which sets out three dimensions of sustainable development: economic, social and environmental, as well as 17 Sustainable Development Goals. These include "ensuring sustainable consumption and production patterns" (goal 12).

In CSR, companies are concerned, among other things, with sustainability, which involves waste reduction, recycling and re-use. All the recommendations adopted at international level seek to raise awareness of the need to focus on environmental issues (global warming, waste disposal, air and water quality, etc.).

To demonstrate compliance with sustainability requirements, companies have a standardization system developed by the International Organization for Standardization (ISO) at their fingertips. The ISO 14000 set of standards provides guidelines and a certification program that document the actions of an environmentally responsible company and have been designed to help companies around the world reduce their negative environmental impact.

¹ https://sdgs.un.org/2030agenda

2. Management of the organization for the implementation of objectives in the field of social responsibility

The fact that society is changing is making organizations able to adapt to market requirements, modernize their structure and operations to become more competitive.

The modernization of the structure requires, among other things, the inclusion in the organization's structure of a function in charge of the management of activities in the area of social responsibility. The idea of a social responsibility manager is not new; according to some authors it has been mentioned (Moga, 2014) in Business Horizons in 1973.

In Romania, according to Government Decision no. 1352/2010, class 3257 comprises "environmental and occupational health inspectors, assimilated". In 2013, the occupational standard "Social responsibility Manager" was developed and approved by the National Qualifications Authority. The standard establishes the COR 325718 code for the "Social Responsibility Manager" occupation and describes its tasks:

- "- coordinate the process of developing SR strategies and policies (Social Responsibility), ensuring consistency between the organization's strategic and Sr objectives;
- analyse specific SR issues and identify the relevant SR themes by proposing responsibility programs appropriate to the objectives of the organization, capable of meeting the expectations of the main stakeholders, from customers and employees to business partners, social partners, the environment and owners or investors;
- organize the SR management system, designing and implementing the internal procedures necessary for the optimal performance of specific activities, from the SR programs to the monitoring, evaluation and reporting of SR performance;
- coordinate the process of evaluation and reporting of SR performance, ensuring a transparent and fair relation with the organization's stakeholders;
- initiate and supervise education, training and career development programs for employees under their authority;
- foster an organizational environment among employees that encourages moral and social responsible behaviour and, on the contrary, discourages illegality, lack of responsibility and unethical behaviour."

When referring to operations management, we consider that this is an important component of the organization's management. In order to achieve the goals of the organization, a high-performance management must be ensured, that takes into account the use of the most innovative technologies that can ensure success.

Processes by which, in a manufacturing or service company, resources made available (financial, logistics, materials, etc.) are converted into finished goods or services provided constitute a set of operations that the company management must consider and aim to include in its strategic management.

In the literature, "operational performance is commonly measured in organizations through five dimensions: cost, quality, availability, flexibility and innovation" (Cojocaru, 2017).

From a managerial point of view, the company needs to consider the lowest cost and the best quality of products or services, so that it can reconcile profit with customer needs.

It is also important for the success of the company to ensure the availability of products or services, because any failure to provide them in the market has a negative impact on the company's performance as well as its reputation.

¹ http://www.conta-

conta.ro/standarde ocupationale/SO manager%20de%20responsabilitate%20sociala 00.pdf

Flexibility is important for the company precisely to be able to adapt easily to the needs of the market in which it operates.

Innovation is also essential to operational performance because without the introduction of the latest and most efficient technologies, without the provision of innovative products and services, the company will not be able to compete.

Operations management is important for both manufacturing and service companies (banks, courier companies, digital markets, etc.). They all need to manage resources efficiently so as to produce and deliver products and services according to market requirements.

Operations management is defined as "resource management activities that produce and deliver products and services" (Cojocaru, 2017). This work involves covering the planning, leadership, management and control phases. The planning of operations requires both a strategic part (on the overall view of the business model) and a tactical part to ensure that the company operates.

As far as resources are concerned, they may differ depending on the company's field of activity: human resources, material resources, information resources, financial resources, etc.

Operations management is a function of the company management, considered the central function, because without operations there would be no goods or services and it must follow this adaptation to the new requirements, such as CSR.

3. Legal regulations and prospects in the area of social responsibility

As we have shown, CSR now requires compliance and voluntary involvement of companies. However, The Order of the Minister of Finance no. 1802/2014 required the company managers to draw up a non-financial report "containing a true and accurate presentation of the development and performance of the entity's activities and of its position, as well as a description of the main risks and uncertainties that it faces" (Art. 482 of the Order of the Minister of Finance 1802/2014).

Subsequently, Order no. 1802/2014 was supplemented by Order no. 1938/2016 of the Minister of Finance, which stipulates that new articles on the non-financial declaration are inserted, among which article 492(1) (Order no. 1938/2016 regarding the amendment and supplementation of accounting regulations, published in the Official Gazette of Romania, Part I, issue 680 of 2 September 2016) states that: According to this order, entities of a public interest that exceed the criterion of an average number of 500 employees during the financial exercise shall include a non-financial affidavit in their administrators' report, that contains, provided that it is required to understand the development, performance and position of the entity and the impact of its activity, information regarding at least the environmental, social and staff-related issues, respect for human rights, fight against corruption and bribery...". In paragraphs 6 and 7, the order shall explain what the non-financial statement should contain from the point of view of the CSR:

"(6) The non-financial affidavit shall contain, as regards environmental aspects, details of the current and foreseeable impact of the entity's operations on the environment and, where appropriate, on health and safety, the use of renewable and non-renewable energy, greenhouse gas emissions, water use and air pollution. With regard to social and staff matters, the information provided in the non-financial affidavit may relate to actions taken to ensure gender equality, the implementation of the fundamental conventions of the International Labour Organization, working conditions, social dialogue, respect for the workers' right to be informed and consulted, respect for trade union rights, health and safety at work, the dialogue with local communities and/or the actions taken to ensure the protection and development of these communities. As regards human rights, anticorruption and bribery, the non-financial affidavit may include information on the prevention of human rights abuses and/or on the instruments in place to fight corruption and bribery.

(7) The non-financial affidavit shall also include the consequences for climate change of the entity's activity and the use of the goods and services it produces, as well as its commitments to sustainable development, the fight against food waste and the fight against discrimination and the promotion of diversity."

We note that the requirement to draw up the non-financial affidavit was only for public benefit purpose entities with more than 500 employees. According to the Order of the Minister of Finance no. 3456/2018, article 4921 was amended to the effect that the obligation to draw up the non-financial affidavit belongs to all entities "which, on the balance sheet date, exceed the criterion of having an average number of 500 employees during the financial year...".

These legal regulations require only the reporting of the measures taken by companies, and not the mandatory adoption of any measures, so the involvement in CSR actions remains at voluntary level.

From a legal point of view, we note that the legislator has used the wording "fight against corruption and bribery", which, in our opinion, do not correspond to the Romanian legal reality, bribery offences being included in the notion of corruption, the term being probably reproduced after the international expression 'anti-bribery and corruption policy'. consider that a wording close to our legal reality "fighting fraud and corruption" (anti-fraud and anti-corruption policies).

In 2020, Regulation (EU) 2020/852 was adopted, which establishes, among others, criteria for environmentally sustainable economic activities (article 3), transparency of undertakings in non-financial declarations (article 8), and environmental objectives (article 9).

For the purposes of this Regulation, the elements listed below are environmental objectives: (a) climate change mitigation; (b) adaptation to climate change; (c) sustainable use and protection of water and marine resources; (d) transition to a circular economy; (e) pollution prevention and control; (f) protection and restoration of biodiversity and ecosystems.

As regards the application of transparency of non-financial statements (article 8), the following shall be done:

- -from 1 January 2022 for the objectives: climate change mitigation and adaptation;
- -from 1 January 2023 for the other four objectives of article 9.

Following the adoption of the Regulation, the Order of the Minister of Finance 1802/2014 was supplemented by 492⁷, with the following contents "The entities referred to in point 4921 shall also include in the non-financial affidavit the information referred to in Article 8 of Regulation (EU) 2020/852 ...". Thus, companies will have to comply with the provisions of the European Regulation, starting with the above mentioned dates.

It has been decided at European level that it is important to regulate the involvement of companies in CSR activities in a stricter manner. On 21 April 2021, the European Commission adopted a proposal for a Corporate Sustainability Reporting Directive (CSRD), which intends to extend the "scope to all large companies and companies listed on regulated markets", "Introduces more detailed reporting requirements and a reporting requirement in line with mandatory EU sustainability reporting standards", "requires companies to digitally 'label' the information reported, so that they can be read automatically and integrated into the single European access point provided for in the capital markets union action plan". The first set of sustainability reporting standards is expected to be adopted by October 2022.

4. Case studies on corporate social responsibility in omania

Romanian companies have voluntarily adopted social responsibility policies and adapted their operations management to establish medium- and long-term social responsibility strategies.

A study¹ carried out in 2019 on the expectations of Romanian consumers from CSR campaigns pointed out that most respondents believe that the involvement of companies in CSR should cover issues such as access to education, access to health services, infrastructure development and air pollution. Most respondents also believe that a CSR campaign should be clear, visible and show results.

Starting 2016, the "Romania Corporate sustainability & transparency Index (Romania CST Index)" is being carried out², "a complex, unique analysis in Romania, assessing the indicators of sustainability of companies in terms of performance level and transparency in areas such as climate change, diversity policies and anti - corruption, responsibility toward employees, responsible marketing or value chain. More than 750 companies were analysed for this index, namely Romanian companies that employ over 500 people, and other smaller companies that have published sustainability reports"³.

The event pointed out that of the 750 companies, only 4.4% published sustainability reports. A ranking of the analysed companies was drawn up, receiving distinctions, as follows:

Gold Level Recognition: Kaufland Romania, Coca-Cola HBC Romania, HeidelbergCement Romania, Antibiotice, Raiffeisen Bank, CEZ Romania, Telekom Romania, Banca Transilvania, Lidl Romania.

Silver Level Recognition: Romgaz, GreenPoint Management, Romstal.

Bronze Level Recognition: Digi | RCS-RDS Group, Transelectrica.

A case study - Kaufland Romania

Kaufland Romania took the top position of the ranking with 98 points⁴. The company is part of the Schwarz Group, which in turn promotes a policy of social responsibility⁵. The Group adopted a CSR strategy, by 2025, aiming at sustainable action along four lines:

- \rightarrow People: more transparency for customers and fair wages for employees;
- Product quality: reduction of the salt and sugar content of marketed products by 20 % and use of certified raw materials;
- \rightarrow Circulatory systems: intelligent recycling and conscious use of products (20% reduction in plastic);
- \rightarrow Ecosystem: reduction of water consumption and active environmental protection.

As part of the group, Kaufland Romania must contribute to the achievement of the objectives, which requires a change in the management of operations.

A section dedicated to CSR has been created on the company's website⁶, and the strategy is implemented under the slogan "involvement makes a difference".

In terms of financial resources, funding has been allocated to funding programs providing non-reimbursable grants to non-governmental associations running projects in the fields of education, environment, health, social and culture.

¹ https://ambasadasustenabilitatii.ro/wp-content/uploads/2019/12/Infografic-BOLD-CSR.pdf

² The Azores Sustainability & CSR services Agency

³ https://www.theazores.ro/romania-cst-index-2021/

⁴ https://www.theazores.ro/wp-content/uploads/2020/11/Romania CSR Index 2020.pdf

⁵ https://gruppe.schwarz/en/responsibility/strategy

⁶ https://despre.kaufland.ro/responsabilitate/implicarea-face-diferenta.html

In order to protect the climate, the management of operations concerned the use of energy-efficient technology and the environmental planning of new buildings, as well as climate-compatible logistics processes and waste avoidance.

The efficient and responsible use of resources is achieved through the adoption of waste separation measures, the use of reusable fruit and vegetable crates, the introduction of clean and sustainable receipts¹.

Regarding the production of textile materials, the company joined the Global Organic Textile Standard certification mark (GOTS), the global symbol of environmentally responsible and socially responsible textile production.

In the field of animal protection, the reorientation of operations concerned several areas:

- -To protect the environment, especially the seas, they no longer use hard microplastics in cosmetics and body care products, or in their own branded detergents and cleaning agents.
- -Marketing products under the Marine Stewardship Council (MSC) logo that promotes sustainable fishing and ensures traceability worldwide and thus the conservation of fish stocks.
- -Improving the welfare of farm animals and ensuring more responsible production of animal products.

With regard to the complex and global Kaufland supply chain, the company has committed to applying fair and transparent business practices, ensuring good working and living conditions, respect for human rights, as well as environmentally friendly conduct in the value chain.

The company's environmental responsibility included the introduction of environmentally friendly shopping bags, the avoidance of food waste, the collection of used batteries, oil recycling, environmentally-friendly technologies for refrigeration and air-conditioning systems, etc.

A case study – Banca Transilvania

A section dedicated to CSR was created on the bank's blog², with campaigns run under the motto "Accountability. Courage. Respect." The company's involvement envisages three fields: education, social and environment.

Several campaigns were designed in the field of education, such as:

- -"An extra year in school, an extra chance for the future", dedicated to school children from disadvantaged backgrounds, by offering school supplies, clothes and food, school scholarships, tutoring and counselling;
- -"Spark days", dedicated to high school pupils, business and entrepreneurship enthusiasts;
- -"Coloured life for blind people", which supports the education and social inclusion of blind people;
- -"4 Hour Challenge", for young people who want to test their entrepreneurial skills in a real and dynamic context;
- -"SuperTeach tomorrow's Romania starts with today's teachers", dedicated to teachers, offering them training for an "open mindset in education".

In the social field, CSR campaigns targeted, among other things:

-"For Christmas we give together", with the donors being able to choose which project they want to support;

¹ FSC® certified thermal paper products, which means that the raw material used comes from responsible forest-based industries

² https://www.bancatransilvania.ro/blog/csr/educatie/

- -"Free pediatric care, 24/7 Peditel", a free medical service dedicated to providing medical advice to parents and children in rural areas;
- -"Together we give a chance to life for patients with oncological disorders", with the aim of acquiring a CT device for the Coltea Hospital;
- -"Together we provide a warm meal for as many families in need as possible" families receive a monthly voucher, with which they can buy what they need from a warehouse in the city.
- -"Dog-assisted therapy for children with special needs. Donate too!" the project aims to prepare the first certified nurses dogs in Romania for the disabled children.

In the category of CSR environmental actions, among other things, the following campaigns were carried out:

- -The "Guide of good environmental manners" the recycling patrol, an education platform on how to look after the environment and how to protect nature;
- -"#PeopleOfChange" more than €300,000 have been invested in voluntary schemes dedicated to multi-area afforestation;
- -"Be an Urban Ranger" the Natural Park of Văcărești the paradise in the middle of Bucharest – a project on the maintenance and protection of the park;

Conclusions 5.

Looking at the involvement of the two companies in CSR campaigns, we can see that the approach is different, depending on the specific nature of the business, but both companies are already flexible and adaptable in terms of management and voluntary compliance with CSR requirements.

Furthermore, the requirement for companies to include in their management reports non-financial statements, including with regard to CSR, ensures the transparency of information related to this area of activity.

As we have pointed out through case studies, transparency is also an objective of companies, which have created special sections on their CSR websites, although according to the MF order the non-financial affidavit is not mandatory to be published, but only reported, in order to achieve transparency with regard to the shareholders and the state authorities.

The approval of a Directive at European level will also require the adoption at national level of transposing legislation, which is higher than a minister order, and therefore has a stronger legal force, which will boost the involvement of companies in CSR campaigns.

References:

- Ambasada Sustenabilității în România, 2021. Romania CST Index: rankingul sustenabilității corporative din România anunță rezultatele din 2021. [online] Available at: https://ambasadasustenabilitatii.ro/romania-cst- index-ranking-ul-sustenabilitatii-corporative-din-romania-anuntarezultatele-din-2021/> [Accessed 2 February 2022].
- Băleanu, T.E., Chelcea, L. and Stancu, A., 2011. The social responsibility of 2. the top 100 Romanian companies. an analysis of corporate websites. Amfiteatru Economic, XIII, 29, pp. 235-248.
- 3. Cojocaru, C., 2017. Managementul operațiunilor – De ce unele companii au mai mult succes decât competitorii lor. Caro 2017-2018.
- Corporate Citizenship Limited and the London Benchmarking Group, 2019. 4. Business for Societal Impact Guidance Manual – Corporate Community

- Investment. [pdf] Available https://corporate-citizenship.com/ [Accessed 2 February 2022].
- 5. European Commission, 2001. Green Paper: Promoting a European framework for Corporate Social Responsibility. [online] Available at: https://ec.europa.eu/transparency/documents- register/detail?ref=COM(2001)366&lang=en> [Accessed 2 February 2022].
- 6. European Commission, 2021. Business, Economy, Euro. [online] Available https://ec.europa.eu/info/business-economy-euro/company-reporting- and-auditing/company-reporting/corporate-sustainability-reporting ro> [Accessed 2 February 2022].
- 7. Kaufland Romania, 2020. Sustainability report of Kaufland Romania 2020. [pdf] Available https://media.kaufland.com/images/PPIM/AP MarketingDocument/rum/9 4/35/Asset 10159435.pdf> [Accessed 2 February 2022].
- 8. Kaufland, 2022. Implicarea face diferenta. [online] Available at: https://despre.kaufland.ro/responsabilitate/implicarea-face-diferenta.html [Accessed 2 February 2022].
- 9. Ministry of Foreign Affairs, 2022. 2030 Agenda for Sustainable Development. [online] Available at: https://www.mae.ro/node/35919 [Accessed 2 February 2022].
- Mironescu, R., 2011. Organizational culture and the social responsibility 10. development in our Romanian companies. Annals of the Oradea University, Fascicle of Management and Technological Engineering, Volume X(XX), No. 2.
- 11. Obrad, C., Petcu, D., Gherhes, V. and Suciu, S., 2011. Responsabilitatea socială a companiilor din România între percepții și realitate. Amfiteatru Economic, XIII, 29.
- 12. Official Journal of the European Union, 2003. Council Resolution of 6 February 2003 on corporate social responsibility. [online] Available at: https://eur-lex.europa.eu/legal- content/EN/TXT/PDF/?uri=CELEX:32003G0218(02)&from=en> [Accessed 2 February 2022].
- 13. Official Journal of the European Union, 2008. Lisbon Strategy. [online] Available [Accessed 2 February 2022].
- 14. Order no. 1802/2014 for the approval of the accounting regulations on individual annual financial statements and consolidated annual financial statements, published in the Official Gazette of Romania, Part I, issue 963 of 30 December 2014, as subsequently amended and supplemented.
- 15. Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 establishing a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088, published in the Official Journal of the European Union, L 198/13 of 22.6.2020.
- Schwarz Group, 2022. Simply act sustainably. [online] Available at: 16. https://gruppe.schwarz/en/responsibility/strategy [Accessed 2 February 2022].
- 17. The Azores, 2020. Romania CSR Index, 2020 flash report. [online] https://www.theazores.ro/wp- Available at:

- content/uploads/2020/11/Romania CSR Index 2020.pdf> [Accessed February 2022].
- 18. The Azores, 2021. Romania CST Index 2021. [online] Available at: https://www.theazores.ro/romania-cst-index-2021/ [Accessed 2 February 2022].
- 19. The European Council, 2020. Presidency conclusions. [online] Available at: https://www.consilium.europa.eu/ueDocs/cms Data/docs/pressData/en/ec/ 00100-r1.en0.htm> [Accessed 2 February 2022].
- 20. United Nations, 2022. Transforming our world: the 2030 Agenda for Sustainable Development. Available [online] https://sdgs.un.org/2030agenda [Accessed 2 February 2022].
- Voicu-Dan, D. and Anghel, E.R., 2011. Practicile de responsabilitate socială 21. ale companiilor europene privind facilitățile acordate salariaților și protecția consumatorilor. Amfiteatru Economic, XIII, 29.

PUBLIC FINANCE FUNCTIONS

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Abstract: The emergence of public finances is a result of the needs but also of the causes determined objectively, having as main function the procurement of the financial resources that the state needs in the exercise of its role and attributions to intervene in the economy and society in general. Public finances are necessary, subjectively and objectively, because they contribute to the accomplishment of the tasks and functions of the state, which could not be accomplished without financial leverage. Public finances are necessarily linked to the state, and to the role of the public sector in the economy. Public finances express social relations through its links with society, these being of course of an economic nature, arising in the mechanisms of establishment and use of financial resources available to both parties, the state and members of society, in order to meet both the needs of the state and the needs of society as a whole, whether collective or of general interest.

Key words: Conceptual premises, distribution function (resource) allocation function (resource); stabilization function (adjustment) of the economy, distribution function, control function.

JEL Classification: E61, F65, O16.

1. Introduction

As a conceptual approach to financial functions, a generalized expression of a specific group of processes and economic relations, public finances must fulfill a certain social mission, meaning they are fulfilled through certain socio-economic processes and play a vital role in contributing to personal goals or the general development of society, including the implementation of various economic and social activities. The concept of public finance is the function of mediating (under conditions considered optimal) the achievement of economic processes and performance, forming appropriate relationships between participants, rather than influencing how they are achieved. Most often, the performance of public finance functions is reflected in the formation, distribution and use of public economic (financial) resources in the context of economic and social activities in which public authorities are involved. In our literature, most of the time, the public finance functions are assigned to the public finance distribution function and the control operation, plus sometimes a function to regulate the economy, each distribution process mediating a part of GDP, performing financial control, respectively stimulating positive phenomena or counteracting negative phenomena in the economy and society.

Public finances are assigned three functions, namely:

- distribution function (resource)
- allocation function (of resources)
- the function of stabilizing (regulating) the economy.

The distribution function appears as part of the distribution, meaning the mediation of general public finances, of the processes of redistribution of resources between individuals and legal entities, which involve public authorities. This function is manifested by taking over from the general public funds some parts of the income or assets of various individuals or legal types of taxes, fees, etc., then distributing the forms of public spending made in accordance with the criteria of equity and social justice. By

default, its performance is reflected in the redistribution of a share of GDP among members of society. In turn, the allocative function is expressed through the mediation of public finances to meet social needs by providing public utilities, created at the expense of economic resources available to public authorities. It involves, in the foreground, the necessary resources for the various public entities to achieve socio-economic objectives and, on this basis, the provision of services or goods to members of society, either free of charge or at undervalued prices.

Finances are managed through such resources for the public consumption of products and services to the requirements of society and in correlation with the private economy, in accordance with the factors of economic and social optimum. The stabilization function expressed through the intervention of public finances exerts stabilizing influences on the development of character and social and economic life, these having the ability to contribute to ensuring price stability, high employment, maintaining balance in external relations, thus contributing to maintaining an appropriate pace of balanced synthesis of the economic process, taking into account the various approaches and also the main situations in which they exist.

2. Distribution function of public finance gross domestic product

The function of allocating public finances to GDP expressed its ability to mediate the cash distribution of the product created to the material activity, as a precondition for carrying out this process and in material form, for the needs of public consumption. In this capacity, public finances ensure the cash distribution and redistribution of a large part of this product and, in particular, the redistribution of revenues from the first phase of the primary distribution of natural and legal persons to public authorities. The financial event in this position implicitly requires the development of financial flows of money related to public consumption and their distribution at different levels of organization and functioning of society.

The easy processes of distributing and redistributing the national cash product, resulting in financial flows (as appropriate), fulfilling the functions of public finances require two phases (sides), namely:

- Creation of (public) funds to public authorities and entities;
- Allocation of funds to appropriate destinations to achieve these objectives and public actions.

The two-phase distribution function represents two closely related processes. Thus, the first phase is manifested by the mobilization of available financial resources to supply public entities and the formation of their funds, not as an end in itself, but in accordance with needs that need to be met, resulting in destinations for which financial resources are mobilized. The second phase involves the allocation of funds from established public funds to destinations, but inevitably depends on the process of prior development and mobilization of resources to these funds, the amount and timing to be met. Logically, it is recognized that the procurement of money to public financial resources funds, the emergence of this function is justified only in terms of their administration to meet certain public needs, and the distribution and use of these funds can take place only if the funds they were established.

In the interdependence relations between these two phases of the distribution function, each fulfills the role of determinants as well as of determining factor. Specifically, the creation of money in the first phase is objectively determined by the existence and size of the needs for fulfilling the financial commitments of the entity as an expression of the second phase. For these needs, it is mandatory to allocate funds to established destinations, depending on the actions for which resources are consumed from the first phase. Therefore, the size and types of public money that finances the first phase depend directly on the destinations that will provide the distribution of their expenses in the second phase, which implies the need to correlate the size of the needs to be covered with the possibilities of procuring resources. However, the proportions of these public money-making processes have an objective basis, given by the size of the actual domestic product, although they are sometimes used within the same framework and are part of the national wealth. Relevant is the way in which public money constitutes the funds in an objective and direct implementation of the second phase, first of all through the size that ensures the good processing of the latter. Thus, the distribution process can only be done to the extent that the funds were created in the first phase of the distribution function. At the same time, the financial resources are given destination according to the evolution of the constitution, formation, dynamics and sources of public funds.

However, we find that the interdependence of the two phases is enhanced by the fact that the destinations resulting in this second phase include the possibility of creating favorable conditions for the establishment of financial funds in the first phase. In this respect, public funding is typical of the economic objectives achieved by the national product in use, as a new value subject to the distribution and mobilization of new financial resources. However, if the size of the allocation of resources to such destinations is larger, the processes of formation and distribution of public interconnection funds are mutually conditioned to a greater extent. From a macroeconomic point of view (from the point of view of public finances) the performance of the financial flows characteristic of the training processes, namely the distribution and use of funds in the distribution function are dependent on the subject to create the distribution of GDP, including public finances. Thus, the product created and distributed in cash becomes the source of funds that reach consumers, later becoming solvent at market demand and thus in the sphere of production, thus generating new values.

The distribution of the value of the product created by the specific distribution takes the form of money, firstly by making cash income directly from participants in production processes, and secondly by creating and then distributing financial funds to public entities and the state. However, it is observed that the distribution of finances, in both its phases, is done by means other than financial ones. The financial forms that translate into the creation, distribution and use of public funds by various public entities, including the state, differ significantly in time and space, ie resource and tax allocations and funds. By allocating part of these funds to meet the various needs of consumers, those entities have met their own consumption needs in the form of goods and services in kind and materials. The aggregate consumption demand itself is made at the expense of financial resources, approaching the field of production to create goods and services of appropriate size and structure. Thus, the distribution function that performs public finances is intertwined with processes of creation, sharing and use of the national natural-material form, highlighting the interaction between cash flows and financial and real ones. In principle, incoming financial flows to public funds can have different sources of money (including financial markets), as data on (financial) outflows include a variety of cash resource destinations. Participants in the relations and financial flows characteristic of public finance functions are public entities, respectively the state and natural or legal persons able to contribute to the establishment of various public financial funds or to the beneficiaries of direct and indirect financial resources distributed in funds.

Individuals and legal entities lend part of their income or resources to create funds for various public entities or authorities. In the distribution phase, the participants in the financial relations benefit directly or indirectly, from money or social utility at the expense of the expenses financed from public funds.

The main form of the distribution function performed in the phase of setting up funds managed by public authorities or entities are: taxes, mandatory contributions, penalties, fines, royalties, revenues from public institutions, state financial aid loans, donations to the state. In turn, the forms that are reflected in the phase of allocating public financial funds within the same functions are mainly public spending, which differs in specific areas and actions (education, health, social security, national defense, public order, etc.). They take the form of material costs of setting up or operating public entities and of personal expenses. Allocations of public funds are also treated, the money being transferred in favor of individuals or legal entities, also known as grants. The function of distribution as an expression of the processes of formation and distribution of financial funds has an objective character, but technically it makes these processes, including the mentioned forms, have a subjective character. These are determined by the decisions taken by the governing bodies and the management of the various entities under the impact of the policies pursued at one time or another.

3. Public finance control function of economic and social activities

Public finance manifests itself as a mediator of exercising control over money and various aspects of economic and social life. Their ability to mediate the monetary and financial inspection of the exchange rate and the results of various economic activities and social control defines their function. In principle, resource management in general and financial resources in particular require more accurate records of their existence and movement, awareness and monitoring of their formation and use, ensuring maximum positive results, including compliance with certain principles of management and financial regulation, activity important in each entity or functional structure. In this context, public finances and exercise control intended to intervene with money on areas of economic activity and acting as social control.

The recognition of the function of control argues that the objective manifestation of financial phenomena creates the framework for the implementation of financial control. By comparison, the financial control activity performed by certain persons who fulfill the established legal framework, through the administrative functions with which they were entrusted results in the granting of financial controllers and a subjective component. The objective side of public finance control is that it can be conducted by persons designated to carry out such control activity in which, in the foreground, processes and financial relations involving the public authority or entity directly or indirectly, respectively public resources. Control may be exercised through public finances so as to meet the objective plan, which supports its public financial relations, including performance-based activities affecting the use of money, training and the use of public money resources, assuming the implicit expression of the distribution function, of the two phases. Normally seen as an expression of the functions of financial control, in order to carry out this control, it is grafted on the operations and financial relations regarding the formation and distribution of public funds. So between the two functions of public finances, the reports show a certain determination, highlighting in the foreground the fact that the financial activity that reflects the distribution function provides the basis for the implementation of financial control. On the other hand, serving as a financial control of the distribution function favors expression, including the purpose of generating new processes of formation and distribution of funds from public money.

It should also be noted that the scope of the event control function is mandatory, although the event is based on the distribution function, it is larger, extending to other socio-economic processes in relation to the financial. From this point of view, two main categories of actors are included in the sphere of material control of the distribution function, namely the consumers of financial resources, which capitalize and thus generate new financial resources. From this perspective, the exercise of financial control over public finances includes not only distribution but also the sphere of production, circulation and consumption, as each of these processes is accomplished by consuming or generating financial resources. So, for example, financial control is also exercised over production, because at this stage values are created that change and consumption and value added, which is subject to financial distribution, targeting expenses, revenues and recording of results. Similarly, financial control concerned the structure of the consumption stage, the proportion, the adequacy and the effectiveness of the expenditure incorporated in the intermediate and final consumption of public entities.

On a larger scale, expressing the financial capacity to mediate in the exercise of control over money, based on financial relations, it is known as control and manifestation which involves the use of money in their functions. So, for example, the cost of the investment volume, the value of the goods, etc., the value of the benefit is evaluated by using money as a value (standard), by the function of financial control taking into account the correlations between different factors that determine the value for choosing the advantageous options to achieve the goals or actions in question. Of particular importance is the money that serves as a means of preserving / accounting value that overlaps with the control function of public finances (in particular), by monitoring and analyzing the performance of processes of accumulation of financial resources in centralized and decentralized public funds, which exercises control, on the way in which they are administered and the efficiency of their use. The exercise of the right to control public finances requires the creation of an appropriate organizational framework, including regulations on the functioning of control structures and bodies in relation to the content of economic and social activities under control. In this sense, financial control can be exercised both within public entities and externally, through specialized institutions, distinguished as forms, internal control and external control. Internal financial control is integrated into the functional structures of public social and economic entities, most often in the form of preventive and operational control, especially in operational structures.

In turn, the external financial control is based on the creation and operation of institutions or bodies specialized in its exercise, usually located at the level of other administrative structures than that of the entities subject to control, and within it, the central place belongs to state financial control, through bodies of the Ministry of Finance (Public), respectively of the Court of Accounts, etc.

4. Public finance control function (stabilizing)

The existence of such a function in the economy of public finances is part of the state or other public bodies holding an active role in the economy, either through indirect involvement in economic activities or indirectly through the influence of private economic activities. In both cases, however, it is clear that the manifestation of public finances is done by influencing economic and social life and especially the economy in accordance with the objectives of public authorities in terms of general policy. By fulfilling these functions, public finances intervene in counteracting destabilizing events (recession, crisis, unemployment, etc.), deteriorating economic and social processes, on the one hand, and stimulating the positive development of these processes, on the other. Note the development of modern public finance theory by recognizing its possible impact in stabilizing the market economy subject to the action of specific factors that disrupt its imperfect mechanisms, providing scientific support for the implementation of this feature through appropriate public financial policies. On the other hand, the quantitative and qualitative dimensions of materials create new value processes that are interconnected with those of the formation and use of public funds.

The possible impact on public finances of the regulation of economic and social activities can be summarized in the following main directions:

- cyclic adjustment or stabilization;
- stimulating economic expansion (growth);
- modernization, restructuring and adaptation to the internal and external market economy.

First, the emergence of this feature stimulates the use of public financial instruments and techniques to counteract the economic crisis, which means that the real or probable occurrence of the phenomenon, as well as the accompanying unemployment, meant to ensure a certain stabilization of production activity and mitigation of cyclical fluctuations, caused by alternating periods of prosperity with economic decline, requires financial facilities or restrictions designed to help prevent major syncope. The second aspect concerns the use of financial techniques and instruments as drivers of economic activities, by stimulating investment and stimulating production growth by ensuring not only economic recovery or combating the slowdown of growth trends, but also its expansion.

The third aspect, which concerns the involvement of public finances through specific tools and techniques for modernizing and restructuring national economies, is to support the efforts of private economic agents or the direct development of segments, branches or sub-branches of the public economic sector or restricting development and ensuring adaptation to external and internal demand.

The regulation of the impact of public finances, based on the interaction with material financial processes, is reflected in economic and financial variables whose size makes the achievement of objectives, and the main tools used for this purpose are taxes, public spending, public budget. For example, the regulatory objectives allowed for the economy through public finances are to be considered dependent interrelationships, total revenue, disposable income and tax on the one hand, total consumption (expenditure), personal consumption and structured investment on the other, according to the following relations:

$$Vt = Vd + T (1)$$

 $Ct = Cp + I (2)$

where: Vt = total revenue, Vd = disposable income, T = taxes, fees, contributions, Ct = taxestotal consumption, Cp = private consumption, I = investment.

The equalization of the two relations in the form Vt = Ct and the correlation of the structural variables, leads to the establishment of specific interactions, both between the two relations and between the variables contained in them. Consequently, the regulation of the tax economy means the full scale adjustment of income tax with its impact on disposable income and the volume of investments. Thus, if there is a trend of stagnation or recession, economic recovery is possible by reducing the share of taxes, which would increase disposable income, much of which can become a source of investment financing. This resizing of taxes becomes a precondition for increased investment and production capacity, including job creation and a significant reduction in unemployment. Such an intervention of financial resources is a specific situation that occurs when a decrease in economic activity, accompanied by the restriction of private investment and the increase of the total active population of the unemployed. Rather, recognizing that the production rate is too fast (corresponding to a small number of unemployed) that threatens to overheat the economy and create conditions for decline, it becomes possible to reverse regulatory

intervention by increasing taxes, reducing disposable income, private investment and production and thus tempering the growth rate too high.

Similar but tailored content-specific processes take place through public spending and regulatory interventions, which are considered to have a variable financial impact on the size of total consumption, aggregate demand and therefore supply. It is materialized by adapting their size and structure according to the requirements in order to ensure the ascending, continuous tendencies of the economy. It consists in regulating the impact by increasing spending, meaning that both public demand for final consumption and public investment can increase investment, production and thus the economy in times of declining proportions, as opposed to the option of reducing public spending, leads to a slowdown in economic activity and thus to the attenuation of reverse cyclical fluctuations. In this context, promoted by the action of regulating public finances, it includes the realization of the public budget, by accepting the budget deficit and financing it with extraordinary resources, of the phases of economic decline, making it a factor of recovery and growth.

5. Conclusions

Public functions have emerged with the evolution of society and fall within the scope of the evolution of human society and require the existence of minimum conditions to be able to relate to the economic nature. The necessary conditions that made possible the appearance of public functions were:

- a) the emergence and development of commodity-money relations, so as to allow the formation and use of state resources in cash;
- b) the emergence of the state, which needs money to fulfill its internal tasks, which could not be purchased in the commodity-money relations.

Following the historical evolution of public finances on the basis of two conditions, it was concluded that public finances appeared with the ordering of the primitive state. This period established that the emergence of the state, monetary relations and the economy have a deep natural character. Without the state, government functions were performed by elected men from the community. The public authorities did not have a special coercive apparatus.

As the development processes that were marked by the social division of labor emerged, so did labor productivity, increased production, and the development of exchange.

Production, consumption exceeding individual needs, gave rise to private property, the emergence of inequalities of wealth and the division into social classes in society. This created the need for institutions to protect the private property and privileges of rich people. This institution was the state.

References:

- 1. Beleanu, P. and Anghelache, G., 2005. Finanțe publice. Bucharest: Editura Economică.
- 2. Giurgiu, A., 2000. Finanțele publice, Course Notes.
- 3. Inceu, A., Pop, F. and Lazar, D., 2000. Elemente de finanțe publice. Cluj-Napoca: C.F.C.I.D., Presa Universitara Clujeana.
- 4. Matei, G., 1994. Finanțe generale. Craiova: Editura Mondo.
- 5. Moșteanu, T., 2005. Finanțe publice. Bucharest: Editura Universitară.
- 6. Talpoş, I.,1996. Finantele Romaniei. Timişoara: Editura Sedona.
- 7. Văcărel, I., 2003. Finante publice. Bucharest: Editura Didactică și Pedagogică.

THE IMPACT OF RECENT OECD/G-20 RULES ON THE TAXATION OF MULTINATIONALS

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Abstract: Digitalisation and globalisation have had a profound impact on economies, and these changes have brought with them challenges to the rules for taxing income from international business. The Organisation for Economic Co-operation and Development has stepped up its efforts to address these challenges in response to tax avoidance concerns by multinational companies. The global agreement is designed to stop large corporations from moving to low-tax jurisdictions and to establish a more equitable system of distributing tax rights to multinationals, depending on where they operate, rather than their headquarters. The tax will no longer be due only where the respective corporations have registered their headquarters and thus managed, through tax optimization practices, to pay lower taxes. A state will be able to tax profits made abroad by a company registered in that home country if it has been taxed abroad at a lower rate than the agreed minimum threshold, in order to offset the difference. Strong tax competition between countries and the significant cross-border transfer of profits by multinational companies have distorted and reduced tax revenues. The global taxation of multinational companies shows a change of attitude on the part of the strong states.

Keywords: taxation, multinational firms, tax havens, tax competition.

JEL Classification: F23, H25.

1. Introduction

Following negotiations to bring international tax rules into the 21st century, members of the G20 / OECD Inclusive Framework have reached an agreement on a tax reform for multinationals to impose a minimum global profit tax of at least 15%. The OECD has recently stepped up its efforts to address these challenges in response to growing concerns about tax avoidance by multinational companies. The rules so far have allowed multinational companies to earn significant revenue in one jurisdiction without paying income tax there.

The rise of intangibles, such as trademarks, copyrights and patents, and the ability of companies to transfer profits to jurisdictions that impose little or no tax, have in the past led to multinational profits to often avoid taxation. There are a number of commercial jurisdictions that are involved in unfair tax competition, which offer low (or even zero) taxation to attract foreign direct investment. Thus, there has been a need to reform the international tax system of multinational companies to combat tax evasion and avoidance of the payment of tax obligations, as well as to respond to the challenges of taxing the digital economy.

In order to address the fiscal issue arising from the digitalization of the economy, a two-pillar solution has been agreed: Pillar One - aims to ensure a more equitable distribution of profits and tax rights between countries in relation to multinational companies; Pillar Two - sets a threshold for fiscal competition in corporate income tax by introducing a minimum global profit tax at a rate of 15% that countries can use to protect their tax bases (GloBE rules - Global Anti-Base Erosion). The OECD will provide personalized technical assistance to support all aspects of implementing the two-pillar solution.

2. Characteristics and stages in the implementation of the Two Pillar Agreement, agreed in order to tax multinationals

Pillar One provides for the annual redistribution of multinational profits (totaling approximately \$ 125 billion in all international trade jurisdictions) to facilitate access to

funds for developing countries. Therefore, the tax will no longer be due only where the respective corporations have registered their headquarters and thus managed, through tax optimization practices, to pay lower taxes. The goal is for multinational companies, especially those in the digital sector, which have benefited greatly from the pandemic, to stop paying ridiculous taxes on their revenue.

Pillar Two provides for the introduction of a 15% global corporate tax, which will be applied to multinational companies with revenues of over 750 million euros. A state will be able to tax the profits obtained abroad by a company registered in that country of origin, if it was taxed abroad at a lower rate than this minimum threshold, in order to compensate for the difference. Basically, the global agreement is designed to stop large corporations from moving to low-tax jurisdictions and to establish a more equitable system of distributing taxing rights to multinationals, depending on where they operate, rather than their headquarters.

Table no. 1: Key elements of the two pillar solution

Table no. 1: Key elements	of the two pillar solution
Pillar One	Pillar Two
Taxing rights over 25% of the residual	GloBe rules provide a global minimum tax
profit of the largest and most profitable	of 15% on all MNEs with annual revenue
MNEs would be re-allocated to the	over 750 milion euros
jurisdictions where the customers and	
users of those MNEs are located	
Tax certainty through mandatory and	Requirement for all jurisdiction that apply a
binding dispute resolution, with an	nominal corporate income tax rate below
elective regime to accommodate certain	9% to interest, royalties and a defined set of
low-capacity countries	other payments to implement the "Subject
	to Tax Rule" into their bilateral treaties with
	developing Inclusive Framework members
	when requested to, so that their tax treaties
	cannot be abused
Removal and standstill of Digital	Carve-out to accommodate tax incentives
Services Taxes and other relevant, similar	for substantial business activities
measures	
The establishment of a simplified and	
streamlined approach to the application of	
the arm's length principle in specific	
circumstances, with a particular focus on	
the needs of low capacity countries	

Source: OECD

The two-pillar solution recognizes developing countries' demands for more predictable rules and generally provides a redistribution of tax rights to market jurisdictions based on where sales and users are located - often in developing countries. It also provides for a global minimum tax, which will help eliminate tax havens, reduce the transfer of profits from developing countries and reduce the pressure on governments of developing countries to provide unnecessary tax incentives. This solution avoids the risk of trade retaliatory sanctions, which could result from unilateral approaches such as Digital Services Taxes (DST). Regarding a possible option for some countries to tax these multinational companies on their own, as some have tried to do with DSTs, it can be stated that the two-pillar package provides for blocking and eliminating unilateral measures, such as DSTs or other relevant similar measures.

Table no.2: Target Deadlines

Pillar One	Pillar Two	
Early 2022 – Text of a Multilateral	November 2021 – Model rules to define	
Convention (MLC) and Explanatory	scope and mechanics for the GloBe rules	
Statement to implement Amount A of Pillar		
One		
Early 2022 - Model rules for domestic	November 2021 – Model treaty provision	
legislation necessary for the implementation	to give effect to the subject to tax rule	
of Pillar One		
Mid 2022 - High level signing ceremony for	Mid 2022 – Multilateral Instrument(MLI)	
the Multilateral Convention	for implementation of the STTR in	
	relevant bilateral treaties	
End 2022 - Finalisation of work on Amount	End 2022 – Implementation framework to	
B for Pillar One	facilitate co-ordinated implementation of	
	the GloBe rules	
2023 – Implementation of the Two Pillar Solution		

Source: OCDE

As for when multinational companies will start paying this new fee, the detailed implementation plan provides a clear and ambitious timetable to ensure effective implementation starting in 2023. For Pillar One, the model rules for national legislation will be developed by the beginning of 2022, and the new real estate profit tax ("Amount A") will be implemented through a multilateral convention, in order to allow the entry into force in 2023. Disputes concerning issues that may be related to "Amount A" will be compulsorily resolved, without delaying the mechanism for preventing and resolving substantive disputes. In the meantime, until the end of 2022, activities will be carried out regarding the implementation of the "Amount B". Fiscal compliance will be streamlined (including filing obligations) and will allow multinationals in the scope to manage the process through a single entity. For Pillar Two, it was previously agreed to provide the model treaty for the implementation of the rule of taxation and, at the same time, that the model rules on the minimum profit tax be developed by November 2021. A Multilateral Instrument will be launched by mid-2022 to facilitate the implementation of this rule in bilateral treaties.

The GloBE rules will work to impose an additional charge using an effective test of the tax rate that is calculated on a jurisdictional basis and uses a common definition of the taxes covered and a tax base determined by reference to the accounting financial income (with adjustments agreed in consistent with the fiscal policy objectives of Pillar Two). With respect to existing distribution tax systems, there will be no additional tax liability if earnings are distributed over 4 years and taxed at or above the minimum level. The GloBE rules will also provide for minimis exclusion for those jurisdictions where the multinational has revenues of less than \in 10 million and profits of less than \in 1 million.

3. Predictable effects in general, in the context of taxation of multinational companies

The global taxation of multinational companies shows a change of attitude on the part of the most important states. There are some experts who say that the taxation of multinationals will not have the desired impact if new rules on transfer pricing are not established, and it is necessary to adopt tax regulations in this regard. Also, some nongovernmental groups analyzing the tax optimization strategies used by multinationals (eg

Oxfam) have criticized the OECD agreement for allowing rich countries to keep most of their additional tax revenue, and the world's poorest countries will recover less than 3%.

> Table no. 3: Additional revenues stemming from tax havens, non-havens or the headquarter of a 15% minimum tax

	Data 2017			
	Tax deficit of 15% min. tax in billion 2021 EUR			
Parent country	Domestic	Non-havens	Tax havens	Foreign agregate data
Austria	2.4	-	-	0.7
Belgium	1.3	18.6	1.3	-
Bulgaria	-	-	-	-
Croatia	-	-	-	-
Cyprus	0.0	0.1	0.1	-
Czech Republic	0.0	0.0	0.0	-
Denmark	1.1	0.3	0.5	-
Estonia	0.1	0.0	0.0	-
Finland	1.0	-	-	0.5
France	0.0	0.1	3.8	-
Germany	7.2	2.2	3.7	-
Greece	0.1	-	-	2.0
Hungary	0.5	0.0	0.0	-
Ireland	2.8	-	-	9.5
Italy	1.0	1.5	0.6	-
Latvia	0.1	0.0	0.0	-
Lithuania	-	-	-	-
Luxembourg	1.8	2.8	1.2	-
Malta	0.1	0.0	0.0	-
Netherlands	2.3	-	-	0.0
Poland	3.6	0.0	0.0	-
Portugal	0.0	0.0	0.0	-
Romania	0.1	0.0		-
Slovakia	0.0	0.0	0.0	-
Slovenia	0.0	-	-	0.0
Spain	2.2	2.6	0.5	
Sweden	0.1	-	-	2.5
EU total	27.9	28.4	11.8	15.2

Source: OECD (based on country-by-country data from fiscal year 2017)

Large countries will be able to adopt economic sanctions on states that will not adjust their tax rate to that set globally. Strong states may impose higher taxes on trade in tax havens (which will not align with the new global fiscal policy) or impose more severe economic sanctions. As long as the EU, the states of North America, China, India and Brazil agree to this global tax on multinational companies, the countries that today are tax havens are too small to oppose. At the same time, some experts in the field believe that, apart from global taxation, no other regulations would be needed, not even to eliminate the tax avoidance practices of large companies. In terms of tax avoidance, this was actually a tax optimization, with companies doing business where the tax system was friendlier to them. Given that governments have spent extremely much on the pandemic, they need money in the budget, and the new agreement puts a minimum global tax on the profits of multinational companies.

4. Conclusions

The recent international agreement could be a cornerstone for countries to adopt more ambitious tax rates. Developing countries have had a significant influence on the agreement. For example, on Pillar One, the agreement includes: a commitment to reduce the application threshold by 7 years (provided that the system operates as intended), which will result in a larger profit fund to be reallocated to the markets; the "nexus" threshold the point at which developing countries would see a Pillar One allocation from a multinational in the field - is set at a low level (€ 1 million, reduced to € 250,000 for small countries) so as to maximize the number of countries that will benefit from revenue. Pillar One also includes the commitment to develop simplified, streamlined approaches, with a particular focus on the needs of low-capacity countries, when applying transfer pricing rules to certain arrangements that are often the subject of tax disputes. These elements contributed to a balanced agreement for all parties to the negotiations.

In Europe, the profit tax remains an important source of income. Cross-border tax competition and significant cross-border profit shifting by multinational companies have distorted and reduced tax revenues, despite an increasing share of corporate profits in GDP. Domestic companies are at a competitive disadvantage, and citizens perceive the existing corporate tax system as unfair.

The impact of the COVID pandemic on public finances has added to the urgency of CIT (corporate income tax) reform, and many governments are spending more than they anticipated before this crisis, while collecting fewer taxes. Many countries are accumulating public debt at rates reminiscent of major wars. In this context, there is a major concern for collecting an adequate and fair tax on corporate profits.

Corporate income tax revenue performance varies considerably across European countries, in part due to tax competition and profit shifting. The continuing downward trend in statutory CIT rates seems to indicate a decline in corporate taxation in Europe, with a significant cost of revenue. The proliferation of preferential tax regimes, especially for intellectual property income, has reduced effective tax rates considerably below legal ones. In order to move towards a more equitable taxation of economic activities and to expand the fiscal space needed to respond to the current crisis, it is more urgent than ever to reduce excessive tax competition and to effectively combat tax evasion. Given the transnational nature of these challenges, a successful response requires international cooperation, preferably globally.

The first and best solution to these challenges is the agreed global agreement on the limits of tax competition and taxation in the digital economy, together with the effective implementation of related measures. Regardless of the feasibility of this global agreement, it will be necessary to better coordinate corporate tax policies between OECD countries, both in terms of tax rate and tax base, in order to reduce competition and tax evasion.

References:

- 1. Baraké, M., Neef, T., Chouc, P.E. and Zucman, G., 2021. Collecting the tax deficit of multinational companies: Simulations for the European Union. EU Tax Observatory Report, No. 1.
- 2. Barake, M., Chouc, P.E., Neef, T. and Zucman, G., 2021. Revenue effects of the global minimum tax: country-by-country estimates. [pdf] Available at: https://www.taxobservatory.eu/wp-content/uploads/2021/10/Note-2-Revenue-

- Effects-of-the-Global-Minimum-Tax-October-2021.pdf> [Accessed 12 February 2022].
- 3. González Cabral, A., Appelt, S. and Hanappi, T., 2021. Corporate Effectives Tax Rates for R&D: The case of expenditure-based tax incentives. OECD Publishing,
- 4. International Tax Review, 2021. How will the G20/OECD's pillar one and pillar affect disputes? [online] Available two project https://www.internationaltaxreview.com/article/b1srp7qzw9dhrd/how-will-the- g20oecds-pillar-one-and-pillar-two-project-affect-disputes> [Accessed 2 March 2022].
- 5. Joachim, E., 2021. Designing a harmonized EU-GloBE in compliance with fundamental freedoms. EC Tax Review, 30(3), pp.136-142.
- 6. Koerver Schmidt, P., 2020. A General Income Inclusion Rule as a Tool for Improving the International Tax Regime – Challenges Arising from EU Primary Law. *Intertax*, 48(11).
- 7. KPMG, 2021. KPMG report: OECD/G20 Inclusive Framework agreement on **BEPS** 2.0. [pdf] Available at: https://assets.kpmg/content/dam/kpmg/us/pdf/2021/07/tnf-kpmg-report-oecd-g20- inclusive-framework-agreement-beps-july2-2021.pdf> [Accessed 2 March 2022].
- 8. Li, W. and Hall, B., 2020. Depreciation of Business R&D Capital. Review of *Income and Wealth*, 66/1, pp. 161-180.
- 9. OECD, 2021. Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy. [pdf] Available at: https://www.oecd.org/tax/beps/brochure-two-pillar-solution-to-address-the-tax- challenges-arising-from-the-digitalisation-of-the-economy-october-2021.pdf> [Accessed 2 March 2022].
- 10. Pinto Nogueira, J.F., 2020. GloBE and EU Law: Assessing the compatibility of the OECD's Pillar II initiative on a minimum effective tax rate with EU law and implementing it within the internal market. World Tax Journal, August 2020.
- 11. Tax Foundation, 2021. Anti-Base Erosion Provisions and Territorial Tax Systems in OECD Countries. [online] Available at: https://taxfoundation.org/anti-base- erosion-territorial-tax-systems/#Minimum> [Accessed 2 March 2022].
- 12. Torslov, T., Wier, L. And Zucman, G., 2019. The Missing Profits of Nations. Estimates updated to 2017, Tables United Nations (2020): World Economic Situation and Prospects. Stastistical Annex.
- 13. Warda, J., 2001. Measuring the Value of R&D Tax Treatment in OECD Countries. OECD Publishing (ed.), STI Review No. 27: Special Issue on New Science and Technology Indicators.

SOCIAL ECONOMY, AN IMPORTANT SOURCE FOR LOCAL DEVELOPMENT

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Abstract: The economic crisis of recent years has put intense pressure on companies, especially in the private sector, which has often led to layoffs among staff. The question constantly arises: What happens to these employees, what protection measures does the state offer? One answer to this question may be related to obtaining European funding through the social economy. Unfortunately, in Romania, the concept of the social economy was practically limited to social inclusion, social protection, unlike countries such as Canada or Latvia, where the concept is based on local development, the contribution of enterprises to local development. To support the local development, it's necessary to create a legislative framework that will allow the revitalization of the social economy in our country. Entities belonging to the social economy, be they non-governmental organizations, landowners' associations, or unions, are important actors in the process of social innovation. In order to meet the needs of these participants in the social economy, we aim to identify innovative financing instruments for the social economy as well as the role of and implications for the local development.

Keywords: Social Economy, Financing instruments, Local Development, Social Innovation, Social Economy Entities.

JEL Classification: M 40, M41.

1. Introduction

Today, the concept of the social economy is being reinvented around the world, aiming at changing and updating the original term introduced by the IOM in 1972, that of "informal economy".

Basically, there are three notions that must be very well understood, in order to know this economic phenomenon that has been quite unapproachable over time, namely: the social economy, the solidarity economy and the popular economy. None of these notions have anything to do with the public domain.

It is important to analyse the real potential of social economy, primarily as a contribution to the overall development of society, especially local society (Tăbîrcă et al, 2021).

The economic crisis of recent years has put intense pressure on companies, particularly in the private sector, which has often led to layoffs. The question constantly arises: What happens to these employees, what protection measures does the state offer?

One answer to this question may be related to obtaining European funding through social economy.

Entities belonging to social economy, be they non-governmental organizations, landowners' associations, or unions, are important actors in the process of social innovation due to the services and products offered, which obviously contribute to the local development process (Tănase, 2006).

In addition to the economic crisis, there is also a more recent problem, the refugee crisis caused by the war in Ukraine. Several problems, related to the needs of these people,

can be solved largely through the same types of financing, that is, through the Social Economy.

2. Literature Review

Globally, according to available research, at the beginning there were several initiatives such as Cooperative associations, which had a weak and rather unstable presence when faced with public authorities. They focused on several global issues such as: pollution, immigration, discrimination, terms of global exchange etc.

Practically, the term social economy has been used since the 17th century, and was coined in 1830, by the French economist Charles Dunoyer, in the book "A Treatise on Social Economy".

Since the 19th century, T.R. Malthus, S. de Sismondi, F. Le Play, John Stuart Mills or Leon Walras have also expressed related ideas. The phenomenon was repeated in the northern part of Canada, where social movements sought to shape the path to a human economy as the basis of the market economy. Thus, Mutual Aid Societies came to be, which would later become Unions and Associations.

"The economic initiative is not a right of the rich, nor is it the monopoly of private enterprises" (Vigier, 2003). Based on Vigier's words, we can appreciate that ethics in the social economy is inscribed in the very approach to these businesses, but in a different way. For example, in Unions, the fundamental principle is that social utility prevails over profit and develops the style of cooperation between those who take part in social life, a family, or a community.

At the beginning of the 20th century, social economy was regarded as the main way of social mobilization, aiming at: the economic and social needs of the population, common social projects within the democratic society. "A first positions of strength stems from nearly two centuries of social economy history. The social economy in the Nordic countries, especially its co-operative and mutualist branches, which developed within the working class to improve living conditions, in other words, often historical research in the social economy, is based on co-operation as bred out of necessity and out of the needs strongly felt by the disadvantaged or struggling population." (Desroche, 1976).

Other specialized studies have been undertaken by the Department of Community Research and Development Centre (CRDC) and the Interuniversity Centre for Research in Social Economy, Enterprise, and Trade Unions (CRISES), at the University of QUEBEC. These two research centres published at least two books on Social Economy: Comeau, Favreau, Levesque, and Mendell in 2001; Favreau and Levesque in 1996.

In terms of Western Europe, during the 20th century, there are two periods that revolutionized Social Economy:

✓ The first stage, between 1945 and 1975.

Economic growth in the developed countries of Europe has led to the strengthening of the economic and social roles of the public and private sectors. Thus, this development has made social economy play a limited role in the relationship between the market and the public.

✓ Post 1970s

The form of Social Economy was adopted much more since the 70's, as the crisis in that period took shape, when the state proved its inability to solve the crisis of unemployment, social exclusion etc. Based on these issues, a definite conclusion has been reached: social economy is perfectly adapted to correcting social and economic imbalances and maintaining jobs.

At EU level, social economy operates through social enterprises, with common objectives such as:

- Management and independence autonomy regarding public authorities;
- Voluntary and open membership;
- The supremacy of the participation of social actors, of the person and of social objectives over capital;
- Defending and applying the principle of solidarity and responsibility;
- The democratic control exercised by the members of the social enterprise;
- Awarding the largest share of the surplus to attaining the objectives of sustainable development and the provision of services to members, in accordance with the general interest;
- The communion between the interests of the user members and the general

In the post-2022 period, the post-pandemic era, it was necessary to project a very careful overview of the role of social organizations. These organizations are beginning to take shape by providing support to the ecological environment, to the community. Research from this period has shown that there is a desperate need for social enterprises to be able to solve the problems related to the protection of the vulnerable. At the end of April 2020, Imagine Canada surveyed 1458 leaders of non-governmental organizations to study the impact of COVID-19 on each industry (Lasby, 2020). The result of the survey was that around 70% of these organizations saw a decrease in revenue. It was the time when the appropriate strategy of loss recovery was that of turning to other sources, namely social economy (Lorena et al, 2011).

3. Research Methodology

To meet the needs of participants in the social economy, we aim to identify innovative social economy financing tools as well as the role in and implications for local development.

For starters, however, we must look at the definition of Social Economy in Romania, which According to Art. 2 of Law No. 219/2015, says that social economy represents "the set of activities organized independently of the public sector, whose purpose is to serve the general interest, the interests of a community and/or nonpatrimonial personal interests, by increasing the employment of persons belonging to a vulnerable group and/or producing and providing goods, services and/or executing works. Social economy is based on the private, voluntary initiative and on solidarity, with a high degree of autonomy and responsibility, as well as the limited distribution of profit to members". (Law 219, 2015)

Specifically, according to Article 4 of Law No. 219/2015, social economy is based on the following principles:

- ✓ The priority given to the individual and social objectives over the increase of profit;
- ✓ Solidarity and collective responsibility;
- ✓ The convergence between the interests of the associate members and the general interest and/or interests of a community;
- ✓ The democratic control of members, exercised over the activities carried out
- ✓ The voluntary and free aspect of the association under the forms of organization specific to the field of social economy;
- ✓ The distinct legal personality, management autonomy and independence from public authorities;

✓ Awarding the largest part of the profit/financial surplus to achieving the objectives of general interest, of a community or in the personal non-patrimonial interest of the members.

EMES, the European Research Network, has identified the principles by which a company can be viewed as a social economy enterprise. Thus, nine indicators have been created that allow the identification of new types of social enterprises, but also the remodelling of old ones (Borgaza, Defourny, 2001). The EMES network was founded by various actors in the social economy, such as volunteers, public bodies, or non-profit societies (Campi et al., 2006).

Referring to the legislative framework, it is necessary first of all to observe the social economic objectives in several countries such as:

Canada where there is the highest number of social enterprises and where the following issues are most encountered:

- promoting social economy as a launching pad for economic and social development
- enabling access to administration for social enterprises
- supporting the economic and social field Latvia
- creating an environment of economic activity favourable to social enterprises
- engaging groups at risk of social exclusion Romania
- employment
- developing social services
- supporting economic and social cohesion

4. Research Results

In Romania, the emphasis is mainly on the social aspect, as social enterprises are perceived more as having a social role, a social protection purpose, unlike other countries where their primary role is that of local development.

According to Table No. 1, we see the Legislation specific to Romania, with the following markers:

- ✓ Law No. 31/90, The Companies Act does not provide as a form of organization the SEC (Social Economy Company)
- ✓ The companies receive the SEC status following the submission of an accreditation file to ANOFM
- ✓ The correct chosen method of taxation is not specified
- ✓ The financial statements don't show separately neither the social expenses, nor the 90% share of the profit reinvested in the social area, which leads to the idea that there is no transparency for these financial reports.

Table No. 1: Legislation Specific to Social Economy Enterprises

Social economy entities. Legal forms.	Specific Legislation	
Cooperative societies with subtypes of cooperatives with specific legislation	Law No. 1/2005 on the organisation and functioning of the union; republished	
Credit Unions	Government Order No. 99/2006 on credit institutions and capital adjustment, approved, altered and amended by Law No. 227/2007	
Agricultural Unions	Law No. 566/2004 on agricultural cooperation	
Agricultural Societies	Law No. 36/1991 on agricultural unions and other means of unionising in	

	agriculture
Associations and foundations – NGOs with subtypes	Government Order No. 26/2000 on associations and foundations, approved, altered and amended by Law No. 246/2005
Employees' Mutual Aid Societies	Law No.122/1996 on the legal status of employees' mutual aid societies and their union
Retirees' Mutual Aid Societies	Law No. 540/2002 on the retirees' mutual aid societies
Landowners's associations	Law No. 230/2007 on the establishment, organisation and functioning of landowners' associations
Communities and composites	Art. 95 on Associative forms of forest owners. Forest Code Law No. 46/2008
Other non-profit organisations (associations and foundations) that have an economic activity Companies certified as social enterprises	Government Order No. 26/2000 regarding associations and foundations, approved, altered and amended by Law No. 246/2005 Law No. 219/2015 on social economy
	Law No. 31/1990 on companies

Source: author's interpretation

It is thus necessary to create a legislative framework to revitalize the social economy in Romania, by developing organizations dedicated to this type of economy, but also by having an active involvement to help understand how important social economy is, especially in this context of the economic and medical crisis, but also of the refugee crisis.

4.1 The Dynamics of Social Enterprises in Romania

According to the Barometer prepared by the "Alături de voi, Romania" ("By Your Side, Romania") Foundation, we notice that the number of legal entities certified according to the ANOFM statistics for the 1990-2019 period has significantly increased, the largest increase being recorded in 2016. Post-2019, the number has sharply increased. By 2020, 519 social economy enterprises had already been certified (Figure no. 1).

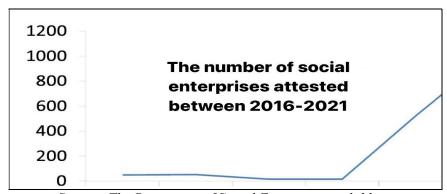
Figure No. 1 The number of certified social enterprises 1990 - 2019



Source: The register of ANOFM-certified social enterprises, March 2020, according to the Barometer available at https://acceleratorul.alaturidevoi.ro/barometrul-economieisociale-din-romania-editia-2021/

In Romania, by March 2021, 1642 enterprises had registered as social enterprises (*Figure no. 2*).

Figure No. 2 The number of certified social enterprises 2016 - 2021



Source: The Barometer of Social Economy, available at https://acceleratorul.alaturidevoi.ro/barometrul-economiei-sociale-din-romania-editia-2021/

In terms of percentages in all counties in Romania there is at least one certified social enterprise, the national average being 35 enterprises per county. The highest density - 229 - is registered in Alba County, followed by Cluj with 137 certified social enterprises, Dolj - 109, Iași - 89, Maramureș - 83 and Prahova – 63 (Figure no. 3).

Figure No. 3 The structure of certified social enterprise – March 2020 Attested social enterprises - Legal Form 2016 - March 2020 Employess' Mutual 1st degree Aid Societies 3% cooperative societies **LTD Companies** 29% Federations

Source: Register of ANOFM-certified social enterprises, March 2020

In order to revitalize the Social Economy in Romania, it is necessary to develop and diversify the sources of financing both at the time of establishment, but also as the activity progresses, as well as meeting the need for tools adapted to the specific activity of each social economy enterprise.

Unfortunately, no company has benefited, according to the Law on Social Economy, from support in promoting tourism, cultural or historic heritage.

According to the same Social Economy Barometer:

- 8.7% of the surveyed enterprises benefited from State Aid Programs aimed at social economy enterprises;
- 6.7% benefited from tax exemptions granted by local public administration authorities:
- 5.6% benefited from the subsidization of labour costs through Law No. 76/2002;
- 3.6% benefited from state aid programs aimed at enterprises and coming from national funds;
- 3.6% benefited from the allocation of buildings or land in the public domain of administrative-territorial units;
- 1.5% benefited from the subsidy provided by social services to vulnerable groups;
- 1.5% benefited from the measures provided for the protected units authorized through Law No. 448 on the protection and promotion of the rights of persons with disabilities:
- 1.0% benefited from the supply of products to public authorities by participating in public procurement procedures;
- 1.0% received support in promoting the products made, the services provided or the works performed in the community;
- 0.5% benefited from taking part in special public procurement procedures social clauses, reserved contracts - social enterprises, social insertion enterprises, protected units (Social Economy Barometer, 2020).

5. Funding

Local development through the citizen-based social economy

How can we act as citizens, as a community?

As a straight-forward way, volunteering allows, through the active involvement in the community, the promoting of goals thus contributing to the support of these goals and their fulfilment. Another way to support the development of Social Economy is the involvement of specialized institutions, by offering financial, economic-financial, and legal advice. By offering donations or sponsorships, it is possible to finance the activity of social economy enterprises, so that they can achieve the objectives for which they were set up

Social economy must be seen as a launching pad for the sustainable development of local communities. In any given community, every member should, in theory, be involved in solving the problems of that community, regardless of their nature. Seen as a promoter of solidarity, of eliminating discrimination, social exclusion, coupled with the fact that 90% of the profit or surplus gained is returned to the community, we can say that social economy serves the community, integrates people, creates solidarity, all of which leads to an increase in the quality of life.

The number of enterprises, of social economy associations, increases on a yearly basis, creating jobs. Volunteering by non-profit associations has gained greater visibility in the community, with funding received through the EU.

Referring to the current context of the refugee crisis following the war in Ukraine, the crisis can be solved even in part by the access, by these companies or nongovernmental associations, of European funds dedicated to social economy.

6. Conclusions

As a result of the economic and financial crisis, we can say that the intervention of the European Union has great relevance, leading to the development of social economy. It is necessary to mobilize the full potential of all social economy entities for economic

recovery, by creating jobs, promoting associations, but also by creating a unitary legal framework concerning social economy enterprises.

According to the latest discussions, there is already a proposal submitted to the relevant institutions, to amend Law No. 31/1990, the Companies Law, concerning the adjustment of annual financial statements, through amendments brought to the OMFP 1802/2014.

The development of social economy is beneficial to all citizens, it supports actions that have a social impact, be they geared towards health, environmental protection-related, or education-oriented.

Recently, there have been many debates concerning social enterprises, the success of these debates being generated precisely by the diversity of the concept of social economy. The involvement of stakeholders in social enterprises is a prerequisite for the development of and trust in these groups (Brandsen, 2009).

Viewed as a third sector, despite the fact that there have been difficulties in regulating legislation, and in spite of the financial crisis which has affected this sector, there has been no dramatic decline. On the contrary, in the field of social economy, fundamental organizations have emerged (for example, tenants' unions on the oversaturated real estate markets) (Brandsen, 2012).

At EU level, social economy is intensely popular, with statistics indicating that social enterprises have created more than 14.5 million jobs, proving that man is far superior to capital.

References:

- 1. Acceleratorul, 2021. The barometer of Social Economy. [online] Available at: http://acceleratorul.alaturidevoi.ro/barometrul-economiei-sociale-din-romania- editia-2021/> [Accessed: 31 March 2022].
- 2. ANOFM, 2022. Register of certified social enterprises. [online] Available at: <www.anofm.ro/Registrul întreprinderilor sociale/> [Accessed 31 March 2022].
- 3. BCR, 2022. The barometer of social economy. [online] Available at: <www.bcrsocialfinance.ro/> [Accessed: 31 March 2022].
- 4. Brandsen, T. and Pestoff., 2009. Public governance and the third sector: opportunities for coproduction and innovation. In: S. Osborne (ed.). The New Public Governance, New Perspectives on the Theory and Practice of Public Governance. Routledge, pp. 223–236.
- 5. Brandsen, T. and Helderman, J.K., 2012. The trade-off between capital and community: The conditions for successful co-production in housing. VOLUNTAS: *International Journal of Voluntary and Nonprofit Organizations*, pp. 1139–1150.
- 6. Campi, et al., 2006. Multiple Goals and Multiple Stakeholder Structure: The Governance of Social Enterprises. In: M. Nyssens (ed.), pp. 29–49
- 7. Defourny, J., 1999. L'économie sociale au Nord et au Sud. Bruxelles: De Boeck
- 8. Defourny, J., 2001. From Third Sector to Social Enterprise, The Emergence of Social Enterprise. London and New York: Routledge, pp. 1–28.
- 9. Desroche, H., 1976. Le projet coopératif, Editions ouvrières. Economie et Humanisme.
- 10. Dunoyer, C., 1830. Traite d'economie sociale.
- 11. Government Order regarding associations and foundations, approved, altered and amended by Law 246, No 26/2005.
- 12. Ionita Predescu, L., I.P., Radu, F. and Tăbîrcă, A.I., 2011. Needs of local sustainable development. Ann. Fac. Econ, 1, pp.91-97.

- 13. Lasby, D., 2020. Imagine Canada's sector monitor: charities & the COVID-19 pandemic. Imagine Canada.
- 14. Law on social economy, No. 219/2015.
- 15. Law on companies, No. 31/1990.
- 16. Law of the organisation and functioning of the union, No 1/2005.
- 17. Onisim, Christian Center for Social Reintegration, 2020. History of social economy.
- 18. Order of the Minister of Public Finance for the approval of Accounting Regulations regarding the Individual annual financial statements and the consolidated annual fiancial statements with amendaments and completations, No 1802/2014.
- 19. Tăbîrcă, A.I., Tănase, L.C. and Radu, V., 2021. Social Costs of Globalization in Emergent Economies. LUMEN Proceedings, 15, pp.84-93.
- 20. Tanase, L., 2006. Socio-Economic Environment Of The Company And The Need For Countable Financial Information. Annales Universitatis Apulensis Series *Oeconomica*, 1(8), pp.1-36.
- 21. Vigier, J.P., 1995. Finances et solidarite, votre epargne pour le developpement.

ISSUES REGARDING THE ROLE AND IMPORTANCE OF CREATIVITY IN ENTREPRENEURSHIP

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Abstract: The socio-economic development of societies in general and of economic entities in particular, depend on the way in which the results of technological and scientific progress are implemented in entrepreneurial activity. Innovation and creativity give entrepreneurship the opportunity to lead to economic growth. The role of creativity in entrepreneurship can be manifested by identifying methods that can lead to reduced costs, increased productivity and competitiveness and increased turnover. The multitude of problems that must be solved permanently, determine the entrepreneur to make the most of his creative ability, ingenuity and accumulated knowledge. The development of creativity can be a personal strength in approaching an entrepreneurial activity. Valuing creative ideas, combined with the ability to use the opportunities offered by the environment, can be the strengths of a successful entrepreneur. Starting from the specialized literature in the field, the present paper wants to make a plea in favor of the implementation of creativity and innovation in the development of entrepreneurship.

Key words: entrepreneurship, creativity, innovation, technological progress.

JEL Classification: M13, O31, O32.

1. Introduction

Economic development in general and entrepreneurship in particular is based on identifying and using those results of research and innovation that can generate advantages over competitors.

Implementing the concepts of creativity and innovation in entrepreneurship can be a very important aspect in approaching and developing business. The valorization of creative ideas, cumulated with the use of all the opportunities that the environment can offer, can be aspects that generate assets for a successful entrepreneur.

Creativity, innovation, innovations can be considered as the source of entrepreneurial activity. Generating new ideas based on stimulating creativity is a factor that stimulates entrepreneurial activity. In this sense, the use of methods to stimulate creativity presented by the literature, provides an important advantage.

In order to have an entrepreneurial activity that generates added value, that identifies and makes the most of new technologies and products in the market, the entrepreneur must carry out his activity on a creative basis, so that he can introduce a novelty in the field.

In order to discover original solutions for the development of a business, the entrepreneur must approach a creative attitude, in order to solve the problems that may arise in his activity, but also to maximize the opportunities offered by the environment. Implementing innovative business ideas can lead to problems that may arise. To generate these ideas the entrepreneur must rely on creativity.

Entrepreneurial mentality and competence is based on entrepreneurial education which must focus on using creativity as an asset in running and developing business.

The development of creativity, the use of methods to stimulate creativity, the implementation in business development of new, innovative ideas, are aspects that can lead to the development of entrepreneurship.

Creativity-based entrepreneurship is an opportunity for entrepreneurs who know and know how to use methods to stimulate creativity. Education and experience in this field allow people who want to have an entrepreneurial activity to use this knowledge in order to develop their own business. Integrating new ideas is essential for business development. In this way both the technological processes and the products and services delivered on the market will be updated in accordance with market trends and customer requirements.

2. The importance of creativity in entrepreneurship

Any business involves creativity. Entrepreneurial creativity offers the entrepreneur the chance to approach an innovative variant of the business, so that starting from a single idea to generate complementary activities that generate value.

A creative entrepreneur must be able to use and maximize his new ideas. Although for many entrepreneurs starting and running a business is a goal, a goal in itself, for those of them who have creative skills, the business can become a way to enhance their creative, innovative ability. In this way, the purpose of running your own business will not only be to make a profit, but will also manifest itself in the desire to give an innovative note to the products and services sold.

Not infrequently, the approach of entrepreneurship in terms of creativity determines the emergence of new businesses on the market, both in terms of logistics and in terms of innovations in the field of activity, generating a sustainable development (figure 1).

In order to obtain future qualitative results, it is appropriate to make optimal use of all resources. Starting a new, creative activity, which will succeed in putting new, innovative ideas into practice, is an activity that can be considered as having a substantial potential for success.

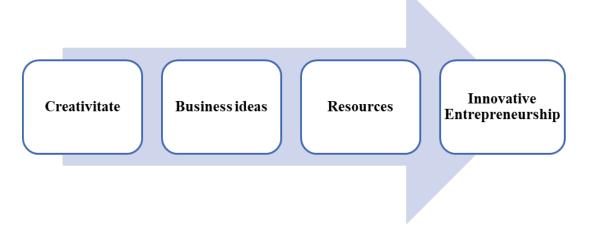


Figure no. 1. Approaching entrepreneurship through the prism of creativity

In order to identify new business opportunities, entrepreneurs can use methods that, by stimulating the imagination, creativity, lead to the production of new ideas.

By educating one's own intellect and developing intellectual processes such as imagination, memory, thinking, one can achieve the stimulation of human resources engaged in running a business to use their creativity.

Among these, man is the decisive component, his quality decisively influencing the results of the activity of economic units. All leadership functions are performed by people, the success or failure of the leadership activity depending on the mastery of the art of working with people.

In the business area that includes creativity as an asset, a main strength is the human resource, its quality and its ability to use methods and techniques to stimulate creativity. Creativity techniques have been developed and are constantly being improved precisely in order to be able to exploit people's creativity and thus be able to identify viable solutions to solve problems.

There are several techniques, relatively simple to understand and apply, that can lead the entrepreneur to find new ideas for his own business (Albu, 2014). These can be considered as belonging to two categories (figure 2):

- rational methods, based on logical, systematic approaches
- Intuitive methods, which stimulate the use of imagination

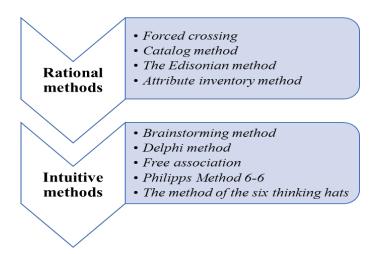


Figure no. 2. Methods to stimulate creativity

In order to be able to apply these methods, the entrepreneur must have an openness to novelty, be able to create a framework to affirm the creative initiatives of the group of people on which he relies in order to launch his business. The role of these techniques and methods of stimulating creativity is to stimulate and nurture creativity, either at the individual or group level.

2.1. Adopting appropriate decisions in entrepreneurship based on the "Thinking Hats" method

When deciding to start an entrepreneurial activity, the initiator of this activity can rely on the experience in that field, on the level of knowledge gained, on capital, labor, and a number of other factors that can support this activity. Based on all the above aspects, the entrepreneur must adopt and implement decisions that will determine the success of his actions.

In order for these decisions to be inspired, the risks to be minimized, and the activity to be profitable, the entrepreneur can rely on the application in practice of a parallel thinking method, the "Thinking Hats" method, one of the most powerful thinking tools. for dealing with crisis situations.

Each "hat" is a way of looking at a problem. The data underlying the decisions will be viewed and processed through a single dimension, thus avoiding the overload of thinking.

Each member of the group who participates in the application of this method will treat the problem in one form. The approaches are:

- 1. the white hat considers the data collection, without any interpretation
- 2. The red hat allows the group to be intuitive but emotional, without motivating the statements
- 3. The black hat stimulates the identification of threats, barriers that may be encountered in the adoption of the decision

- 4. The yellow hat implies the possibility to identify the positive aspects that derive from the decision
- 5. The green hat invites all members of the group to maximize their creative capacity
- 6. the blue hat is the one under which the group is coordinated in order to conclude the results of the application of the method

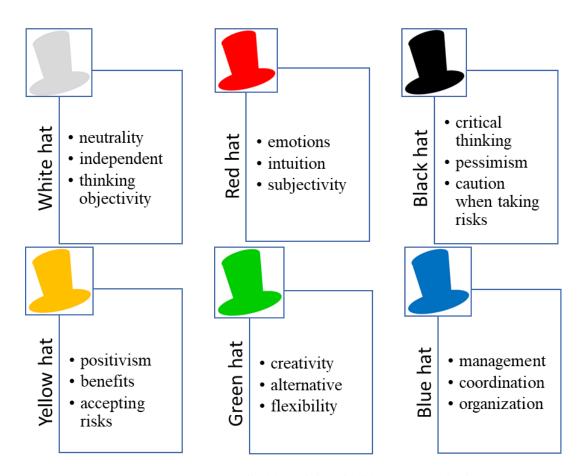


Figure no. 3. Peculiarities of the Thinking Hats method

When the entrepreneur tries to find the best course of action, he must look at his business through the eyes of the six thinking hats. In this way, moving from exuberance, optimism, from the situation in which uncertainty is not seen as something that could destabilize the business, the entrepreneur must then look at his business with critical eyes. putting the associated risks, to address critical thinking, even pessimistic.

Having a perspective from all these points of view, the entrepreneur will be able to decide the middle way, the one that will provide him with the optimal business alternative. This "game" stimulates comprehensive thinking, and gives the chance to develop a business plan from alternative perspectives.

3. Creative industries, area of interest for entrepreneurs

In general, a business is promoted by what it creates, by its uniqueness and by its human potential. The area of creative industries includes those sectors of activity that are based on their development combining the ability to create added value and jobs and the characteristics of entrepreneurs, respectively creativity, skills and individual talents (Cojanu, V, etc., 2016).

In order to integrate the creative industries into the complex of "traditional" business, at the level of the European Commission, a body called the Alliance of European Creative Industries (ECIA) was created in 2011. As defined in the Creative Europe program, "Cultural and creative industries are those industries that produce and distribute goods and services which, when created, are considered to have a specific characteristic, use or purpose that materializes or transmits cultural expressions, regardless of the commercial value they can have "(EC 2011).

In the context in which the specialization of assets, in almost all fields of activity, has registered a very accelerated pace of development, an alternative of a business can be the original approach based on new creative ideas.

Choosing to start a business in an area where creativity plays an important role is justified by the benefits that such an industry can bring.

The main advantages can be mentioned:

- creating a friendly work atmosphere that favors approaching the workspace in a particular, personalized way
- importance attributed to the human factor and the possibility to offer employees the chance to show off their imagination, creativity
- the possibility of starting a business in a non-conformist area, such as the rural area, the location being in this case our strong point
- maximizing the synergy between creativity, technology and business

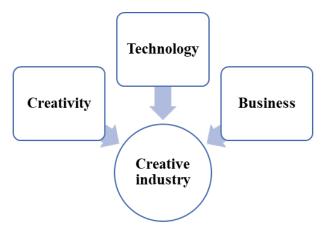


Figure no. 4. Synergistic concept of the creative industry

A brief enumeration of the fields of activity in which creativity, and its transformation into business, is paramount, allows the specification of the following sectors:

- IT, software
- Mass media
- Advertising
- Design
- Crafts
- TV, radio
- Visual arts
- Fashion

In order to be able to assert itself in one of these sectors, the entrepreneur must have and be able to highlight assets such as:

- Creativity
- Ability to create one's own image and promote it
- The desire to learn constantly, to be up to date with trends in the field
- Determining to turn your passion into a business
- Ability to adapt to trends in its field of activity and market requirements

All these advantages are vital for approaching a business based on creativity, but their maximum use must be based on the main managerial functions, namely planning, organization and control. In this way you can lay the foundations for a successful business.

4. Conclusions

Starting from the main objective of an entrepreneurial activity, namely to lead to economic growth, identifying the synergy between creativity, technology and business is an asset that any creative entrepreneur must maximize in carrying out his activities. In this sense, the entrepreneur must identify those opportunities from the external environment that, based on his creative capacity to be highlighted and used as appropriate as possible.

The development of innovative entrepreneurship must be based on both its own strengths, such as creativity, imagination, and the ability to identify those areas of the economic sectors in which these strengths can be highlighted.

Stimulating creativity by using methods and techniques that can lead the entrepreneur to come up with new ideas for their own business can lead to benefits for their own business, such as increased competitiveness and market share and reduced costs. Any business involves creativity.

Entrepreneurial creativity offers the entrepreneur the chance to approach an innovative variant of the business, so that starting from a single idea to generate complementary activities that generate value. Integrating ideas is essential for business development. In this way both the technological processes and the products and services delivered on the market will be updated in accordance with market trends and customer requirements.

References:

- 1. Albu, M., 2014. Managementul cercetării-dezvoltării. Ploiești: Editura Universității din Ploiesti.
- 2. Cojanu, V., Pîslaru, D.N. and Botezatu, E., 2016. Industriile creative: potențial de creștere în România și în context european. Institutul European Român.
- 3. European Commission, 2011. Proposal for a Regulation of the European Parliament and of the Council on establishing the Creative Europe Programme. [online] Available http://www.europarl.europa.eu/meetdocs/2009 2014/documents/com/com com (2011)0785 /com com(2011)0785 en.pdf)> [Accessed 12 February 2022].
- 4. Rosca-Sadurschi, 2018. Impactul L., inovațiilor antreprenoriatului. Culegerea de articole a Conferinței Științifice Internaționale Competitivitatea și Inovarea în Economia Cunoașterii, Vol. 2, pp. 31-37.

ACCOUNTING POLICIES – A SOURCE OF INSPIRATION FOR CREATIVE ACCOUNTING

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Abstract: The choice and application of accounting policies by the economic entity is a flexible process based on the reasoning of professional accountants. This flexibility leads to the reporting of different results obtained by entities in similar or identical situations. Thus, a possible manipulation of the financial statements appears, with direct consequences on the decisions taken by the users of the financial-accounting information. In this scientific approach, I intend to analyze the impact of the accounting policies and options chosen by the entity on the financial statements. The research undertaken is based on a review of the literature and legislation in force, as well as on an empirical study that will help me to draw relevant conclusions.

Keywords: accounting policies, options, accounting innovation, manipulation of financial results, creative accounting.

JEL Classification: M41.

1. Introduction

Accounting is a tool for knowing and managing financial position, performance and changing financial position (Gurău and Gurău, 2020, p. 85). The role of accounting is to ensure the provision of financial-accounting information necessary for different categories of users to make the best economic decisions. But the existence of multiple economic uncertainties in which an entity operates makes many elements of financial results impossible to measure with certainty, they are only estimated. In this context, managers use the development and application of accounting policies specific to the entity and its object of activity.

The elaboration by the management of the economic entity of some more and more innovative derivative procedures that lead to a "change of surface" of the financial results is found in the specialized literature under the name of creative accounting. Since its inception in the Anglo-Saxon system, accounting creativity has proven to be virtuous as it provides accounting with the means to enable it to keep pace with the ever-increasing development of markets and the proliferation of financial results. But while accounting innovation is needed to keep up with economic, legal and social developments, the problem arises when the instinctive perversion of business people begins to manifest itself.

Accounting policies are options determined by certain interests, in compliance with certain principles, rules and conventions on the registration, recognition and measurement of items described by the accounting model, preparation and presentation of financial statements (Ristea and Dumitru, 2012, p. 32).

2. Review of the specialized literature and the legislation in force

The literature provides numerous definitions of the concept of accounting policies, all referring to the steps taken by an entity to report honest accounting, based on a true and fair view. In order to understand what is meant by the phrase "accounting policies", the figure below presents two definitions, in my opinion the most relevant.

ACCOUNTING POLICIES are defined as: specific accounting bases used on the specific principles, bases, conventions, rules and an ongoing basis by an organization in preparing financial practices applied by an entity statements; these bases are in the preparation and considered and determined by the presentation of financial organization as the most statements. (Source: IAS 8 Accounting Policies, appropriate for the faithful Changes in Accounting Estimates presentation of its financial results and Errors) and operations. (Source: Oxford University Publishing House Accounting Dictionary)

Figure no. 1. Defining accounting policies

Source: own projection

Romanian legislation, in this case OMFP no. 1802/2014¹, took over the definition given to the accounting policies by the international accounting standards (IAS 8), adding also the obligation to develop its own accounting policies, with the specification that they are approved by the entity's administrator. The same national regulations state that: "In the notes to the financial statements, all entities shall disclose, in addition to the information required by other provisions of these regulations, information on the following:

- a) the accounting policies adopted, including:
 - the evaluation bases applied to the different elements;
 - compliance of the adopted accounting policies with the accounting principles provided by the present regulations;
 - any significant changes in the accounting policies adopted; (...)"²

The application of accounting policies and the obligation to draw up an accounting policy manual have direct consequences on the financial statements, including on the indicators calculated on the basis of the information provided by the annual accounts; that is why the legislator allocates a more and more comprehensive space to the argumentation of the choice of accounting policies in the explanatory notes of the financial statements.

At the same time, the local legislation presents a series of accounting policies aimed at choosing certain treatments to the detriment of others. The following figure lists these examples of accounting policies.

¹ OMFP no. 1802/2014 for the approval of the Accounting Regulations regarding the individual annual financial statements and the consolidated annual financial statements.

² Practical guide for the application of the accounting regulations regarding the individual annual financial statements and the consolidated annual financial statements approved by OMFP no. 1802/2014, 2015, CECCAR Publishing House, Bucharest, pp. 24.

Figure no. 2. Examples of accounting policies

- * choosing the method of depreciation of fixed assets
- * revaluation of tangible assets or preservation of their historical cost
- * the recording during the period in which the tangible assets are conserved, of an expense with depreciation or of an expense corresponding to the adjustment for the depreciation found
- * choosing a stock valuation method
- *inventory accounting through permanent or intermittent inventory

Source: OMFP no. 1802/2014

The choice and elaboration of these accounting treatments is made according to the specific activity of the economic entity and the strategy adopted by it. The objectives of accounting policies differ from one entity to another, but each pursues essentially the same thing: reducing reported losses, reducing taxable profits, increasing results to attract new investors, steady or relatively stable financial performance necessary to reduce the financial risk felt by the business environment.

It is very important that, once the accounting policies for choosing the most appropriate treatment for the entity have been established, they are kept for as long as possible. The obligation to argue the chosen accounting policies in the explanatory notes to the financial statements has the expected effect of increasing the confidence of users of accounting information.

The consistency and permanence of accounting policies that are considered appropriate for the enterprise at a given time must become a management goal, even if at present the accounting treatment considered favorable to the entity no longer offers the same satisfaction.

- The legislator allows changes in accounting policies, but it must be borne in mind that any change in methods leads to different effects. Following the provisions of IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors, three cases are identified in which changes in accounting policies are approved, namely:
 - if they are required by law;
 - if they are required by an accounting standard;
- whether they result in more relevant or credible information on the company's financial policy and performance (Ristea and Dumitru, 2012, p. 39).

The legal regulations also stipulate that any changes in accounting policies must appear in the explanatory notes to the financial statements.

Analyzing the international and national accounting standards, there is a certain flexibility given by the possibility of choosing some accounting treatments to the detriment of others. To limit this freedom, IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors lays down the following rules:

if there is a standard that specifically applies to a transaction, event or condition, then the accounting treatment must be chosen in accordance with the regulations of that standard;

in the absence of a standard that specifically applies to a transaction, event or condition, professional judgment will be used to determine the most appropriate accounting policies for the company.

The Romanian legislator also called for the imposition of limits on the choice of accounting methods used by entities, stating that the accounting policies approved by administrators must comply with applicable law, both in the field of accounting and legislation in general. In developing accounting policies must compliance with the accounting principles set out in the regulations.

Despite all these requirements, the flexibility of the rules remains, it is accepted and allowed by the accounting standards and even encouraged by the professional environment which is more in line with the phrase "freedom and compliance with accounting regulations".

The choice of one or the other accounting treatment has consequences for the financial statements, so it is preferable that the entity's short-term objectives (obtaining a bank loan, avoiding the imposition of high taxes) do not take precedence over the main objective of honest accounting: reflection of the faithful image.

The flexibility of the rules and the possibility to choose accounting policies favorable to the entity derive the creative accounting practices. Exploiting legislative gaps can also be done in an aggressive manner by defining accounting policies that lead to undeserved benefits for the entity and for certain users of accounting information. In this case, we are talking about masking reality, about reporting a deceptive image of the company made under the protection of the legal nature of creative accounting.

3. Factors that may encourage managers to use creative accounting policies

The situation in which the performances of the managers of the economic entity are measured in accordance with the size of the obtained result often appears in the current economic practice. Thus, managers will be tempted to behave opportunistically, choosing to benefit from those encouraging factors that allow them to maintain these results at a high level.

Pursuing and achieving the financial objectives of the economic entity has facilitated the emergence of accounting innovation, which is defined by some authors as a process in which a transaction is structured in such a way as to allow the application of the desired accounting method. Analyzing the two existing international accounting systems (Continental European and Anglo-Saxon), it is observed that a more prescriptive and inflexible approach to the continental European model reduces the abuse of accounting policies and facilitates the manipulation of accounting estimates. It is also noted that the Anglo-Saxon model leads to the use of re-evaluation and the principle that the substance prevails form. Both models accept creative accounting control, as shown in figure no. 3.

In the context of business globalization, both professional accountants and managers of economic entities are put in a position to find quick solutions to adapt to new information requirements, sometimes without waiting for normalization, thus forcing the need to use influencing factors to find solutions and treatments, to promote the image of the entities they lead and to obtain an advantage, without coming into conflict with the law.

The use of creative accounting practices relates to the accounting imagination used to translate legal, economic and financial innovations for which there are no standardized accounting solutions at the time of their launch, and to the fact that the arrangements arising from this financial engineering are initiated in depending on their impact on the outcome of the entity (Stolowy, 1994).

Figure no 3. Factors that can encourage managers to use creative accounting policies

Encouranging factors for creative accounting	Solution	Principle of application
* Selecting the accounting method; * Estimates and forecasts; * Concluding artificial contracts; * The real moment of the transaction.	* Limiting choice; * Limiting the purpose of estimates; * The importance of the substance over the form; * Imputation of revaluation.	*Continental European; *Continental European; *Anglo-Saxon; *Anglo-Saxon.

Source: own projection

The review of the literature shows that, although there are misunderstandings about the definition of creative accounting, most researchers acknowledge that, in essence, it is distinguished by two aspects presented in the figure below.

Figure no. 4. The distinctive character of creative accounting

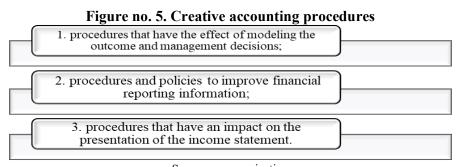
- first of all, creative accounting involves using the imagination of experts in the field to translate legal, economic and financial innovations that do not have standardized accounting solutions at the time of their emergence.
 - second, the arrangements resulting from this financial engineering will be initiated in response to the impact on the entity's performance.

Source: own projection

Creative accounting policies with a significant impact on decision making

Creative accounting policies can be used by business managers to change the image of performance. As a result of estimation, rather than an accurate quantification, for example, in the case of unsecured customers, the presentation in financial statements of information such as the fair value of financial assets and financial liabilities, useful life of assets, moral wear and tear of inventories etc., can be done by influencing the results or information provided in the financial statements. The presentation of economic and financial indicators inevitably simplifies the information on the target markets. The choice of one or more indicators is not neutral at all and the information provided is subjective.

Knowing the indicators by which the market is analyzed, the entity is tempted to act on a numerical basis, establishing a direct causal link between the complexity and manipulation of the accounts. The complexity of the account requires simplification, a simplification that works with indicators that are easy to manipulate (Răileanu, Manea and Răpceanu, 2010, p.23). In figure no. 5 shows the ways in which creative accounting classifies its procedures according to the objectives imposed by managers.



Source: own projection

Following this scientific approach, I will briefly analyze a series of procedures, mechanisms and practices specific to creative accounting. Thus, the table no. 1 presents the creative accounting policies and techniques with significant effect in modeling the result.

The existence of various interests determined by some of the influencing factors that can encourage managers to use the above creative accounting policies is closely related to financial markets, where investors play a key role, being fully aware that accounting "options" have always existed. Even if all this leads to a distorted interpretation of the information gathered from the financial statements, the managers continue to support the minimization of the impact of creativity. If the purpose of creative accounting is to take advantage of the weaknesses and shortcomings of accounting regulations to improve the accounts (or image of an entity), the principle of options has been known to experts in the field for a long time, so this concept is not new. Thus, in most cases where creative accounting is disclosed, the choice and application of accounting policies fall within the flexibility of accounting standards and rules.

The way in which the accounting policies are applied is based on the reasoning of the experts and on the desire of the managers to model the financial results in the desired direction (Feleagă and Malciu, 2002, p. 390). However, in many cases, the design and application of certain accounting treatments may be detrimental to the results and financial position reported. It should be noted that accounting legislation allows for the application of alternative treatments, so it cannot be a matter of fraudulent reporting, in most cases it is an aggressive application of accounting policies.

At some point, creative accounting policies exceed the limits of accounting rules, and financial reporting no longer provides a true and fair view of results and financial position. To determine if it is a fraudulent financial report, you must prove its intent. What started out as an aggressive application of accounting policies can result in fraudulent financial reporting if it is continued for large sums and over a long period of time. However, it is not always easy to identify where creative accounting is fraudulent. Determining this point is more about art than science.

Table no.1 Significant creative accounting policies and practices

Identified components	Mechanism of action	Impact on performance	Limitation	The method used to achieve the goal
Research and development expenses	Capitalization of research and development expenditures.	Increasing the result in the year of capitalization; Decrease in the year of the transfer and in the following years due to depreciation; The impact of choosing the beginning date of depreciation.	Fulfillment of the conditions provided by the reporting rules; Difficulties in assessing the cost of research.	Option; Subjectivity in evaluation.
Tangible fixed assets	Lease- back contract.	The emergence of added value from lease-back operations; Recording of rents during the period after taking over the asset.	Artificial increase in the result due to the existence of a commitment to pay rent for a certain period. The risk of distributing fictitious dividends.	Financial mechanism.
Depreciation	When setting the depreciation plan, there are several options and possibilities: -time of use; -estimation of the residual value.	Modification of the recorded depreciation rate, therefore of the depreciation expenses.	The need for a depreciation plan; Permanence of methods.	Personal appreciation; Option.
Goods stocks	Incorporation of financial expenses in the cost of production of stocks.	Increasing the result in the year of incorporation of expenses; Decrease in the year of stock decline.	Difficulty in defining borrowed capital and production financing; The notes must state the justification for the capitalization and the amount of the expenditure.	Option.
Depreciation adjustments and equity securities	Underestimation or overvaluation for the depreciation of participation titles.	Increasing (or decreasing) the result in the year of registration; Reverse effect in the year of resumption.	Prudence principle.	Subjectivity in evaluation.
Depreciation adjustments for current assets	Underestimation or overvaluation for debt depreciation; Underestimation or overestimation of adjustments for depreciation of stocks.	Increasing (or decreasing) the result in the year of registration.	Prudence principle.	Subjectivity in evaluation.
Provisions	There are several problems: -date of the restructuring decision; -degree of accuracy	Impact on the result depending on the level of the provision; Reverse effect in the year of resumption.	Prudence principle.	Option; Subjectivity in evaluation.

	in terms of evaluation; - taking into account the capital gains of the provision (although it is forbidden).			
Long-term contracts	The existence of several methods for registering these contracts: - the percentage of advancement method; -method of finishing the works	Impact on turnover depending on the method used; Different recognition of contract revenue.	Prudence principle.	Option; Subjectivity in evaluation.

Source: Răileanu, Manea and Răpceanu, 2010, p. 28-29.

5. Case study: Valuation of goods stocks

By elaborating this case study in my capacity as author, I will follow the influence of the stock evaluation method on the result of the entity SC ONE STORE SRL which registers in March 2022 the following operations in the management of cargo stock X:

- initial stock 1,200 kg at price of 3.6 lei,
- inputs on March 3 of 300 kg at a price of 3.75 lei,
- outputs on March 15 of 500 kg,
- inputs on March 20 of 200 kg at 3.98 lei,
- outputs on March 25 of 550 kg.

The unit selling price was 4.95 lei / kg.

2. *method FIFO - first *method LIFO - last in, in, first out; first out; *weighted average cost method.

Figure no. 6. Goods stocks valuation methods

Source: own projection

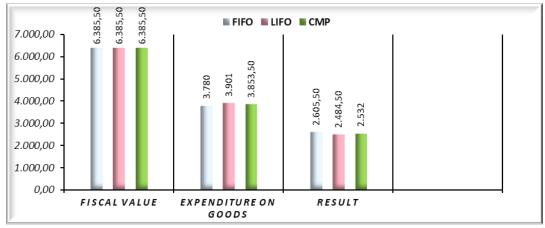
Table no.2 Evaluation of goods stocks using the three methods

Date	Initial stock	Inputs	Outputs	FIFO method	LIFO method	Weighted averege cost
						method
01.03.2022	1.200x3.6			1.200x3.60	1.200x3.60	1.200x3.67
03.03.2022		300x3.75		1.200x3.60	1.200x3.60	1.500x3.67
				300x3.75	300x3.75	
15.03.2022			500	700x3.60	1.000x3.60	1.000x3.67
				300x3.75		

20.03.2022	200	x3.98	700x3.60	1.000x3.60	1.200x3.67
			300x3.75	200x3.98	
			200x3.98		
25.03.2022		550	150x3.60	650x3.60	650x3.67
			300x3.75		
			200x3.98		
30.03.2022	4320 lei		2461 lei	2340 lei	2385.50 lei

Source: own projection

Chart no.1 Profit and loss account



Source: own projection

It can be seen from the study presented that the result obtained by the assessed entity depends on the chosen stock valuation method. The FIFO method determines the highest result, and the LIFO method has the lowest result and implicitly the lowest profit tax expense. In addition, if the entity decides to change the method of valuing inventories from one year to the next, it will allow it to smooth the result.

Conclusions

Given all the aspects related in the content of this research, a relevant conclusion of the scientific approach can be deduced, namely, creative accounting is a tool to support managers, as it provides information that promotes and supports the image of the entity it leads, but also personal interests which he pursues. Therefore, even if the use of creative accounting is not illegal, it provides managers under financial pressure with solutions that are not in line with ethical standards. In other words, half-truths and lies can be considered susceptible to possible fraud.

The existence of accounting options based on freedom of choice and appreciation determines managers who, depending on the profits pursued or the tendency towards optimism or pessimism, are tempted by the reversal of reasoning or the translation into accounting of legal, economic and financial innovations for which standardization has not yet found solutions. Thus, creative accounting can define opportunities that have the effect of modeling the results and content of financial reporting.

References

- 1. Bruno, G., 2007. Les impôts dans les affaires internationales, 7-e edition, Edition Francis Lefebvre.
- 2. Bunget, O., 2005. Contabilitatea românească între reformă și convergență. București: Editura Economică.

- 3. Ghid practic de aplicare a reglementărilor contabile privind situațiile financiare anuale individuale și situațiile financiare anuale consolidate aprobate prin OMFP nr. 1802/2014, 2015. București: Editura CECCAR, p. 24.
- 4. Feleagă, N., Manciu L., 2002. Politici și opțiuni contabile (Fair Accounting versus Bad Accounting). București: Editura Economică.
- 5. Grosanu, A., 2013. Contabilitate creativă. Bucuresti: Editura ASE.
- 6. Gurău, M., Gurău, M.I., 2020. Contabilitatea în era economiei digitale. Politici și proceduri contabile. București: Editura Universității din București.
- 7. Malb, J.L., Giot, H., 1995. L'elasticite du resultat selon les dimensions temps et espace, Congrès AFC.
- 8. Mihăilă, S., Erhan, L., 2015. Poziționări și evoluții în contabilitatea creativă, Analele ASEM, Editia a XIII-a, Nr.1.
- 9. OMFP nr. 1802/2014 pentru aprobarea Reglementărilor contabile privind situațiile financiare anuale individuale și situațiile financiare anuale consolidate.
- 10. Raimbourg, P., Boizard, M., 2009. Inginerie financière, fiscalité et juridique. Paris: Dalloz.
- 11. Răileanu, V., Manea, C.L., Răpceanu, C., 2010. Contabilitate creativă (suport de curs și aplicații practice). București: ASE București.
- 12. Răileanu, V., Răileanu, A.S., 2009. Abordări contabile și fiscale privind impozitele și taxele. Bucuresti: Editura Economică.
- 13. Remenaric, B., Kenfelia, I., Mijoc, I., 2018. Creative accounting motives, techniques and possibilities of prevention. *Economski Vjesnik / Econviews*, pp.193-199.
- 14. Ristea, M., Dumitru, C.G., 2012. Libertate și conformitate în standardele și reglementările contabile. București: Editura CECCAR.
- 15. Stolowy, H., 1994. Existe-t-il vraiment une comptabilite creative? Revue de droit comptable.

EVOLUTION OF TAX REVENUES FROM DIRECT TAXATION IN THE PERIOD 2008- 2020. AN ANALYSIS ROMANIA VS EU **MEMBER STATES**

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Abstract: The aim of the paper is to present the evolution of tax revenues from direct taxation in the European Union (EU 27) in the period 2008-2020, and to highlight the situation of Romania compared to Member States, especially those in the region (similar states in terms of economic development). We consider, in this sense, the evolution of both tax revenues from the taxation of personal income and corporate profits (we also refer to the taxation of large corporations in order to reduce the transfer of profits and increase revenues worldwide) and the evolution of statutory tax rates, as well as the strengths and weaknesses regarding the Romanian tax system in the regional context. In our approach we use a descriptive methodology, by using relevant bibliographic sources and statistical data from international database.

Keywords: direct tax revenues, corporate income taxation, personal income taxation, tax rates. Jel Classification: H24, H25.

1. Introduction

The main objectives considered are:

- the evolution of tax revenues from the taxation of personal income and corporate profits (including the taxation of large corporations in order to reduce the transfer of profits and increase revenues worldwide) in the period 2008-2020
- the evolution of the statutory tax rates related to direct taxation in the period 2008-2021
- strengths and weaknesses regarding the Romanian tax system in the regional context.

Therefore, the period we are referring to is 2008-2020 / 2021, when we try to analyze how tax revenues (including tax rates) have evolved in the European Union, and implicitly in Romania, the statistical data used being provided by the Taxation Trends report (2021), prepared by the European Commission. For the regional analysis, the countries considered are the Czech Republic, Hungary, Poland, Bulgaria and Romania (regional average).

Evolution of tax revenues from direct taxation in the period 2008-2020 2. in the EU 27

In the EU-27, in the period under review, tax revenues from direct taxation, as a share of GDP, had an oscillating trajectory, in 2020 their level being 0.5 pp higher compared to 2008 (the year in which the financial crisis began). During the analyzed period, they decreased from 12.8% in 2008 to 11.9% of GDP in 2010, but registered an increase of 1.0 pp in GDP in the period 2013-2015, from 2016 registering an upward trend. The evolution of these revenues is explained primarily by the increase in corporate income taxes as well as personal income taxes. From 2008 to 2010, the share of direct taxes decreased more than GDP, and the decrease in direct taxes was more pronounced than the decrease in indirect taxes.

If we look at the region, we notice that four of the five countries analyzed (Poland, Romania, Bulgaria, Hungary) had a decrease in the share of these revenues in GDP in the period 2008-2020, in Hungary the level reached in 2020 being 3.5 pp. lower than in 2008 (6.8% of GDP in 2020, compared to 10.3% in 2008), followed by Romania, which in 2020 reached a value of 4.7% of GDP, compared to 6.4% of GDP in 2008 (in 2020 we have the lowest level in the EU 27).

It should be noted that no country in the region has reached the level of tax revenues before 2008, the year in which the financial crisis began.

Table 1. Direct tax revenue (% of GDP) in the EU-27 in 2008-2020

	i abie i	. Dire	i ian	CVCIIU	י טיין או	UI GD	. <i>,</i>	iic EC	-2/111	2000-	2020		
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
EU-27	12,8	12,1	11,9	12,1	12,6	12,9	12,9	12,9	13,0	13,2	13,2	13,2	13,3
EA-19	12,6	11,9	11,7	12,0	12,5	12,8	12,8	12,8	12,9	13,0	13,2	13,2	13,2
BE	17,0	15,8	16,1	16,7	17,1	17,8	17,7	17,3	16,9	17,5	17,7	16,4	16,5
DK	28,1	28,5	28,6	28,6	29,3	29,9	32,8	30,3	29,6	29,8	28,3	31,1	30,9
DE	12,5	11,7	11,1	11,5	12,1	12,3	12,3	12,5	12,9	13,1	13,4	13,4	13,0
EE	7,7	7,4	6,6	6,3	6,6	7,2	7,4	7,8	7,5	7,2	7,5	7,4	7,8
ΙE	12,5	12,0	11,8	12,3	12,9	12,9	13,0	10,8	10,9	10,5	10,7	10,4	10,2
EL	8,4	8,8	8,4	9,5	11,1	10,6	9,9	9,6	10,3	10,1	10,4	9,9	9,3
ES	10,7	9,5	9,5	9,6	10,4	10,5	10,7	10,5	10,5	10,6	11,0	10,8	11,6
FR	12,2	11,0	11,5	12,1	12,8	13,2	13,1	13,1	12,9	13,3	13,7	13,6	13,7
HR	7,2	7,3	6,6	6,3	6,2	6,6	6,2	6,1	6,4	6,2	6,3	6,5	6,5
IT	14,7	14,9	14,3	14,2	14,9	15,2	14,7	14,7	14,9	14,5	14,1	14,5	15,2
CY	11,1	9,6	9,4	10,1	9,9	10,4	10,4	9,9	9,3	9,5	9,5	9,4	9,7
LV	9,0	7,0	7,4	7,5	7,7	7,8	7,8	7,8	8,3	8,6	7,4	7,0	7,2
LT	9,2	5,9	4,6	4,3	4,8	5,0	5,0	5,4	5,6	5,4	5,7	8,9	8,8
LU	13,3	13,6	13,6	13,6	13,6	13,6	13,3	13,9	14,4	14,9	16,9	16,9	16,0
MT	12,2	12,9	12,1	12,5	12,9	13,3	13,3	12,5	13,2	13,3	12,9	13,2	13,1
NL	11,0	11,1	11,2	10,7	10,2	10,2	10,8	11,5	11,8	12,9	12,7	13,4	13,4
AT	13,9	12,6	12,7	12,8	13,1	13,7	13,8	14,2	12,9	13,0	13,6	13,7	12,7
PT	9,3	8,6	8,5	9,4	9,1	11,3	10,9	10,7	10,1	9,9	10,1	9,7	10,1
SL	8,8	8,1	8,0	7,8	7,5	7,0	7,2	7,2	7,5	7,5	7,9	7,8	7,9
SK	6,6	5,7	5,5	5,6	5,7	6,2	6,7	7,1	7,2	7,2	7,3	7,2	7,2
FI	17,1	15,7	15,6	16,0	15,8	16,4	16,6	16,8	16,6	16,8	16,3	16,3	16,4
SE	18,8	18,4	18,1	17,5	17,4	17,7	17,8	18,3	18,9	19,0	18,6	18,1	18,2
BG	6,2	5,2	4,9	4,8	4,8	5,2	5,5	5,7	5,8	6,1	6,1	6,1	6,1
CZ	8,2	7,5	7,2	7,4	7,4	7,6	7,7	7,7	8,0	8,1	8,5	8,5	8,5
HU	10,3	9,6	7,8	6,2	6,7	6,5	6,7	6,8	7,3	7,2	6,6	6,6	6,8
PL	8,4	7,2	6,7	6,7	7,0	6,8	6,8	6,9	7,1	7,3	7,8	7,9	8,0
RO	6,4	5,9	5,8	6,1	5,8	5,9	6,2	6,6	6,4	6,1	4,9	4,8	4,7
medie regionala	7,89	7,08	6,46	6,26	6,36	6,41	6,59	6,74	6,94	6,97	6,78	6,78	6,83

Source: European Commission, DG Taxation and Customs Union, based on Eurostat data

In 2020, despite the COVID-19 pandemic, the share of direct tax revenues in GDP remained stable, probably due to extensive measures in Member States to protect jobs / population / firms. By far, the largest share of direct taxes is in Denmark, which accounted for 30.9% of GDP from these taxes in 2020 (most social benefits are financed by income taxes). The following values are recorded by Sweden, Finland, Luxembourg and Belgium, respectively 18.2%, 16.0%, 15.9% and 15.8% of GDP. At the end of the ranking, in 2020, are Romania (4.7% of GDP), Bulgaria (5.9% of GDP) and Croatia (6.5% of GDP), which had low revenues from these taxes (caused by rates reduced taxes, as well as a low degree of collection).

2.1. Evolution of tax revenues from personal income taxation in the period 2008-2020 in Romania and EU 27

Table 2. Personal income statutory tax rates, 2008-2021

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
BE	53,7	53,7	53,7	53,7	53,7	53,8	53,8	53,7	53,2	53,2	53,2	53,1	53,1	53,1
DK	62,3	62,1	55,4	55,4	55,4	55,6	55,6	55,8	55,8	55,8	55,9	55,9	55,9	55,9
DE	47,5	47,5	47,5	47,5	47,5	47,5	47,5	47,5	47,5	47,5	47,5	47,5	47,5	47,5
EE	21,0	21,0	21,0	21,0	21,0	21,0	21,0	20,0	20,0	20,0	20,0	20,0	20,0	20,0
IE	41,0	46,0	47,0	48,0	48,0	48,0	48,0	48,0	48,0	48,0	48,0	48,0	40,0	40,0
EL	40,0	40,0	49,0	49,0	49,0	46,0	46,0	48,0	48,0	55,0	55,0	55,0	54,0	54,0
ES	43,0	43,0	43,0	45,0	52,0	52,0	52,0	45,0	45,0	43,5	43,5	43,5	43,5	45,5
FR	45,4	45,4	45,4	46,6	50,3	50,3	50,3	50,2	50,2	50,2	51,5	51,5	51,5	51,5
HR	53,1	56,1	50,2	47,2	47,2	47,2	47,2	47,2	47,2	42,5	42,5	42,5	42,5	35,4
IT	44,9	44,9	45,2	47,3	47,3	47,3	47,8	48,8	48,8	47,2	47,2	47,2	47,2	47,2
CY	30,0	30,0	30,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0
LV	25,0	23,0	26,0	25,0	25,0	24,0	24,0	23,0	23,0	23,0	31,4	31,4	31,4	31,0
LT	24,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	27,0	32,0	32,0
LU	39,0	39,0	39,0	42,1	41,3	43,6	43,6	43,6	43,6	45,8	45,8	45,8	45,8	45,8
MT	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0	35,0
NL	52,0	52,0	52,0	52,0	52,0	52,0	52,0	52,0	52,0	52,0	52,0	51,8	49,5	49,5
AT	50,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0
PT	42,0	42,0	45,9	50,0	49,0	56,5	56,5	56,5	56,5	56,2	53,0	53,0	53,0	53,0
SL	41,0	41,0	41,0	41,0	41,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0	50,0
SK	19,0	19,0	19,0	19,0	19,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0
FI	50,1	49,1	49,0	49,2	49,0	51,1	51,5	51,6	51,6	51,4	51,1	51,1	51,1	51,3
SE	56,4	56,5	56,6	56,6	56,6	56,7	56,9	57,0	57,1	57,1	57,1	57,2	52,3	52,3
BG	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0
CZ	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	15,0	23,0
HU	40,0	40,0	40,6	20,3	20,3	16,0	16,0	16,0	15,0	15,0	15,0	15,0	15,0	15,0
PL	40,0	32,0	32,0	32,0	32,0	32,0	32,0	32,0	32,0	32,0	32,0	32,0	32,0	32,0
RO	16,0	16,0	16,0	16,0	16,0	16,0	16,0	16,0	16,0	16,0	10,0	10,0	10,0	10,0
EU 5	24,2	22,6	22,7	18,6	18,6	17,8	17,8	17,8	17,6	17,6	16,4	16,4	16,4	18,0
EU-27	39,2	39,1	39,3	39,0	39,4	40,1	40,2	40,0	39,9	39,9	40,2	40,7	40,2	40,3
EA-19	39,1	38,8	39,7	40,6	41,1	42,3	42,3	42,0	42,0	42,3	42,6	43,2	42,9	43,0

Source: European Commission, DG Taxation and Customs Union, based on Eurostat data

In 2021, statutory personal income tax rates varied by region. While Romania, Bulgaria, Hungary continue to apply flat-rate income taxes (single rate, italics), other countries, such as the Czech Republic, Austria, Germany, Slovenia, Croatia and Slovakia, use progressive income tax rates.

We notice that in economically developed countries high tax rates predominate (45-54%), their average (EU 19) increasing from 39.1% in 2008 to 43% in 2021. However, there are countries where rates have decreased compared to 2008, namely Denmark, Sweden, Belgium; however, the countries where these rates have increased considerably (Greece, Spain, Italy, Portugal, Luxembourg) predominate during the analyzed period; There are also countries that have maintained their tax rate over the period: Belgium, Germany, Austria.

If we look at Romania and the countries in the region (Poland, Czech Republic, Bulgaria, Hungary), we notice that Bulgaria, and the Czech Republic, similar to our country, have a flat reduced tax rate (10%, 15%, and for Romania, 16% till 2017, becoming 10% starting with 2018). As for Poland, in present it taxes personal income at a rate of 32% (up from 40% in 2008); Hungary has reduced its tax rate from 40% in 2008 to 15% since 2017.

Table 3. Income from personal income tax / wealth, in the period 2008-2020,% of GDP

						oi Gl	JΓ						
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
EU-27	9,0	8,9	8,7	8,8	9,2	9,4	9,5	9,4	9,3	9,4	9,5	9,6	9,9
EA-19	8,7	8,7	8,5	8,5	9,0	9,2	9,2	9,2	9,1	9,2	9,4	9,5	9,8
BE	12,3	12,0	12,1	12,4	12,5	13,0	12,9	12,4	12,0	12,0	11,8	11,3	11,8
DK	24,0	25,0	24,8	24,8	25,1	25,6	28,5	25,9	25,3	25,2	24,2	26,5	26,9
DE	9,0	8,9	8,2	8,2	8,7	9,0	8,9	9,1	9,2	9,5	9,7	9,8	9,7
EE	6,1	5,6	5,3	5,1	5,2	5,4	5,7	5,7	5,8	5,6	5,5	5,5	6,2
ΙE	9,0	8,9	8,7	9,1	9,6	9,5	9,4	7,5	7,6	7,2	7,0	6,9	6,6
EL	4,5	4,4	4,0	4,8	7,0	5,9	5,9	5,7	5,9	6,3	6,4	5,9	6,3
ES	7,1	6,7	7,0	7,2	7,5	7,6	7,7	7,4	7,3	7,5	7,7	8,0	8,8
FR	7,9	7,8	7,6	7,8	8,4	8,7	8,7	8,7	8,6	8,6	9,5	9,4	9,6
HR	3,8	3,8	3,4	3,4	3,6	3,9	3,8	3,5	3,6	3,2	3,5	3,6	3,6
IT	11,3	11,2	11,3	11,1	11,8	11,9	11,9	12,1	11,8	11,7	11,6	11,8	12,6
CY	4,3	3,3	3,4	3,5	3,5	2,8	2,7	2,7	2,8	3,1	3,2	3,2	3,4
LV	5,9	5,3	6,2	5,8	5,7	5,8	5,9	5,9	6,3	6,6	6,0	6,5	6,1
LT	6,5	4,1	3,6	3,5	3,5	3,6	3,6	3,9	4,0	3,9	4,1	7,2	7,1
LU	7,6	7,5	7,4	8,0	7,9	8,3	8,4	8,7	8,9	8,7	9,3	9,4	9,8
МТ	5,7	6,3	5,7	6,4	6,4	6,6	6,4	6,0	6,4	6,5	7,0	7,1	7,8
NL	6,5	7,7	7,6	7,3	6,8	6,7	6,9	7,4	7,1	8,3	7,9	8,5	9,0
AT	10,3	9,7	9,6	9,6	9,9	10,1	10,4	10,8	9,3	9,3	9,7	9,8	9,4
PT	5,4	5,5	5,4	6,0	5,8	7,7	7,7	7,3	6,8	6,4	6,5	6,3	7,0
SL	5,7	5,7	5,5	5,5	5,6	5,1	5,0	5,1	5,2	5,1	5,4	5,3	5,4
SK	3,1	2,8	2,6	2,8	2,9	2,9	3,0	3,1	3,3	3,4	3,6	3,8	3,8
FI	12,7	12,7	12,0	12,2	12,4	12,7	13,3	13,2	12,9	12,5	12,2	12,2	12,6
SE	15,8	15,3	14,6	14,1	14,5	14,7	14,7	14,9	15,6	15,6	15,2	14,5	14,8
BG	2,7	2,7	2,8	2,7	2,7	2,9	3,1	3,1	3,1	3,4	3,3	3,3	3,5
CZ	3,9	3,9	3,7	4,0	4,0	4,1	4,2	4,0	4,3	4,5	4,8	5,0	5,2
HU	7,5	7,2	6,3	4,8	5,2	4,9	4,9	4,9	4,8	5,0	5,1	5,1	5,3
PL	5,3	4,5	4,3	4,3	4,5	4,5	4,6	4,7	4,8	5,0	5,3	5,3	5,3

RO	3,2	3,3	3,2	3,3	3,4	3,4	3,5	3,7	3,7	3,6	2,4	2,3	2,4
medie reg	4,52	4,32	4,08	3,82	3,98	3,97	4,04	4,06	4,14	4,27	4,18	4,21	4,35

Source: European Commission, DG Taxation and Customs Union, based on Eurostat data

We note that in countries where the tax rate is high, the related tax revenues are also high, exceeding the EU 19 average in the analyzed period. (Denmark, Austria, Finland). In most EU-19 countries, the share of revenue in GDP is higher than in 2008, with an upward trend starting with the period 2015-2016.

As for Romania and the countries in the region (Bulgaria, Czech Republic, Poland, Hungary), Hungary and Poland have values above the average. In Romania, the level of collection is the lowest in the European Union, two of the causes being the categories of taxpayers exempt from this tax, as well as the reduced tax rate.

If we refer to the year 2010 (the year of the "exit" from the financial crisis), in present, the EU 19 countries had higher revenues from the taxation of individuals (+ 1.3 pp in 2010); the same cannot be said about Romania or Hungary (due to the reduction of the tax rate in both states).

However, as the income tax is calculated at a 10% rate, the Romanian tax system is competitive for foreign citizens who become Romanian tax residents, but remain enrolled in the social security system of other EU Member States which apply a tax base ceiling or a specific progressive system.

Over time, EU countries have sought to increase their fiscal attractiveness in order to generate additional revenue and attract investment, while avoiding the erosion of their internal tax base so as not to jeopardize their resources.

One solution was to choose high-income foreign taxpayers by implementing specific preferential schemes, which target only newcomer residents. These schemes allow the tax rate applied to the local population to be kept intact, while at the same time obtaining additional income by applying a reduced rate for foreigners. Over time, these schemes have become increasingly aggressive, facilitating real tax optimization strategies based on simple changes of address. Although they initially focused on the revenue generated in the new country of tax residence, these schemes have since been extended to income from foreign sources or worldwide (the principle of the specific tax regime applicable to the income of new tax residents as well as the large fortunes of newly settled taxpayers - for example, foreign inventors are significantly affected by maximum tax rates when making decisions regarding the tax domicile).

Preferential schemes are all the more problematic as they target the highest-income taxpayers, either by defining the minimum amounts of income to be obtained or by reducing the tax rates that will benefit only individuals with a higher previous tax rate (those who earn the most income). The exemptions thus directly undermine the progressiveness of tax systems and create favorable regimes for people with already high incomes.

2.2. Evolution of tax revenues from profit taxation in the period 2008-2020 in Romania and EU 27

In the last decade (more precisely, the last five years), Member States have implemented numerous changes in both the corporate tax rate and the corporate tax base. Nine Member States have reduced their statutory corporate tax rates, the most important reductions in the tax rate being adopted in Hungary (-9.4 pp), Belgium (-9 pp) and France (-6 pp). Legal tax rates have also been reduced by Croatia, Greece, Italy, Luxembourg, Slovakia and Sweden.

The only countries that increased their statutory corporate tax rates were Latvia (+5 pp), Portugal (+2 pp) and Slovenia (+2 pp).

Tax reforms adopted by Member States over the last five years include a combination of measures to extend and narrow the tax base. Many countries have increased their tax bases by adopting anti-avoidance / anti-evasion measures and reducing tax exemptions and deductions, such as limiting the deductibility of losses (Latvia, the Netherlands, Sweden) or the use of company cars (Poland), reduction of the exemption for dividend income (Spain and Belgium) or capital gains (Spain).

However, many new exemptions and deductions have been introduced, such as the tax exemption for reinvested profits (Latvia, Portugal), the increased deductibility of municipal taxes (Italy), more generous tax brackets in progressive schemes (Netherlands), extending a previously limited tax exemption to special economic zones for the whole country (Poland).

Investment incentives such as higher capital allowances, accelerated depreciation and incentives for research and development are encouraged. In addition, some Member States have introduced preferential tax regimes for intellectual property income and the deduction of national interest.

2010 2013 2017 2018 2020 2021 2008 2009 25,0 34,0 34,0 34,0 34,0 34.0 34,0 34,0 34,0 34,0 34,0 29.6 29,6 25.0 BE 25,0 25,0 25,0 25,0 25,0 25,0 24,5 23,5 22,0 22,0 22,0 22,0 22,0 22,0 DK 29,4 29,4 29,5 29,6 29,6 29,6 29,7 29,8 29,8 29,9 29,9 29,9 29,9 29,9 DE 21,0 21,0 21,0 21,0 21,0 21,0 21,0 20,0 20,0 20,0 20,0 20,0 20,0 20,0 EΕ 12,5 12,5 12,5 12,5 12,5 12,5 12,5 12,5 12,5 12,5 12,5 12,5 12,5 12,5 ΙE 35,0 35,0 24,0 20,0 20,0 26,0 26,0 29,0 29,0 29,0 29,0 28,0 24,0 24,0 EL 30,0 30,0 30,0 30,0 30,0 30,0 30,0 28,0 25,0 25,0 25,0 25,0 25,0 25,0 ES 34,4 34,4 34,4 36,1 36,1 38,0 38,0 38,0 34,4 44,4 34,4 34,4 32,0 28,4 FR 20.0 20.0 20,0 20.0 20.0 20.0 20.0 20.0 20.0 18.0 18.0 18.0 18.0 18.0 HR 31,4 31,4 31,4 31,4 31,3 31,3 31,3 31,3 31,3 27,8 27,8 27,8 27,8 27,8 IT 10,0 10,0 10,0 10,0 10,0 12,5 12,5 12,5 12,5 12,5 12,5 12,5 12,5 12,5 CY 20,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 20,0 20,0 20.0 LV 15,0 20,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 15,0 LT 29,6 28,6 29,2 29,2 29,2 27,1 24,9 28,6 28,8 28,8 29,2 26,0 24,9 24,9 LU 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0 MT 25,5 25,5 25,5 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 NL 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 25,0 ΑT 26,5 26,5 29,0 29,0 31,5 31,5 31,5 29,5 29,5 29,5 31,5 31,5 31.5 31,5 PT 22,0 21,0 20,0 20,0 18,0 17,0 17,0 17,0 17,0 19,0 19,0 19,0 19,0 SL 19,0 19,0 19,0 19,0 19,0 23,0 22,0 22,0 22,0 21,0 21,0 21,0 21,0 21,0 SK 26,0 26,0 26,0 26,0 24,5 24,5 20,0 20,0 20,0 20,0 20,0 20,0 20,0 20,0 FΙ 22,0 22,0 28,0 26,3 26,3 26,3 26,3 22,0 22,0 22,0 22,0 21,4 21,4 20,6 SE 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10,0 ΒG 21,0 20,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 CZ21,3 21,3 20,6 20,6 20,6 20,6 10,8 10,8 10,8 10,8 20,6 20,6 20,6 10,8 HU 19,0 19,0 PL 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0 19,0

Table 4. Corporate profit tax rates in UE 27, 2008-2021

16,0

16,0

16,0

16,0

16,0

RO

16,0

16,0

16,0

16,0

16,0

EU 5	17,4	17,2	16,9	16,9	16,9	16,9	16,9	16,9	16,9	14,9	14,9	14,9	14,9	14,9
	6	6	2	2	2	2	2	2	2	6	6	6	6	6
EU-27	22,8	22,9	22,2	22,1	22,0	22,4	22,2	22,1	21,8	21,6	21,4	21,3	21,0	20,8
EA-19	22,3	22,2	21,9	22,0	21,8	21,9	21,6	21,5	21,4	20,8	20,7	20,7	20,6	20,3

Source: European Commission, DG Taxation and Customs Union, based on Eurostat data

At EU-27 level, we notice the downward trend in these rates in the analyzed period; in addition, corporate tax rates differ significantly across Member States, with the highest (Germany, 33%) and lowest (Hungary, 9%) differing by more than 20 percentage points. However, the limits of fiscal competitiveness are gradually coming to the fore: only Greece has reduced its corporate tax rate (by 1%) since 2019. Poland has introduced a reduced preferential rate of 9% for small taxpayers. The average corporate tax rate in the region is around 17%, while the legal rate of corporate tax in the countries in the region is usually between 15-20%. In Romania, this is 16%.

The European Union has made efforts to limit tax competition and combat tax evasion techniques. The EU's goal is to establish a common framework for corporate taxation, or at least to prevent the application of tax evasion techniques in the Member States. An important tool in this effort is the Tax Avoidance Practices Directive (ATAD, Directive 2016/1164 EC), which is binding on Member States from 1 January 2019. Adopting this set of EU rules, including those on interest deduction restrictions, has been the biggest challenge in recent years. Offshore standardization (controlled foreign company - CFC) is also one of ATAD's major concerns, and the introduction of the global minimum tax will fundamentally change the future of corporate taxation and the state of tax competition between countries.

EU countries (and at regional level) that apply traditional corporate taxation allow the carry-over of losses incurred in previous years and the possibility of offsetting them with a positive tax base in subsequent years. This option can usually only be used for a certain period of time, usually between 5 and 7 years, and in some places only between 3 and 4 years.

It should be added that the states in the region still tend to impose withholding taxes on interest, dividend and royalty payments (at the rate of 15% or 19-20%). Lithuania, Estonia and Hungary continue not to impose withholding tax on capital gains. Starting with 2019, the group taxation started to be applied in Hungary as well, previously existing only in Austria and Poland. Also, in most states the tax system encourages research and development (R&D); Slovakia, Poland have recently taken measures in this regard, while in Romania various fiscal facilities specific to these activities have been previously implemented.

With regard to international taxation, efforts to protect the profit tax bases against corporate tax evasion have continued with the adoption of significant reforms in line with the OECD / G20 project on tax erosion and profit shifting (BEPS). The fiscal challenges of the growing digitalization of the economy are another major concern for many countries that have announced or implemented interim measures to tax certain revenues from digital services.

The OECD's BEPS ("tax base erosion and profit shifting") initiative has drawn attention to cross-border intra-group transactions; Transfer pricing rules have already been introduced in the tax systems of almost all countries involved (in Bulgaria, transfer pricing documentation can be prepared at the specific request of the tax authority). Documentation obligations have recently changed.

The key objective of country-by-country reporting required by the OECD is to promote transparency by providing local tax authorities with the information they need to

assess tax risks. In the last year, taxpayers in the CEE region have had to actively participate in the launch of the country reporting system (CbCR).

Table 5. Revenues from corporate taxation in the EU-27 during the period 2008-2020, % GDP

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
EU-27	2,8	2,1	2,2	2,3	2,4	2,4	2,4	2,4	2,6	2,7	2,7	2,6	2,4
EA-19	2,8	2,1	2,2	2,3	2,4	2,5	2,4	2,4	2,6	2,7	2,7	2,7	2,4
BE	3,3	2,3	2,5	2,8	3,0	3,1	3,1	3,3	3,4	4,1	4,3	3,7	3,3
DK	2,5	1,9	2,3	2,2	2,6	2,8	2,8	2,8	2,8	3,2	2,7	3,1	2,6
DE	2,5	1,9	2,0	2,4	2,5	2,4	2,4	2,4	2,7	2,7	2,8	2,6	2,2
EE	1,6	1,8	1,3	1,2	1,4	1,7	1,7	2,1	1,7	1,5	2,0	1,8	1,7
IE	2,8	2,3	2,4	2,2	2,3	2,4	2,4	2,6	2,8	2,8	3,2	3,1	3,2
EL	2,1	2,5	2,6	2,1	1,1	1,2	1,9	2,2	2,5	2,0	2,2	2,2	1,2
ES	2,8	2,2	1,8	1,8	2,1	2,0	2,0	2,2	2,2	2,2	2,5	2,1	2,0
FR	3,0	1,8	2,3	2,6	2,7	2,7	2,6	2,6	2,6	2,9	2,7	2,8	2,7
HR	2,9	2,5	1,9	2,3	2,0	2,0	1,7	1,8	2,2	2,3	2,2	2,3	2,3
IT	2,9	2,4	2,3	2,2	2,3	2,5	2,2	2,0	2,1	2,1	1,9	2,0	2,1
CY	6,4	5,9	5,5	6,2	5,7	6,5	6,4	5,8	5,5	5,8	5,8	5,7	5,9
LV	3,0	1,5	1,0	1,4	1,6	1,6	1,5	1,6	1,7	1,6	1,1	0,2	0,7
LT	2,7	1,8	1,0	0,8	1,3	1,4	1,4	1,5	1,6	1,5	1,5	1,6	1,6
LU	5,0	5,3	5,4	4,8	4,9	4,5	4,1	4,2	4,4	5,0	6,3	6,0	4,8
MT	5,8	5,8	5,6	5,3	5,7	6,0	5,9	5,9	6,1	6,1	5,3	5,4	4,6
NL	3,3	2,1	2,3	2,2	2,1	2,1	2,5	2,7	3,3	3,3	3,5	3,7	3,1
AT	2,5	1,8	2,0	2,1	2,1	2,2	2,2	2,3	2,4	2,5	2,8	2,8	2,1
PT	3,5	2,8	2,7	3,1	2,8	3,3	2,8	3,1	3,0	3,2	3,3	3,1	2,8
SL	2,5	1,8	1,8	1,6	1,2	1,2	1,4	1,5	1,6	1,8	1,9	2,0	1,9
SK	3,0	2,5	2,4	2,4	2,3	2,9	3,3	3,7	3,5	3,5	3,3	3,0	3,0
FI	3,3	1,9	2,4	2,6	2,1	2,3	1,9	2,2	2,2	2,7	2,5	2,5	2,1
SE	2,6	2,6	3,1	2,9	2,4	2,6	2,6	2,9	2,9	2,9	3,0	3,1	3,0
BG	2,9	2,1	1,8	1,8	1,7	1,9	2,0	2,2	2,2	2,3	2,3	2,3	2,2
CZ	4,0	3,3	3,2	3,2	3,1	3,2	3,3	3,4	3,5	3,4	3,5	3,3	3,1
HU	2,5	2,1	1,1	1,1	1,2	1,2	1,5	1,6	2,1	1,8	1,2	1,1	1,2
PL	2,7	2,2	1,9	2,0	2,1	1,8	1,8	1,8	1,8	1,9	2,1	2,2	2,3
RO	2,9	2,3	2,1	2,3	1,9	2,0	2,1	2,3	2,2	2,0	2,1	2,1	1,9
medie reg	3,00	2,41	2,02	2,08	2,01	2,01	2,14	2,27	2,38	2,30	2,21	2,21	2,12

Source: European Commission, DG Taxation and Customs Union, based on Eurostat data

During the analysed period, these revenues remained relatively constant in 2020, at 2.4% of GDP (EU-27 average). After the sharp decline in 2009, corporate revenues gradually rose but did not return to pre-crisis levels. It should be noted, however, that at the level of 2020, compared to 2019, there has been a slight decrease in revenue in most EU countries 27.

Romania has a lower level than the regional average for the whole period analyzed, and in 2020 it has the second lowest level in the EU-27, of 1.9% of GDP (at the same level as Latvia), ahead only of Greece and Hungary (with 1, 2% GDP)

If we refer to Bulgaria, which has a tax rate of 10%, it has a higher collection since 2017; therefore, the level of collection in Romania must be adjusted, the main causes being the tax legislation, respectively the diminished tax base due to the exceptions and preferential treatments granted, as well as the tax evasion.

3. SWOT analysis of the Romanian fiscal system in the regional context

In order to carry out this analysis, we took into account the advantages and disadvantages of the Romanian tax system (strengths and weaknesses), respectively the threats and opportunities from a fiscal perspective.

Romania, from the perspective of the fiscal system, is attractive for investors, in terms of the 16% profit tax rate, the level of social contributions related to salaries, which are lower than in other European countries, but also the ceiling on the income tax of microenterprises (micro-enterprises with income of up to 1 million euros can opt for the payment of the profit tax, instead of the turnover tax). Also, the 19% VAT is an advantage, the other European countries having a VAT of at least 20%.

Strengths

- Stable tax rates. The stability and predictability of taxation are key benefits for attracting investment to any country. Countries with long-term stable legislation manage to remain attractive because any investor can make long-term business plans and rely on stable tax rates and predictability related to possible changes.

In Romania, the direct tax rates (income tax, profit tax) are stable, which is a strong point of the current Romanian taxation. There are also no intentions to change the taxation in the next period, the flat income tax rate (10%) and the social security rates (10% CASS, 25% CAS), the profit tax rate (16%) and the tax on dividends (5%) being stable, as well as the standard VAT rate (19%).

- Competitive taxation for the CEE area (Central and Eastern Europe)

In the current global economic context, when each country wants to maintain / increase its level of competitiveness in order to attract as many foreign investments as possible, from a tax perspective, Romania remains an attractive destination, but the digitization and reform of ANAF, reducing bureaucracy and litigation remain the key to complementing the advantage of favorable tax rates.

From the perspective of the profit tax, with a share of 16%, Romania ranks well in relation to the countries in the EEC region, with a higher share than Hungary (9%) and Bulgaria (10%), but lower than the Czech Republic and Poland (both with 19%) or Slovakia (21%). For comparison, the average corporate tax rate in EU member states was around 21% in 2020.

Regarding the value added tax, Romania, with a standard VAT rate of 19%, is below the regional average (22%). By comparison, the standard VAT rates in the area are Hungary (27%), Croatia (25%), Poland 23%, Czech Republic (21%), Bulgaria 20%, Slovakia (20%).

Weaknesses

- Unreformed and non-digitized ANAF. A weak point regarding the Romanian taxation is represented by the fact that the National Agency for Fiscal Administration (ANAF) is still an unreformed and poorly digitized institution. Romanian entrepreneurs and foreign investors support the maintenance of the current taxation, together with the digitalization and modernization of ANAF, which should lead to transparency and a better collection of taxes from all taxpayers, without exception. Basically, an increase in taxation would not necessarily have the effect of increasing budget revenues, but by improving the current collection of taxes and encouraging voluntary compliance (bonuses for good payers) could increase budget revenues.

- Excessive "taxation" of labor. From a tax perspective, a weak point for Romania is the excessive "taxation" of labor through unsecured social insurance and tax arbitration, which leads to implicit unfair competition, resulting from various forms of labor remuneration that bear a differentiated tax cost. The high cost of labor is thus generated by the discrepancy in the application of social security for various alternative forms of remuneration.

One solution would be to cap the social security contributions applicable to employment contracts at a reasonable level to ensure the contribution to the pension and social health insurance system (even with an element of solidarity, but not without a maximum ceiling). The effect of capping contributions at a reasonable maximum level will "bring to light" high wages and discourage the use of alternative methods of payment for work (PFA and micro-enterprise), which currently generate significantly lower revenues to the social security budget. However, the capping measure should be introduced and maintained in the long term, so that employers and employees rely on legislative stability.

Opportunities - The need to digitize ANAF has become apparent in the context of the situation generated by Covid. Measures are needed to implement solutions for digitizing and modernizing ANAF (IT systems, cash registers connected to ANAF servers, starting discussions on electronic invoicing, remote tax control, filing online statements, improving Virtual Private Space, improving " payroll card "etc.) and continuous improvement of online communication with taxpayers - individuals or legal entities.

Threats - we refer to the budget deficit, which could lead to the imposition of new taxes and duties or the economic crisis generated by Covid-19 and the impact on the payment capacity of companies.

4. **Conclusions**

Currently, Romania is a fiscally attractive country in terms of personal income tax rates, profit, VAT and social contributions for the employer. However, if we take into account the evolution of tax revenues in the period 2008-2020 from direct taxation, they have had a relatively oscillating trajectory, but in recent years, especially 2020, they have recorded the lowest level in the EU 27 (4.7% of GDP).

In our opinion, there are two main problems, the large budget deficit and the low level of collection, the main causes being the Romanian tax legislation, respectively the diminished tax base due to exceptions and preferential treatments granted, tax evasion (eg VAT evasion, for the year 2018, in Romania a share of 33.8% of the theoretical revenues to be collected, the highest value in the EU).

In order to increase the collection rate, the fight against fraud and an efficient tax system, we consider that there are two directions that should be followed (also assumed by PNRR), respectively:

- Fiscal regulation / legislation (implemented in stages), the starting point being the analysis of the fiscal system, with emphasis on the exceptions of the profit tax, the income tax, the social contributions and the property tax; application of ecological taxes; gradual reduction of the scope of the micro-enterprise scheme; gradual reduction of tax incentives for staff employed in the construction sector.
- Continuation of ANAF computerization and administrative reform (implementation of SAFT in 2022, connection of electronic cash registers to ANAF server, development of SVP - aimed at increasing voluntary compliance).

It should be noted that in 2020, ANAF implemented some measures aimed at facilitating the digital interaction with economic agents, such as: payment of tax obligations directly by bank card for persons registered in the Virtual Private Space (SPV), extension of enrollment in SPV by individuals who do not have a digital certificate. At the beginning of 2021, ANAF presented the Digital Strategy 2021-2024, respectively the reform package consisting of a set of coherent actions on the digitization strategy, the communication strategy and the steps for the rapid realization of the projects being implemented (SAF-T, Traffic Control, NOES, One Stop Shop, etc.), as well as those to be implemented (SPHERE, APIC).

References:

- 1. European Commission, 2021. Taxation Trends 2021 report, based on EUROSTAT data.
- 2. European Commission, 2022. Taxation and Customs Union. [online] Available https://ec.europa.eu/taxation customs/taxation-1/economic-analysistaxation/data-taxation en> [Accessed 3 Frebruary 2022].
- 3. EU Tax Observatory, 2021. New forms of tax competition in the European Union: An empirical investigation.
- 4. Eurostat, 2022. Your key to European statistics. [online] Available at: https://ec.europa.eu/eurostat/data/database [Accessed 3 Frebruary 2022].
- 5. Fiscal Council, 2020. Annual Report 2020.
- 6. Mazars, 2021. Fiscal Guide for Central and Eastern Europe. [online] Available at: https://www.mazars.ro/Home/Services/Tax/Central-and-Eastern-European-at: Tax-Guide-2022> [Accessed 3 Frebruary 2022].
- 7. OECD Ilibrary, 2022. OECD Tax Statistics. [online] Available at: https://www.oecd-ilibrary.org/taxation/data/oecd-tax-statistics tax-data-en> [Accessed 23 Frebruary 2022].
- 8. Rosca, A., 2021. SWOT Analysis of Romania from the perspective of taxation in 2021: Advantages, disadvantages, threats and opportunities.
- 9. Tax Foundation, 2022. Sources of Government Revenue in the OECD. [online] Available at: https://taxfoundation.org/publications/sources-of-government- revenue-in-the-oecd/> [Accessed 3 Frebruary 2022].

THE DIMENSIONS OF STRATEGY: A STUDY CASE OF UNILEVER'S RESPONSIBLE UMBRELLA STRATEGY

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Abstract: The strategy concept has been acknowledged as one of the most important factors that might contribute to an organization's succes as it might be perceived an expression of the company's ability to adapt, change and responde properly to the overall dynamic business environment. Besides understanding what a strategy is, another important topic that should be considered in order to properly comprehend the concept, is related to the question how strategies are developed? Therefore, the objective of this study is to explain the dimensions of strategy, respectively the strategy process, content and context utilizing a qualitative approach. Within this scope, an analysis of Unilever's overall strategy has been provided, revealing the main reasons why the organization has chosen to be perceived as responsible (strategy context) and which actions have been taken by the firm in order to consolidate its company image and reputation (strategy process and strategy content). The results reveal a constant effort made by the company in order to consolidate its position in the fast-moving consumer goods market worldwide. Additionally, the results sustain that the organization has used the concept of businesses responsibility and the firm's inheritance in a strategic manner.

Keywords: strategy, strategy process, strategy content, strategy context, Unilever. JEL Classification: M14, L29, I31.

1. Introduction

The strategy concept has been acknowledged as one of the most important factors that might contribute to an organization's accomplishment. Despite the fact that the term of strategy has been debated significantly since the '90 in the field of strategic management, a widely endorsed explanation of the notion has not been yet established (Khalifa, 2021). Over the time, strategy was been associated with several aspects such as: objectives and resources usage (Chandler, 1969), future and past decisions of a company (Kenneth, 1987; Mintzberg, 1987), environmental opportunities, market share (Ansoff, 1980), and competitive advantage (Porter, 1997). Furthermore, recent definitions of the concept have correlated strategy with terms such as challenges, change, power, company performance, plans, joint effort of organizational stakeholders and managers/owners, growth and winning (Toma & Marinescu, 2015; Toma, et al., 2016; Khalifa, 2021). In short, the concept may be perceived as a company's various responses towards changes that may occur in a dynamic business environment. Existing literature reveals that corporate social responsibility (CSR) practices incorporated in companies' strategies may contribute to employee retention and attracting talented workforce. CSR presents a mutually beneficial situation empowering organizations and stakeholders to achieve, working together, economic and social objectives.

Besides understanding what a strategy is, another important topic that should be considered in order to properly comprehend the concept, is related to the question how strategies are developed? Therefore, the aim of this paper is to explain the dimensions of strategy, respectively the strategy process, content and context utilizing a qualitative approach. Within this scope, an analysis of Unilever's overall strategy has been provided, revealing the main reasons why the organization has chosen to be perceived as responsible (strategy context) and which actions have been taken by the firm in order to consolidate its company image and reputation (strategy process and strategy content). Moreover, the evaluation of Unilever's strategy has been based on B. de Wit and R. Meyer's (2020) developed framework regarding the dimensions of strategy.

The paper's structure consists of the following parts: introduction, literature review (a briefly explanation of strategy and the dimensions of the concept), results and discussion (the evaluation of Unilever's dimensions of strategy), conclusions and bibliography.

2. Literature review

Defining the concept of strategy

In the business and strategic management literature, the concept of strategy has derived from the military field (Toma and Grădinaru, 2016). Most authors have linked this term with other concepts such as business models, entrepreneurship, leadership, creativity, and development (Săseanu, et al., 2014; Grădinaru, et al., 2017; Toma, et al., 2018; Toma & Tohanean, 2019). Moreover, recent definitions of the concept have correlated strategy with challenges, power, organizational performance, plans, joint effort of stakeholders and managers/owners, growth and winning (Toma, 2013; Tohanean, et al., 2018; Khalifa, 2021). The pioneers of strategic management highlighted several features of strategy that are still relevant nowadays. For example, strategy is formulated and implemented in accordance with the company's stated goals in a certain period of time. Strategy should be a reflection of those goals (Grant, 2021).

Moreover, the concept is dynamic (Ansoff, et al., 2019). Strategy changes in accordance with objectives or in order to attain them. Moreover, in order to achieve the goals, available resources are used in a strategic manner (for example, considering the human resource, certain individuals are responsible with specific parts of the strategy process; some design the strategy, while others make sure that the strategy performs as expected). Therefore, strategy implies a common effort (Clegg, et al., 2019) and involves the use of various tools, techniques, and methods such as quality assurance, marketing mix, Six Sigma, creative thinking, and balanced scorecard (Toma, 2008; Toma & Naruo, 2009; Toma, et al., 2010; Toma, et al., 2013; Grădinaru, et al., 2016)

Companies could not exist without the human component. Moreover, individuals have the ability to learn from previous experiences and therefore apply the accumulated knowledge into practical decisions (Marinescu & Toma, 2013). Furthermore, strategy should be related to the needs of the company and of those legitimate stakeholders (Clegg, et al., 2019). Hence, it should reflect this understanding through the generated results (for example, increased market share in value or volume). For instance, during the pandemic (2019-2020) Unilever Romania decided to launch Dero Protect Powder detergent with 42 washes in order to capitalize on consumers' pressing need to avoid possible Sars-Cov-2 infection. Even though the moment was proper for the product launch and the format choice reflected the biggest segment existing in the detergent market (the most used format in the Romanian fabric cleaning market is represented by powders, followed by liquids and lastly capsules), Dero Protect did not performed as expected. There were three important aspects Unilever learned afterwards: commercials TV still represent an important channel through which the firm can communicate with the targeted consumers (the company promoted the product only online through social media); variety is important for Romanian consumers (with only one product it is difficult to increase market share and the organization should have considered to launch a Dero Protect range- powder, liquid and capsules options); Romanian consumers are mostly price sensitive (Dero is perceived as an affordable brand. On the other hand, Dero Protect had approached a more premium price strategy, closely to its main competitor, Ariel, and therefore consumers were not interested in purchasing the product). Future decisions made for Dero should require considering these insights in order to improve strategic approaches designed for the brand.

In the current business environment, it is difficult for companies to differentiate and stand out due to the increasing number of competitors (Mintzberg, et al., 2008). On the other hand, consumers may benefit of variety in terms of products or services, access to information and therefore reviews provided for a specific good and worldwide purchasing possibilities (Mintzberg, et al., 2008). While at first side, these may be perceived as threats for companies, they might be viewed also as opportunities that can be exploited by organization in order to obtain competitive advantage. A winning company is a firm which manages to adapt and transform threats into opportunities (Ansoff, et al., 2019). Additionally, nowadays, organizations are expected to be accountable of their actions (Ansoff, et al., 2019). A good example in this case is Ariel, a powerful brand owned by Procter & Gamble (P&G). For example, Ariel's brand purpose is very much connected with the category specifics as it is focused on reinventing cleanliness to decarbonize laundry across its entire value chain. To support this purpose, from product point of view, Ariel is constantly working to improve its formula or innovate and deliver a superior clean, even in cold water. Ariel, from a strategic angle, developed a strong plan and committed to it.

The dimensions of strategy

Besides understanding what a strategy is, another important topic that should be considered in order to properly comprehend the concept, is related to how strategies are developed? B. de Wit and R. Meyer (2020) have stated that the dimension of strategy is formed considering the following strategic aspects: context, process and content.

The strategy process reveals the manner in which strategies arise (Mintzberg & Lampel, 1999). Thus, it might be described as the most complex component of a strategy dimension, compressing several concepts such as: strategic thinking, formulation, implementation, changing, controlling, innovation and analyzation (Fréry, 2006). Additionally, the stages of strategy process are considered the following: analysis, formulation and implementation phases (Randall & Dent, 2019) (Fig. no. 1). During the analyzation phase the company identifies opportunities that can be exploited and evaluates components of its business (for instance, threats, strengths and weaknesses) (Baumgartner & Rauter, 2017). Afterwards, based on the acquired and analyzed information, the managers establish the accessible strategic options and choose the ones which fit the company's interests and focus (formulation phase) (Randall & Dent, 2019). The last stage, respectively the implementation phase, entails converting the strategically developed and selected responses into tangible activities (Friesl, et al., 2021).

The strategy content might be perceived as the outcome of these undertaken strategic actions based on the level of aggregation (de Wit, 2020). Therefore, strategy can be created for functional, business, corporate and network purpose (Bob de Wit & Meyer, 2004). The functional extent appertains to an organization's departments (Casadesus-Masanell & Ricart, 2010).

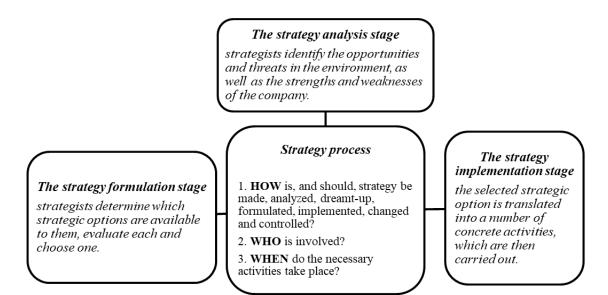


Fig. no.1: The components of the strategy process

Source: Adapted after Fréry, F., 2006. The fundamental dimensions of strategy. MIT Sloan Management Review, 48(1), pp. 71-75.

On the other hand, the following strategy approach concentrates on the administering process of a business unit, while the corporate strategy assures the alignment between various business units owned by an economic entity (Mintzberg, et al., 2003). Lastly, the network strategy relates to the partnerships developed to further support the company's goals (Bob de Wit & Meyer, 2004).

On the other hand, strategy context is formed by situations in which strategy activities take place (Burgelman, 1983). The concept it strongly associated with circumstances and the ability of managers to adapt, shape and create conditions (Constantiou & Kallinikos, 2015). The components of strategy context are as follows: the strategist, the industry (market), organizational and international context (de Wit, 2020) (Fig. no. 2).

The strategist represents the individual how is responsible with strategy design and implementation (the strategizing process) (Rasche & Seidl, 2020). The market context enhances a broad and complex set of components that have the capacity to influence an organization's behavior (for instance, suppliers, consumers and competitors; technological, economic and social-cultural drivers) or can be influenced by a company's development (Whittington, 2019). The industry context through regulations may constraint the potential of strategy. On the other hand, the market environment may provide a clear perspective of how competitive advantage may be gained by enabling strategizing manager to capitalize on ascending trends (Whittington, 2019). The organizational context refers to the legacy of the company as well as to the management practices or ways of doing business that have been passed on from a generation to another (Melnik & Ermolaev, 2020). Similar to the industry context, organizational circumstances have a two-sided perspective. For instance, inheritance may contribute to creating differentiation points from competition, preserve traditions and increase the company's credibility among stakeholders and shareholders, while outdated business practices may limit and affect the overall performance of applied strategy and therefore of the firm (Vermeulen, 2018).

Moreover, leadership may be perceived as a critical component for organizational

development (Xie, 2019). Lastly, international context occurs when the organization's horizons are expended and the company operates abroad. Operating abroad requires an understanding and an efficient integration of various factors that the firm should take into consideration such as cultural differences, other consumer behaviors, the countries laws and regulations (Kaleka & Morgan, 2019).

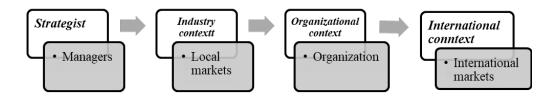


Fig. no.2: The components of strategy context

Source: Adapted after Kaleka, A. & Morgan, N., 2019. How marketing capabilities and current performance drive strategic intentions in international markets. Industrial Marketing Management, Volume 78, pp. 108-121.

3. Research methodology

Following a qualitative approach, the present paper aims to explain the dimensions of strategy, respectively the strategy process, content and context. Within this scope, an analysis of Unilever's overall strategy has been provided, revealing the main reasons why the organization has chosen to be perceived as responsible (strategy context) and which actions have been taken by the firm in order to consolidate its company image and reputation (strategy process and strategy content). Moreover, the evaluation of Unilever's strategy has been based on B. de Wit and R. Meyer's (2020) developed framework regarding the dimensions of strategy.

Results and discussions

In 1930, two independent entrepreneurial ventures, respectively the Lever Brothers (Willian and James Lever) and Margarine Unie (Jurgens and Van den Bergh) have merged and formed the nowadays multinational company known as Unilever. With over 330.000 products in its portfolio, the company has grown to become one of the most important players in the fast-moving consumer goods industry (FMCG) and present in more than 190 countries. But what factor contributed the most to the organization's outstanding growth? A possible answer to this question may be considered the responsible, purpose and peopledriven company image Unilever built even since the beginning. Moreover, the organization developed and applied a strategy which is based mostly on responsible practices. Why and how did Unilever create this strategy?

Strategy context

The current strategy context favors companies which integrate concepts such as sustainability, durability, fairness and general wellbeing in their business strategy. Considering how consumer behavior might be affected by the pandemic, Euromonitor identified ten global consumer trends for 2022, respectively the backup planner (individuals how are willing to purchase other goods, if they are not able to find in store their usual product option); the climate changers (individuals which are interested in responsible and sustainable companies and products); the digital seniors (a category which before the pandemic were not in scope, but now, due to the constraints of Covid-19, have learned to purchase goods using online channels); the financial aficionados (consumers how are willing to invest-for instance in cryptocurrencies, in order to improve their financial stability); the great life refresher (individuals how are interested in wellbeing and are willing to change their lifestyle, improve their mental and physical health); the Metaverse movement (consumers how are attracted by simulated, 3D digital ecosystems of the future); the pursuit of preloved (circular economy, secondhand shopping); the rural urbanites (individuals how are considering to migrate from urban to rural communities); the self-love seekers (genuineness and self-acceptance at individual level); the socialisation Paradox (this category enhances two types of consumers, respectively the ones how are pleased to resume to their day-to-day activities -before COVID-19, and others that are still hesitating). Furthermore, considering the international context, firms must meet the expectations not only of consumers, but also those of suppliers, business partners, governments, employees, investors, and society as a whole. Integrating responsible practices into daily corporate operations has become a critical criterion, particularly for international expansion. From an organization's context perspective, Unilever's legacy represents a strength point of the company that can and has been exploited in order to create value for both the firm and its brands. Thus, it may also be perceived as useful tool that can compensate, to some extent, the quality of the company's products when comparing with those of Procter and Gamble (P&G). Unilever's inheritance represents a competitive advantage. William Lever has been an example of best practices by supporting its employees, consumers and local communities. For instance, when the entrepreneur expended the business to Liverpool and developed the Port Sunlight factory, besides creating job opportunities for the local community, he provided high-quality accommodation, facilities, and recreational opportunities for his workers. Moreover, he proven to be genuine interested in identifying and fulfilling the needs of individuals by offering them accessible options for health and hygiene. Nowadays, Unilever's managers aim to conduct their business in the same way William Lever did back then when Unilever was only an entrepreneurial initiative.

Strategy process

Firstly, strategists of Unilever have acknowledged the ascending trend of responsible business as a market opportunity that can be used to gain competitive advantage and create sustainable value for a set of various parties of interest. As threats, the company was invariably been aware of the variety of choices that the consumers will have over time. Thus, the firm's main competitor has always demonstrated an impressive innovation capacity. For instance, in the Romanian FMCG market, the majority of P&G products are perceived as more efficient and qualitative comparing with Unilever's ones. For example, in the toilet blocks segment, Bref (P&G) has been the leading brand by the end of December 2020 with 43% market share, while Domestos (Unilever) registered a 3rd position with only 11% market share (Tabel no.1) (Nielsen Global, 2020). Unilever's products have a decent quality and are slightly less expensive than Procter's ones (comparing with non-promo periods of time).

Tabel no.1: Market shares of top players in the toilet blocks segment (Romania)

MARKET SHARE (Romania)			
2020			
BREF	43		
PLAYER NO.2	16		
DOMESTOS	11		
PLAYER NO.4	9		
PLAYER NO.5	7		
OTHERS	15		

Source: Nielsen Insights Reports, December 2020.

Moreover, in the Romanian FMCG market, P&G seems to be a trend setter, while Unilever a follower (for instance, P&G was the first company which launched detergent capsules in Romania, while Unilever has started recently to invest in future formats of detergents). Therefore, considering the presented arguments, meaningfulness, a close to individuals and purpose driven image may assist Unilever in increasing the value of products.

Strategy content

Giving the circumstances (the need of balancing with the demands of numerous stakeholders, a diverse range of product options for consumers, the need of establishing a responsible business presence, and competing against innovative and strong rivals), Unilever decided to enhance its image as a corporation that cares about the well-being of people and the environment. Within this scope, the organization has been aiming to create brands with purpose. Therefore, the most powerful Unilever brands have been associated with social causes in order to attract and retain consumer. Purpose can offer the consumers the extra motivation or differentiation they are looking for at shelf, among all those functional propositions. For instance, Dove (a well-known brand of Unilever from the beauty and personal category) encourages self-esteem, natural beauty and educates young consumers regarding the negative impact social media has on day-to-day life. Domestos (iconic toilet cleaning brand of Unilever) sustains the access to sanitization and hygiene in schools, while Cif (an important player in surface cleaning, house hold category) cleans places beloved by local communities. Additionally, in order to consolidate the responsible company image, the firm has developed Unilever Sustainable Living Plan (USLP) 2010-2020, an ambitious plan meat to improve day-to-day business activities and create sustainable value for a broader set of legitimate parties of interest. Hence, Unilever has developed strategic and long-term partnerships with NGOs in order to increase credibility among its stakeholders and reinforce the idea of responsible business.

The strategy content (brands with purpose; profit, people, planet orientation; responsible business image; USLP) is supported by global, corporate, business and functional efforts. Unilever's global strategy (strategist and CEO Alan Joe since 2019) sustains and motivates the appliance of responsible practices by worldwide branches. On the other hand, corporate and business strategies adhere to global standards while assuring local markets and industries adaptation. Moreover, individuals how are grouped into departments, carry out the entire business activity and act in accordance with the firm's values, mission and vision.

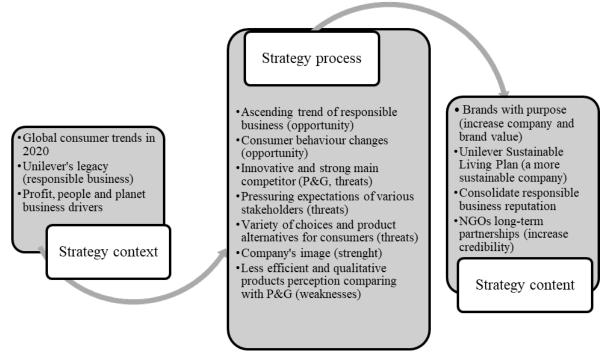


Fig. no.3: The dimensions of Unilever's responsible umbrella strategy

Source: Author's own contribution based on literature review

4. Conclusions

Considering the current competitive business environment, strategy can be characterized by an organization's taken action and its capability to innovate, adapt or influence the industry, local and international context (depending on the type of strategy used within this scope). The concept may be perceived as a company's various responses towards changes that may occur in a dynamic environment. For instance, consumer's behavior modifications, the increasing pressure and demands of vital parties of interest, the variety of choices in terms of products and services available to individuals, access to worldwide information may be considered factors that trigger firms to act and therefore apply strategies in order to remain in the market.

The analysis of the dimensions of Unilever's responsible strategy reveals a constant effort made by the company in order to consolidate its position in the FMCG market worldwide. Within this scope, the company has used the concept of businesses responsibility and the organization's inheritance in a strategic manner. The first strategic step conducted by Unilever has to evaluate and improve its value chain and afterwards associate its most powerful brands with a relevant social mission. Moreover, the paper sustains that the appliance of responsible strategies has become a genuine criteria of evaluating an organization's performance in the current business environment. Furthermore, Unilever has proven to be aware of this particular tendency and designed its strategy accordingly.

References:

1. Ansoff, H., 1980. Strategic issue management. Strategic management Journal, 1(2), pp. 131-148.

- 2. Ansoff, H., Kipley, D., Lewis, A. & Helm-Stevens, R., 2019. Societal Strategy for the Business Firm. In: *Implanting Strategic ManagemenT*. London: Palgrave Macmillan, pp. 285-310.
- 3. Baumgartner, R. J. & Rauter, R., 2017. Strategic perspectives of corporate sustainability management to develop a sustainable organization. Journal of *Cleaner Production*, 140(1), pp. 81-92.
- 4. Burgelman, R., 1983. A Model of the Interaction of Strategic Behavior, Corporate Context, and the Concept of Strategy. Academy of Management Review, 8(1), pp. 61-70.
- 5. Casadesus-Masanell, R. & Ricart, J., 2010. From Strategy to Business Models and onto Tactics. Long Range Planning, 43(2-3), pp. 195-215.
- 6. Chandler, A., 1969. Strategy and Structure: Chapters in the History of the American Industrial Enterprise. Cambridge: MIT Press Ltd.
- 7. Clegg, S., Schweitzer, J. & Whittle, A., 2019. Strategy: Theory and Practice. 3rd ed. New York: Sage Publications Ltd.
- 8. Constantiou, I. & Kallinikos, J., 2015. New games, new rules: big data and the changing context of strategy. Journal of Information Technology, Volume 30, pp. 44-57.
- 9. Fréry, F., 2006. The fundamental dimensions of strategy. MIT Sloan *Management Review*, 48(1), pp. 71-75.
- 10. Friesl, M., Stensaker, I. & Colman, H., 2021. Strategy implementation: Taking stock and moving forward. Long Range Planning, 54(4), pp. 1-45.
- 11. Grant, R. M., 2021. Contemporary Strategy Analysis. 11th ed. New York:
- 12. Grădinaru, C., Toma, S.-G. & Marinescu, P., 2016. Marketing mix in services. Ovidius University Annals- Economic Sciences Series, XVI(1), pp. 311-314.
- 13. Grădinaru, C., Toma, S.-G. & Papuc, R., 2017. Entrepreneurship in the world: The analysis of the Global Entrepreneurship Index in the period 2015-2017. Ovidius University Annals- Economic Sciences Series, XVII(2), pp.14-18.
- 14. Kaleka, A. & Morgan, N., 2019. How marketing capabilities and current performance drive strategic intentions in international markets. Industrial *Marketing Management*, Volume 78, pp. 108-121.
- 15. Kenneth, R., 1987. The Concept of Corporate Strategy. 3rd ed. Homewood: Richard d Irwin.
- 16. Khalifa, A., 2021. Strategy, nonstrategy and no strategy. Journal of Strategy and Management, 1(35-49), p. 14.
- 17. Marinescu, P. & Toma, S.-G., 2013. Training programs- Training and development alternatives for students. *Procedia Economics and Finance*, 6, pp. 306-312.
- 18. Melnik, A. & Ermolaev, K., 2020. Strategy Context of Decision Making for Improved Energy Efficiency in Industrial Energy Systems. MDPI, 13(7), pp. 1-28.
- 19. Mintzberg, H., 1987. The Strategy Concept II: Another Look at Why Organizations Need Strategies. California Management Review Journal, 30(1), pp. 25-32.
- 20. Mintzberg, H., Ahlstrand, B. & Lampel, J., 2008. Strategy Sahari: Your complete guide through the wilds of strategic management. 2rd ed. London: Person Education Ltd.

- 21. Mintzberg, H., Ghoshal, S., Lampel, J. & Quinn, J., 2003. The strategy process: concepts, context, cases. Global Fourth Edition ed. Edinburgh: Pearson Education Limited.
- 22. Mintzberg, H. & Lampel, J., 1999. Reflectiong on the strategy process. Sloan Management Review, 40(3), pp. 21-30.
- 23. BIBLIOGRAPHY Nielsen Global, 2020. Nielsen Insights. [Online] Available https://global.nielsen.com/insights/ at: [Accessed 09 03 2022].
- 24. Porter, M., 1997. Competitive strategy. Measuring Business Excellence, 1(2), pp. 12-17
- 25. Randall, C. & Dent, E., 2019. Reconciling the historical divide between strategy process and strategy content. Journal of Management History, 25(3), pp. 401-
- 26. Rasche, A. & Seidl, D., 2020. A Luhmannian perspective on strategy: Strategy as paradox and meta-communication. Critical Perspectives on Accounting, Volume 73, pp. 2-11.
- 27. Săseanu, A.-S., Toma, S.-G. & Marinescu, P., 2014. Feminine leadership and organisational
- 28. culture. *Manager*, 19(1), pp. 144-150.
- 29. Tohănean, D., Toma, S.-G. & Dumitru, I., 2018. Organizational performance and digitalization in industry 4.0. Journal of Emerging Trends in Marketing and Management, 1(1), pp. 282-293.
- 30. Toma, S.-G., 2008. What is Six Sigma? *Manager*, 8, pp. 152-155.
- 31. Toma, S.-G & Naruo, S., 2009. Quality assurance in the Japanese universities. *Amfiteatru Economic*, 11(26), pp. 574-584.
- 32. Toma, S.-G., Marinescu, P. & Hudea, O. S., 2010. From the tableau de bord to the balanced scorecard. Revista Economică, 4(51), pp. 280-285.
- 33. Toma, S.-G., 2013. Economia Întreprinderii. București: Editura Universității din București.
- 34. Toma, S.-G., Bratu, A. & Burcea, M., 2013. When business strategy meets creativity. *Network Intelligence Studies*, 2, pp. 148-152.
- 35. Toma, S.-G. & Marinescu, P., 2015. Strategy and change. *Manager*, 21(1), pp. 145-150.
- 36. Toma, S.-G. & Grădinaru, C., 2015. From military strategy to business strategy. Strategii Manageriale, 31(1), pp. 227-233.
- 37. Toma, S.-G., Marinescu, P. & Grădinaru, C., 2016. Strategic planning and strategic thinking. Revista Economică, 68(5), pp. 168-175.
- 38. Toma, S-G., Peptenatu, D., Andronache, I., Ahammer, H., Pintilii, R-D., Draghici, C-C. & Simion, A. G., 2018. The creative economy in Romania, a key factor of economic integration in the European Union. In: Dima, A. (eds.), 2018. Doing Business in Europe, pp. 329–350. Cham: Springer.
- 39. Toma, S.-G & Tohănean, D., 2019. Green business models: The case of a German automaker. *Quality-Access to Success*, 20(S2), pp. 635-640.
- 40. Vermeulen, F., 2018. A basic theory of inheritance: How bad practice prevails. Strategic Management Journal, 39(6), pp. 1603-1629.
- 41. Whittington, R., 2019. Exploring Strategy, Text and Cases. 12th ed. London: Pearson Education Limited.
- 42. Wit, de B. & Meyer, R., 2004. Strategy: Process, Content, Context-An International Perspective. 3th ed. Boston: Cengage Learning.

- 43. Wit, de B., 2020. Strategy: An international perspective. 7th ed. Andover: Cengage Learning.
- 44. Xie, L., 2019. Leadership and organizational learning culture: a systematic literature review. European Journal of Training and Development,, 43(1/2), pp. 76-104.

INNOVATIVE PERFORMANCE IN THE PRACTICE OF THE ACCOUNTING PROFESSION IN THE REPUBLIC OF MOLDOVA

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Abstract: Science is determined by innovation, and accounting is no exception. The professional reasoning in organizing the accounting activity within each entity in any field of the national economy, presupposes the implementation of technologies, innovations and the application of National Accounting Standards, IAS / IFRS, which can be influenced by taxation, level of experience, the quality of financial audit, as well as the attitude towards risk. The slowdown in the implementation of technologies and standards in the case of the Republic of Moldova has been influenced by the complexity of the adoption and implementation of IAS / IFRS, the imbalance of internal versus external beneficiaries, and the costs of implementing advanced technologies or innovations. The influence of factors (bureaucracy, formalism and professionalism) on the supervisory bodies of the Republic of Moldova has contributed to the slowdown in the full adoption of IAS / IFRS and innovations or technologies. The required direction at the moment is the digital domain, entities transiting from physical work in the office to the remote one, and which requires the moment of transition to the online environment of tools necessary for connection through technologies, to ensure data protection and to protect against cyber attacks. In this context, the emergence of several venture capital firms is possible. Every innovative idea needs to be reflected in Accounting Reports and Balance Sheets, for these reasons accounting is bound to crystallize truthful and current information, based on fair and true value

Keywords: IAS, IFRS, accounting, innovations, technology. JEL Classification: M41.

1. Introduction

Intellectual products and technologies are recognized in accountants' work today, as decisive factors in increasing labor productivity, mandatory and indispensable elements of work strategies, because the management of all operations requires interdependence with information technology. The use of technologies in the practical activity of accountants stimulates the interaction with other professions, but also with potential clients, and the possibility to use within the entities and to introduce innovations, also increases the degree of competitiveness of the entity.

At present, a clear idea has formed of the need to move to an innovation-based economy (Turcanu and Golocialova, 2015, p. 450), in which innovation is the main driving force of socio-economic development and progress. The small and medium-sized enterprise sector proves a more advanced flexibility and a predisposition to innovation, thus representing an accelerated impulse of revolutionary innovations and of optimization and improvement (Turcanu and Golocialova, 2017, p. 28).

The effectiveness of the accountant's practical work depends largely on the outcome of developments based on the process of continuous modernization of technologies and management systems with high-performance and advanced indicators. The innovation field is the core of modernization in any economic field, especially accounting, and its characteristics drive the acceleration and quality of transformations in the professional activity of accounting from accountant based on bureaucratic skills of accounting, calculation and payment of taxes, to the accountant applying technology and generator of ideas innovative. The innovative activity is the determining condition for the development of the practical activity of the accountant, because it favors the generation of results based on performance, on positive effects of collaboration with other employees and creates a basis for the realization of many projects and programs to improve the whole

business. Accounting is a mastery of recording, classifying and crystallizing financial information about all transactions and transactions that take place in the business of any entity. Technologies help the practical accountant as a tool used for processing, storing, organizing and transmitting data, usually by using computers and other electronic means (e.g electronic signatures). As a result of the elimination of bureaucratic operations, we are gaining rapid access to information, information technology, innovative products and internet connectivity, which have led to significant changes in the work of professional accountants and improved the financial reporting system. Technological changes offer new opportunities and bring countless challenges to the field of accounting and the accounting profession, helping entities to make decisions. The impact of technologies and innovations is expected to be positive, overcoming the negative effects, such as data loss or cyber security problems manifested as a result of the use of information technology. New software tools used to perform data processing in the accounting business, such as audit and reporting software, improve the overall performance and competitiveness of the business.

2. Innovative performance in accounting

In the years 2020-2021, according to accountants, artificial intelligence and automation of other processes not only increases the level of efficiency, but also reduces the level of stress, resulting from the pandemic situation, where physical contact could be avoided for business. In accounting practice, the physical circuit of documents has been replaced by the digital circuit, due to the pandemic situation. The ability to quickly digitize accounting processes also requires proper training of accountants. The innovative performances in accounting (Figure 1) have become today in the activity of the accountant obligatory elements for the accomplishment of his work.

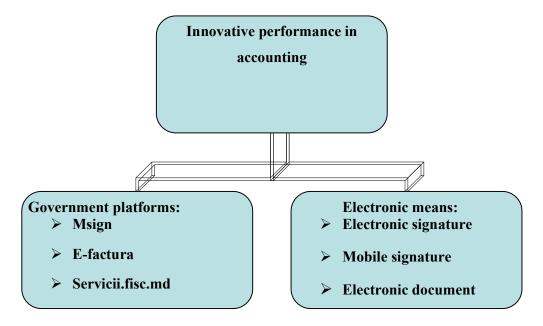


Figure 1. Innovative accounting performance

Source: Elaborated by the author

As an innovative performance (Figure 1) in the practical activity of accountants can be considered the digitization of the circuit of documents and reports, the possibility of signing documents remotely through certain innovative devices, and / or is achieved through government platforms and electronic means or instruments:

- ✓ **MSign** the government electronic signature service, which allows the signing of documents remotely by using a secure information system (documents for receiving works or services, etc.);
- ✓ E-invoice information system that ensures the electronic circuit of invoices between beneficiaries and suppliers;
- ✓ Servicii.fisc.md state platform for electronic receipt of reports through which statistical and fiscal reports are submitted online;
- ✓ Electronic signature represents data in electronic form, which are attached to or logically associated with other data in electronic form and which are used as a method of authentication. (Law no. 91/2014). In the Republic of Moldova, the regulatory framework regulates three types of electronic signatures:
- simple electronic signature;
- unqualified advanced electronic signature;
- qualified advanced electronic signature.
- ✓ Mobile Signature is an innovative service that allows access to electronic services using a mobile phone;
- ✓ Electronic document information in electronic form, created, structured, processed, stored and / or transmitted through computer or other electronic devices, signed with electronic signature in accordance with Law 91/2014.

The current environment does not allow the accountant to work without the application of contemporary technologies and without access to remote information, digitization giving accounting a number of benefits that contribute to the improvement of all other processes within a company.

As the profession of an accountant evolves, we need to improve our performance in the use of technology, because, as practice shows, accounting is not just about keeping track of all business operations and knowledge of taxation, but is directly related to other areas, that there is a high demand for the skills of an accountant. The prospective accountant is the professional who changes his conduct and skills necessary to be successful in the future business ecosystem, with the changes in society.

As, from an organizational point of view, the accounting of the entities from the Republic of Moldova continues to be regulated, based on jurisprudence, the accountants are getting closer to the profession of lawyers. The legal framework is determined by the accounting law, which is specific to EU member states. Because, "accounting science is a bridge, which unites economics and law, the practicing accountant also manifests himself as a lawyer, judge of economic processes, and as an economic consultant" (Richard, 2000, p. 160). Thus, the accountant is obliged to know the legislation and aspects of taxation, and the electronic access to the State Register of legal documents through legis.md becomes, day by day, more and more necessary and sometimes even ordinary.

Methodologically, the accounting is based on the IFRS principles, reflected in the provisions of the CNS. By innovation we mean the creation of an advance towards something better or towards a superior and advanced development through dynamism and utility. With the acceleration of the expansion of globalization, the complexity of the problems arising in the sphere of realization and regulation of business and professions has increased enormously. Globalization in the field of accounting has led to the emergence of international models and standards that, through their transposition at the country level, become innovations. The progress made by the notion of innovation in the accounting profession is manifested by changes in the rules that create important changes in practice.

For these reasons, an issue of accounting in the Republic of Moldova is currently its harmonization with both European directives and IFRS.

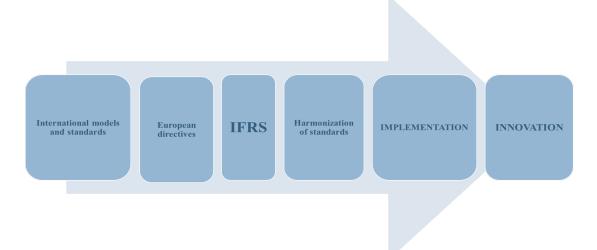


Figure 2. Model transposition, international standards, EU and IFRS directives at country level - innovations

Source: Elaborated by the author

Innovation is not easy to achieve, when in the accounting profession it is specific that everything you do is guided by regulations and bureaucracy. The mentality practiced over time, together with elements of bureaucracy, prevents the practitioner of this profession from advancing in the absence of technology. But the current conditions for progress are changing this paradigm. Rules and regulations remain strict and based on the law, but innovation comes with the application of technology.

The technology allows accountants to connect more effectively with their clients through software platforms, to transmit the necessary feedback from the official website of the company, as well as can always download or view information from other information systems related to the activity in the field. in which he is employed. In order for employees to be innovative, an innovation-oriented organizational culture is needed. Innovation is more attached to the functions that use information technology in the company, but it makes all the processes inside are dynamic and leads to a collaboration between all professions, but the miracles of technology will benefit most accountants. In the accounting profession there is a need to focus on technological innovation and change. An accountant can be a professional who initiates innovation in a company. To do this, it is necessary to create a culture of innovation based on technology. To achieve this goal, we need to consider the skills of an accountant focused on innovation (Figure 3).

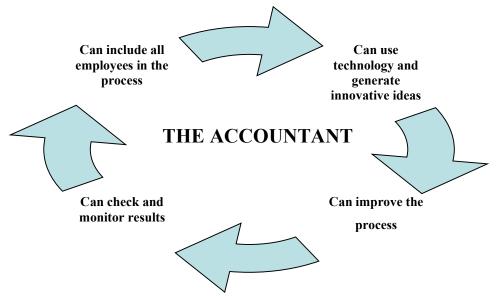


Figure 3. Modern accounting-oriented organizational culture of innovation Source: Elaborated by the author.

- 1. The accountant can use technology and generate innovative ideas many ideas can be generated by an organization's accountants, but if they do not have the necessary testing framework, only ideas remain. That is why digitization is needed to support the testing or implementation of these ideas. As bureaucratic as the accounting profession may seem, yet using IT technologies, this profession greatly simplifies their work process, and the ideas of an accountant become a first step towards formalizing the innovation process that might otherwise fail in time, exhaustion and disappointment.
- 2. The accountant can improve the process Accountants are creative. That is why in the work process, the accountants interacting with the specialists from different fields, different knowledge and experiences, can bring together ideas to improve the processes. Sometimes, by recombining and reorienting simple ideas, solutions can be generated with an impact similar to inventing completely new things. Processes can always be improved, and such an approach helps employees make decisions quickly and be focused on customer
- 3. The accountant can check and monitor results Every new day should be seen as a new beginning for the innovation process, and in innovation, every idea takes you one step closer to an exceptional discovery. Any situation is a new opportunity to look for a new solution to an old problem, and then you can monitor both your results and those of all employees.
- 4. The accountant can include all employees in the process Accountants are always the ones who will perform better than others, but the result of innovation is better when everyone contributes or aims to be innovative. This approach is important for those who are in contact with clients, where good guidance of accountants is important to be innovative. Innovation has its role in guiding employees and training their ability to be innovative in the use of technology.

3. Conclusions

The innovation trend is a strategic one, aimed at supporting companies that provide services in areas with vital applicability in the current context of globalization and the technology-based world. Of course, every idea in order to be put into practice needs to be argued and legally regulated, and then reflected in accounting and reporting.

Digitization and innovation have an impact on the accounting mechanism of accounting operations which corresponds to the basic trend of modern accounting methodology. As accounting is closely linked to taxation and legislation, there is a need for moderate regulation in the work of an accountant, as well as the need to develop mechanisms to reflect all accounting operations, to prepare appropriate management reports, statistical and fiscal financial reports by structuring corresponding to the field of activity to which it belongs. There is a need to harmonize legislation, to encourage entrepreneurs to innovate. In a rapidly changing environment, information technology is becoming an important strategic partner for accountants. Manual accounting work has been replaced by the most advanced techniques using technologies and innovations. Computers, printers, faxes, smartphones, digital signatures along with accounting software have a big impact on the field of accounting. Accounting technologies and software help professional accountants in their day-to-day accounting tasks to efficiently perform the calculations required by accounting operations and the reporting process. As a result of internet connections, accounting documents can be shared, and the online tax record system has effectively improved accounting.

References:

- 1. Codul cu privire la stiință și inovare al Republicii Moldova nr. 259/2004 (republicat în Monitorul Oficial al Republicii Moldova, 2018, nr. 58-66, art.131).
- 2. Hotărâre de Guyern Nr. 53 din 05.02.2020 cu privire la aprobarea Metodologiei de finanțare instituțională a organizațiilor de drept public din domeniile cercetării și inovării (Publicat: 07.02.2020 în Monitorul Oficial Nr. 36-43 art. 65).
- 3. Hotărâre de Guvern Nr. 377 din 10.06.2020 cu privire la aprobarea proiectului de lege pentru aprobarea Strategiei naționale de dezvoltare "Moldova 2030". (Publicat: 26.06.2020 în Monitorul Oficial Nr. 153-158 art. 508).
- 4. Legea Nr. 2 din 06.02.2020 privind organismele de plasament colectiv alternative. Publicat: 27.03.2020 în Monitorul Oficial Nr. 94-98 art. 142.
- 5. Legea Nr. 91 din 27.06.2014 privind semnătura electronică și documentul electronic. Publicat: 04.07.2014 în Monitorul Oficial Nr. 174-177 art. 397.
- 6. Richard, J., 2000. Accounting: theory and practice. Finance and statistics.
- 7. Sobor, S., 2006. Căile de dezvoltare a sistemului de finantare a activității inovaționale în Moldova. Economica, Revistă științifico-didactică, XIV, 4(56), pp. 97-100.
- 8. Standardele Internationale de Raportare Financiară modul de acces: http://www.mf.gov.mf/ro/lwx/contabilitate/%C8%99.
- 9. Turcanu, V., Golocialova, I., 2015. Raportarea financiară conform standardelor internaționale. Lucrare metodică și practică. Chișinău: ACAP.
- 10. Turcanu, V., Golocialova, I., 2017. State support: problems of recognition and accounting. In: Collective monograph "Development of the accounting system. analysis and control: integration perspective of problems"/Vinnitsa University of Finance and Economics – Zhytomyr: "Ruta", 2017, pp. 26-60.

PRICIPLES OF PUBLIC MANAGEMENT

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Abstract: The science of public management brings together a set of principles that are considered fundamental to the management and execution processes in public institutions, to have welldefined basic coordinates and to achieve coherence between conception, decision and action. The content of public management principles is determined by the public sector and adapted to the public sector, so that their knowledge and integration into public management by public managers and policy makers becomes, at the same time, a necessity to be supported by all decision makers. In the context defined by the new public management, the integration of principles is not only an essential condition, but also an urgent need for real public sector reform. It can be said that there are some fundamental principles of public management that by applying them can create the premises for efficient management in the public sector, based on specific laws. Also, the integration and consolidation of principles in the public sector, can generate a new type of public management, based on fairness, meritocracy, with long-term beneficial effect on both the state and society as a whole.

Keywords: public management, new public management, the principle of unitary leadership, the principle of autonomous management, the principle of continuous improvement, the principle of efficient management, the principle of legality.

Jel Classification: H83, D73

1. Introduction

Everyday reality has shown that there are no universal models of public management that can be imposed by the central level in the public sector, but that the performance of public management in a system and within each of its components can only be achieved through an adequate adaptation of general principles to the specific reality existing in the public sector, to the general and specific social needs identified both at the central level, in the state administration, but especially in the public sector, at the level of the local communities. The efficiency of public sector management undoubtedly depends on the ability and professionalism of public management representatives to create an autonomous public management system, based on a common vision of the role of each component of the system as part of a clearly defined whole. Although some principles may seem mutually exclusive, it can be said with certainty that each has its own clearly defined content, which is confirmed by practice. The value of each of the principles, reflected in the results, is determined by the ability of the representatives of the public management to combine and implement in a permanent balance, the basic values promoted by each principle.

2. The principles of public management

Of course, depending on the source, we find several principles of public management, derived from general management, but I will limit myself to the most important ones, especially in the current context.

2.1. The principle of unitary leadership

The principle of unitary leadership presupposes that all decision makers define and apply the basic concepts of public management, starting from the same perception reflected in a common, unitary vision, clear for the public sector, for each sector and each individual organizational unit. The well-being of a people, the functioning of an administrative system and the viability of a public institution are greatly affected by adherence to this principle. It is absolutely necessary to state clearly, in the same national context, the mission and role of public management, the type of management approach, management style, universal and specific concepts, methods and techniques whose

application in a unified vision should ensure cohesion and harmony within each structural component, each sector and the system as a whole, thus enabling the objectives for which it was created to be achieved. In some states, this principle is erroneously understood by public administration representatives as another form of expression and implementation of the elements of centralism. Of course, this is the result of significant limitations in the preparation, thinking and managerial capacity of decision-makers to adapt to the new approach, the viability of which has been and is confirmed by the experience of public managers in other states, and which is considered essential and necessary.

If we consider the principle of unitary leadership as a fundamental principle of public management in the broadest sense, the process of integration of states in the European Union presupposes the knowledge, acceptance and integration of each in a common system of values. There is an elementary logic according to which a system can work efficiently only if the stakeholders are harmoniously integrated and coordinated, and in this sense the principle of unitary management must be perceived and implemented. Therefore, not only the knowledge of the content of the unitary management principle and its correct implementation by all decision makers is necessary, but it becomes absolutely essential in the context of the new public management.

2.2. The principle of autonomous management

The principle of autonomous management, as a principle of public management, starts from two main premises. One derives from the diversity of fields in which public management operates, and the other from the multitude of specific intra and extraorganizational variables that give a special character and offer public managers freedom of decision and action, but also responsibility for performance.

The principle of self-management consists in specifying the content of the public administration according to the fields in which it is applied and according to the variety of general and specific public interests identified. Thus, the principle of autonomous management consists in granting public entities an adequate degree of managerial and financial autonomy to satisfy the general and specific public interests. Although in most countries legislative autonomy is not considered adequate in a unitary state, in terms of managerial autonomy, the practice in all developed democratic countries has confirmed the urgent need to grant this independence to the public leadership that independence of incentive action to achieve performance and to take responsibility for its level.

2.3. The principle of flexibility

Closely associated with the principle of autonomy, there is another principle of public management, namely the principle of flexibility, of the rapid adaptation of the administration to the permanent changes of social life. Rapid adaptation of administrative organizational structures to social change and transformation is a necessary requirement. Social life, being assimilated to a phenomenon or process, is always in a permanent change and evolution. These transformations of the company refer to the officials of the executive institutions the capacity of adaptability, to the exact knowledge of the concrete situations and answers for the events that take place. The principle of flexibility emphasizes the variation of managers in any situation imposed by the organization, because we all know that society in general evolves, and there are a variety of changes that influence decisionmaking at the managerial level.

2.4. The principle of continuous improvement

The principle of continuous improvement as a principle of public management, consists in approaching in a constant dynamic way according to the changes in the national and international environment, but also in the system of general and specific public interests. Although this principle is based on an absolute basic logic, according to which the content of public management must be improved depending on the degree of achievement of the planned objectives, but also through internal changes.

In the states where they occur, the problems are often caused either by the rather rigid structures of the administrative systems, which follow the traditional bureaucratic approach, or by the weak organizational and managerial culture within these systems, both being a direct consequence of the lack of professionalism of public managers. The principle of continuous improvement involves the development by the representatives of a comprehensive analysis process, starting with the identification of the differences between the objectives pursued and the results obtained. The aspect of identification alone cannot automatically lead to the observance of the principle. A causal analysis of deviations should be initiated, identifying the causes that had the greatest impact. Moreover, the improvement means a quantitative and / or qualitative leap expressed and achieved precisely as a direct result of the professionalism of public managers to identify and implement in public institutions the necessary and timely changes in the concept and style of management. In this context, the function of control-evaluation management is becoming increasingly important and is an essential tool for public sector managers.

2.5. The principle of efficient management

The principle of efficient administration consists in achieving, through the processes and management relations in the public sector, an efficient management of all categories of resources attracted and destined to achieve the planned objectives, so that the necessary correspondence can be observed between the level of economic and social performance by the holders of public office and management and executive functions, and the costs with which they are provided. According to this principle, it is necessary to accept an elementary economic consideration of the expenditure for the maintenance of the public management system, which ensures the achievement of the general interests as a result of the public services provided. In terms of public management, adherence to this principle means that all management processes and relationships are designed and combined to maximize the satisfaction of social needs through the public services provided, while minimizing the costs of properly managing all categories of trained resources.

2.6. The principle of legality

The principle of legality consists in the dimensioning, structuring and combination of processes and management relations, considering the legal provisions as a legal basis to be considered and not as an end in itself. Undoubtedly, the influence of the legislative factor in public management is significantly greater than in the private sector. It is important for the representatives of the management of public institutions to understand and accept that the public management does not have the role of implementing laws, decisions, regulations, etc., but to satisfy the general public interest and specific social needs. To achieve this goal, public managers carry out processes and management relationships under legal conditions. Therefore, the application of normative legal acts by public managers should not be considered as an end in itself. A public institution has primarily a social mission to satisfy the public interest, provided that the legal framework is respected. In some states, still focused on bureaucratic traditionalism and excessive centralism, the components of the messages of the public management system are strongly influenced by the provisions of the legal framework; even through the content of some normative acts, some documents are approved for the officialization of the structure of public institutions, the forms of organization are established, while for other institutions there is no elementary legal framework. These are direct consequences of a restrictive approach to the role of public institutions in the administrative sector and are due to serious

delays in both the design and training of managers, which are otherwise incompatible with the principles of modern public management.

In practice, there are various forms of manifestation of this principle, but what is most important for public management representatives is the correct perception of the mission of public institutions they lead and the creation of a public management system, a management within the established legal framework that serves accomplishing this mission. As can be seen from the above, there is a constant interdependence between the principles of the new public management, each of which, it can be said with certainty, significantly determines the quality of management processes in public institutions.

2.7. The principle of hierarchy and order

The organization is varied in levels, it is divided vertically and horizontally, the individual on one of these floors collaborates with remote specialists, is on the lower floors and is, in turn, subject to the upper body specialist, if he exists. It also builds competence by delimiting and separating between different positions and functions the duties, tasks and attributions of positions. In the conception of the New Public Management there is an orientation that proposes a correspondence between the significance of the organizational relations vertically (chain of command) and the horizontal ones (cooperation), with an inclination towards the improvement of the cooperation relations. Vertical relationships have the role of deciding on critical activities and are assumed and realized on the basis of gathering essential data and choosing based on participation between compartments, horizontally. This principle, which mimics the military chain of command, can be a preparation to ensure the cohesion of the organization; allows the government to hold the organization in its hands, encourages the transfer of orders through progressive transfers, dispersal of obligations and oversight of execution. In this progressive system, control of the command is performed. The principle gives legitimacy to the conduct of business and provides the fundamental system for establishing non-urgent and non-priority needs. On the other hand, the principle provides a system of regulation recognized by all individuals of the organization, by respecting the rules. The rule can create connections between individuals, creating individual or collective initiatives, but there are assumptions that there may be limits in this regard.

3. Conclusions

Knowledge of the principles of the New Public Management is not only a theoretical basis for reporting and consideration in the design, sizing and combination of processes and management relationships, but also an analytical and practical tool. Using the principles of the New Public Management, we can determine, through a careful analysis, the reasons why a public management system is more efficient in one country than another. We can answer the question of how in some countries it is possible to provide better public services in optimal price-quality conditions and, by extension, why it is not possible for the citizens of a country to have a better standard of living than others. from another country. A possible answer to this question could be the ability of managers to put into practice, the principles from which, starting from being true, as well as combining them in a harmonious way, create the managerial advantage and the beneficial result for the society.

References:

1. Andreescu, A., Gegea, N., Nedelcu, G., Prună, Ş., 1998. Noutăți ale managementului din Ministerul de Interne. Bucharest: Editura Ministerului de Interne.

- 2. Androniceanu, A., 2020. Management public in institutii si autoritati administrative. Bucharest: Editura Universitară.
- 3. Androniceanu, A., 2011. Noutăți în managementul public. Bucharest: Editura Universitară.
- 4. Matei, L., 2006. Management public. Bucharest: Editura Economică.
- 5.OECD, 1994. Managementul performanțelor în administrație: măsurarea performanțelor și managementul axat pe rezultate. [pdf] Available at: <www.oecd.org/countries/romania/37107586.pdf> [Accessed 14 February 2022].
- 6. Popa, I., 2005. Management general. Bucharest: Editura ASE.

APPLICATION OF AUTOREGRESSIVE INTEGRATED MOVING AVERAGE AND HOLT WINTERS METHODS FOR OPTIMUM SALES FORECASTING IN THE MANUFACTURING SECTOR

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Abstract: This study investigated into the application of autoregressive integrated moving average (ARIMA) and Holt winters methods for optimum sales forecasting of Nestle Nigeria plc, Lagos Nigeria. The purpose of this study is to examine sales forecasting model using ARIMA and Holt Winters methods for short-term decision-making. The specific objectives are to: assess the future sales of Nestle Nigeria Plc. using ARIMA forecasting model, evaluate the future sales of Nestle Nigerian Plc. using Holt Winters forecasting model, examine the optimum forecasting model between ARIMA and Holt Winter for Nestle Nigeria Plc, determine the appropriate forecasting model for Nestle Nigeria Plc. short term forecasting. Secondary data were sourced from yearly sales revenue data of Nestle Nigeria Plc., from 1990 to 2017 and analysed with the aid of Minitab software. Holt winters multiplicative model MAPE, MAD and MSD were 2.3, 1.7 and 4.8 respectively, while ARIMA is 1.8, 1., and 5.4 respectively. The result shows that the appropriate model is ARIMA model for Nestle Nig. to predict short term forecasting since, it has the lower value of the performance metrics. The result also revealed that ARIMA method seem more effective and powerful going by the MAPE result. It was recommended that in advance of attempting simple method of prediction, it is helpful in trying more complex ones equally they have the capacity to make available additional and precise outcomes in certain conditions.

Keywords: Forecasting; ARIMA; MAPE; Holt Winter; Decision-Making; Performance metrics. JEL Classification: C53, L25.

1. Introduction

Forecasting plays a significant role in the effectiveness and performance of organisations and it is about predicting future. Forecasts are based on information of variables of interest. Makridakis et al (as cited in Omane-Adjepong, Oduro & Oduro, 2013) stated that the request for forecasting recently is growing, as managers plus executives of different business tries towards reducing over-dependency upon unplanned and instead focus extra on scientific in confronting the challenges. Suwanvijit, Lumley and Choonpradub, (2011) stated that projecting is around expecting the prospect by way of precisely as likely. Prediction is the beginning of planning. Reducing the risk in decisionmaking is the objectives of forecasting. Success depends largely on getting those forecasts rightly (Incesu, Asikgil & Tez, 2012). Sales forecast is an important element for many organizations, which lead to increase in organization efficiency, increase in revenue and average reduction in costs. Sales forecasting is highly complex because of inner and outside environmental influence. Though, dependable projecting of deals has the ability expand industry plan excellence (Yan & Tu, 2012). It is recognized that appropriate general technique of short-horizon projections of request is generalization of previous movement of transactions. Also, it is important to note that, while forecasting technique provides a prediction of the future, the forecast is only a tool to be used as part of decisionmaking process. Part of decision is the approval of forecast. That is, managers must decide whether to accept the forecast or devote more resources to obtaining a better forecast. Ultimately, the decision maker makes the decision, usually based on number of sources of information, both subjective and objective. Therefore, this study seeks to use two linear prototypes like ARIMA and HW prototypes to determine the best approach for short-term

sales forecasting method in a manufacturing industry using Nestle Nigeria Plc. sales record.

2. Literature Review **Holt-Winters' Model**

Holt-Winters model make use of weight to predict future values. According to Chatfield and Yar (as cited by Thoplan, 2014), the HW method is a widely applied predicting technique in TS analysis that considers any underlying trend and seasonal component irrespective of whether it is additive or multiplicative in nature. The HW forecasting procedure is a robust method which is relatively easy to apply. Generally, there are 2 forms of HW-SE technique, an additive or multiplicative process. The seasonal multiplicative HW is invalid where there empty or adverse values time series (Omane-Adjepong et al., 2013). According to Thoplan (2014), the multiplicative form of the HW predicting technique can be directly useful to a time series data outside all previous change. This kind of the HW technique is called non-linear as the idea prediction is a nonlinear depending on the former remarks. Though, the additive version of the HW mode can likewise be useful in the hypothesis that the effects seasonality of time series is linear.

Additive Holt-Winters' Seasonal Model

The additive version of the HW forecasting procedure has been successful in some instances in forecasting competitions, Lawton (as cited by Thoplan 2014). The choice of the forecasting method to use depends on its simplicity, accuracy and stability on the time series, Umar (as cited by Thoplan 2014). The Holt-Winters additive way is labeled for the reason that seasonality is extra towards sequences movement that was characterized thru the totality of the degree in addition progress (Pereira et al., 2014). The formula is as shown in the following equations (Zheng & Kim, 2015). This additive periodic prototype at time n+1 was projected in winters as stated below:

$$Z_{n+l} = T_{n+l} + S_{n+1} + I_{n+1}$$
.

Note that I_{n+1} is error term,

 T_{n+1} is trend component and

 S_{n+1} is seasonality component with the period of s.

If we assume linear trend of T_{n+1} , then

 $T_{n+1} = \beta_{0,n} + \beta_{1,n}(n+1) = (\beta_{0,n} + \beta_{1,n}n) + \beta_{1,n}l = T_n + \beta_{1,n}l$ additive seasonality component of s as $S_i = S_{i+s} = S_{i+2s} = (i = 1,2,...s)$ and $\sum_{i=0} S_i = 0$. Then Z_{n+1} the forecasting value of future time on n is

$$\hat{Z}_{n}(l) = \hat{T}_{n} + \hat{\beta}_{l, n}l + \hat{S}_{n+l-s}, l = 1, 2..., s, \\ \hat{Z}_{n}(l) = \hat{T}_{n} + \hat{\beta}_{l, n}l + \hat{S}_{n+l-2s}, l = s + 1, s + 2..., 2s, \\ \hat{Z}_{n}(l) = \hat{T}_{n} + \hat{\beta}_{l, n}l + \hat{S}_{n+l-3s}, l = 2s + 1, 2s + 2, ..., 3s$$

Multiplicative Seasonal Model

The Holt-Winters multiplicative process is labelled for the reason that the seasonality is increased through the movement (Pereira et al., 2014). The formula is as shown in the following equations (Zheng & Kim, 2015).

$$Z_{n+l} = T_{n+l} + S_{n+l} + I_{n+l}$$

= $(T_n + \beta_{1, n} I) S_{n+l} + I_{n+l}$.
Where,

the notation for T_{n+1} , S_{n+1} and I_{n+1} are as above and multiplicative seasonal components s as $S_i = S_{i+s} = S_{i+2s} = ...$ (i = 1, 2..., s) and $\sum_{i=0}^{s} s_i = s$.

Then Z_{n+1} the forecasting value on n is

$$\hat{Z}_{n}(l) = (\hat{T}_{n} + \hat{\beta}_{1, n}l) + \hat{S}_{n+1-s}, l = 1, 2..., s, \hat{Z}_{n}(l) = (\hat{T}_{n} + \hat{\beta}_{1, n}l) + \hat{S}_{n+1-2s}, l = s+1, s+2..., 2s,$$

$$^{\hat{}}Z_{n}(l) = (^{\hat{}}T_{n} + ^{\hat{}}\beta_{1, n}l) + S_{n+1-3s}, l = 2s+1, 2s+2...,3s,$$

ARIMA Model

The main principle ARIMA modeling method is based on the linearity postulation in the midst of variables. Though, the linearity assumption might not present in the numerous events of time series. In addition to non-seasonal prototype, the SARIMA prototype might be stated in a multiplicative manner such as ARIMA (p, d, q) (P, D, Q) s, where (p, d, q) signifies the non-seasonal portion of the prototype, (P, D, Q) s displays the seasonal element of prototype in addition s is number of periods per term. In the seasonal element, P signifies the Seasonal Autoregressive (SAR) period, D is the amount of seasonal variance(s) achieved also Q means the Seasonal Moving Average (SMA) period. The over-all notational usage of a fit beginning the Seasonal- ARIMA prototype may be written as;

$$(1 - \beta)^{d} (1 - \beta)^{D} V t = \mu + \frac{\Theta(\beta) \Theta(\beta^{2})}{\phi(\beta) \Phi(\beta^{2})} \varepsilon_{t}$$

Where, β is a backward shift operator and are the Seasonal Moving Average (SMA) and the Seasonal Autoregressive (SAR) polynomials of order P and Q respectively (Omane-Adjepong et al., 2013).

Model of regression is in this method:

$$Yt = bo + b1Yt - 1 + b2Yt - 2 + \dots + bpYt - p + et$$
 (1)

Where

Y = projected factors,

 X_1 - X_p = illustrative variables,

 b_0 - b_p = coefficients of linear regression and signifies the error.

If, though, these variables are well-defined as

$$X1 = Yt - 1, X2 = Yt - 2, X3 = Yt - 3, ... Xn = Yt - n + e$$

The above equation (1) become:

$$Yt = bo + b1Yt - 1 + b2Yt - 2 + \dots + bpYt - p + et$$
 (2)

Equation 2 in ARIMA prototype for time series data signifies a regression equation, but then varies from Equation (1) as it has diverse descriptive factors which are preceding prices of judge variables Y_t, named AR. As it is likely towards regression historical worth's of a series over, present is the time series prototype which practices previous faults as descriptive factors:

$$Yt = bo + b1et - 1 + b2et - 2 + \dots + bpet - q + et$$
 (3)

 Y_t is stable comparable of track if $w_t = \Delta^d Y_t$ is a stationary order. Bearing in mind that Δ means the variance:

$$\Delta Yt = Yt - Yt - i Yt \qquad (4a)$$

$$\Delta 2Yt - \Delta Yt - \Delta Yt - I$$
 (4b) and so on

Likely to return to Y_t thru the total w_t in the whole of d periods. It can be written as $Y_t = \sum^d w_t$ where \sum the summation operator:

$$\sum_{i=1}^{n} w_i = \sum_{i=1}^{n} i = -\infty \text{ wi} \qquad (5a)$$

$$\sum 2wt = \sum tj = -\infty \sum ji = -\infty$$
 wi (5h) and so on

It is value noting that the sum operative Σ is the reverse of the dissimilarity operator Δ . Since $\Delta Y_t = Yt - yt - 1$, it can be written that $\Delta = 1 - \beta$ and thus $\sum = \Delta^{-1} = (1 - \beta)^{-1}$

While computing this summary for a dynamic series, generates the quantity one comment of the creative series without distinguishing (Y_0) then improves up succeeding prices of the series in variance.

Thus, if $w_t = \Delta Y_t$, Y_t can be calculated:

$$Y_t = \sum W_t = \sum_{i=-\infty}^t W_i = \sum_{i=-\infty}^0 W_i + \sum_{i=1}^t W_i = \sum_{i=-\infty}^t W_i = \sum_{i=-\infty}$$

$$Y_0 + w_1 + w_2 + ... + w_t$$
 (6)

Number one phase is to know the level of similarity d, which is, the amount of period that the series is in desires to be distinguished to yield a fixed series. Then it inspects the association and incomplete auto-correlation task to regulate likely conditions of p and q (Pindyck & Rubinfeld, 2004 as cited in Pereira et al, 2014).

3. Evaluation Metrics

It was projected for the first time by Hyndman and Koehler (2006), such as scalefree error metric. It is a smaller amount of complex to outliers then have the ability towards comparing projecting procedures upon a series, at the same time projecting accurateness amid cycles. MASE is valid in addition does not give boundless or unclear standards in trend. MASE is suggested to be usual degree for assessment of projecting accurateness (Hyndman, 2006). MAPE is the complete mean error as proportion of demand. This process grants difficulties as soon as the series take prices of equivalent to nil.

The MAPE can be expressed as follows:

$$MAPE_n = \frac{\sum_{t=1}^{n} \left| \frac{E_t}{D_t} \right| 1000}{n}$$

Where:

 $|E_t|$ Complete mistake worth in the period t;

 $|D_t|$ Real demand in absolute worth in the time t;

n = total number of the times.

Hyndman and Koehler (2006) sated the methods are valuable while comparing diverse approaches of the same set of information, but then they strongly advised scholars in contradiction to use when relating through data sets that have diverse measures. MAPE is one of the fraction errors that have been steadily applied for associating prediction accurateness. In general, the smaller the value of the forecast accuracy measure, the better the forecast. However, there is no specific threshold for these measures. Instead, a smaller value produced by these accuracy statistics foretells the best forecasting methods among severally competing methods.

Moving Average

Gupta, and Starr (2014) specified that the moving average (MA) technique make available a forecast of future worth of goods based on current past history. MA is also called simple MA technique. The latest n consecutive values, which are observations of actual events such as daily, weekly, monthly, or yearly demand, are used in making a forecast. These data are recorded and must be updated to maintain the most recent nvalues. A decision must be made concerning how many data values should be included in the MA set (n). Moving average technique be an expected amount of current definite worth's, modernized as soon as innovative values develop and obtainable. A moving average forecast make use of figure of the furthermost fresh real facts ideals in producing a forecast (Williams, 2015). The MA technique is applied at the time that demand for a produce is objectively persistent over time and does not have a rapid growth rate or seasonal characteristics (Gupta & Starr, 2014). MA can be calculated using the subsequent

$$ft = MA_n = \frac{\sum_{i=1}^{n} A_{t-i}}{n} - \frac{A_{t-n} \pm \dots + A_{t-2} + A_{t-1}}{n}$$

Where:

Ft = Forecasting of period t;

MA n = MA period;

 A_{t-I} = real worth in the period t-I and

n = MA No of periods

The method is mainly valuable in eliminating the fluctuations of random in the historical data. When the degree of the trend is great, and the pattern is very reliable, then the smaller amount of the number of periods (n) in the group the better it is. If the trend is slow (up or down), and if variations around the average are common, then having additional periods of time in the group is healthier than having excessively few. In choosing the worth of n, there are numerous contradictory special effects. The greater the worth of n, the bigger is the consequence of smoothing any random deviation.

Weighted Moving Average

A mode towards making predictions extra approachable to the best recent real events (demand) is to apply the WMA technique. Just like the MA technique, the most current n period is used in forecasting. On the other hand, for each period is assigned a weight between 0 and 1. The aggregate of entirely weights adds up to 1. The maximum bulk is allocated to the greatest fresh period and then the weights are allocated to the past periods in the downward direction of magnitude. The WMA technique permits the modern period to have the utmost influence, and later periods declining significance. Reminder that when all weights are equal (1/n), the WMA is the same as the MA (Gupta & Starr, 2014). The major weights are allocated to the freshest events as soon as there is an ongoing trend. In a rapidly fluctuating structure, wt may be much greater (\gg) than w_{t-1} . Williams (2015) enlightened the WA as it is related to a MA, excluding which is characteristically ascribes more weightiness to utmost current time series worth's.

```
Ft = w_{t-n}(A_{t-n}) + ... + w_{t-2}(A_{t-2}) + w_{t-1}(A_{t-1}) + w_{t-1}(A_{t-1}) + ... + w_{t-n}(A_{t-n})
Where:
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 w_{t-1} = Weight for period t -1, etc.;

 A_{t-1} = Actual value for period t-1, etc.

WMAs can track strong trends more accurately than UWMAs. An analysis of error with the use diverse values of n in addition different weights has to be done to find the best value of *n* and the corresponding weights.

Exponential Smoothing

The exponential smoothing (ES) method, like the WMA method, calculates an average demand (forecast). ES procedure remembers the last estimate of the average value of demand and combines it with the most recent observed, real value to form a fresh projected average. Demand for a particular time t is forecasted by ES by joining the forecasted past time (t-1) with previous period (t-1) real demand (actual demand for previous period is given a weight of ' α ' and the forecast of the prior period is given a weight of $(1 - \alpha)$, where α is a smoothing constant whose value lies between 0 and 1 (Gupta & Starr, 2014). ES is a strong WA technique which is comparatively stress-free to apply and comprehend. Each new forecast is founded on the past forecast in addition to proportion of the variations among forecast and the actual value of the sequences at such point (Williams, 2015).

That is: Next forecast equal past forecast plus (actual - past forecast) Where

(Actual - past forecast) signifies error in forecasting in addition is a proportion of the error. Additionally,

 $F_t = Ft-1 + \alpha (At-1 - Ft-1)$

In a situation where

 F_t = projected period t

 F_{t-1} = projected for past period (i.e., period t-1)

 α = Smoothing proportion

 A_{t-1} = Actual demand or sales for the previous period

In a variety of situations ES has been found to be very effective. Because ES works better than the older methods of MAs and WMAs, many forecasting and control systems employ it. It has proved effective for various uses. Fighter aircraft make use of ES to target their guns at moving goals. In conclusion, they predict the position of enemy jets for the period of flying operations (Gupta & Starr, 2014). This use displays how fast the ES technique can track a steady, but dynamically fluctuating pattern. Industrialists make use ES to make forecast for demand levels, which the same experience kind of non-random but volatile changes from time to time. In such circumstances, the current past has the best facts about the near future. ES can hook these moves and make quick changes to inventory levels. Other manufacturers and organizations involve in service use it for the reason that it calls for less computational work and is readily understood.

Forecasting with a Seasonal Cycle

When seasonality is present, forecasting can be done by presumptuous that what occurred last year (or last month, etc.) will take place again. It is called the historic forecast technique. The form is expected to recurrence itself within the time period. This method works if a stable configuration (which is often seasonal) exists. Typically, the hotel and resort business is involved with historical forecasts, as the business in the area of agriculture. In each case, special situations can arise that lead to the desire to adjust the historic forecast.

Other Methods Trend Analysis

Analysis of trend includes evolving an equation which will rightly define trend (presumptuous that trend is in the data). The trend elements might be linear, or not. An easy design of info regularly can make known the reality in addition environment of a movement. There are 2 vital systems which can be useful toward improving predictions as soon as movement is existing. One comprises the use of a trend; the rest is an addition of ES (Williams, 2015). If the period of time shows an increasing or decreasing trend, then the techniques discussed above (MA, WMA, and ES) may not be appropriate for making a forecast. The trend line equation is, Y = a + bX, where Y = sales forecast and X = period of time. X = autonomous factors and Y = dependent variable since the demand depends on the time period. As X increases Y increases in an increasing trend. Y will decrease as X increases in a decreasing trend (Gupta & Starr, 2014).

A linear trend equation has the form

Ft = a + bt

Where

Ft = period of forecasting t

a =worth of Ft a t = 0, which is the v intercept

b =Slope of the line

t =Identified no of periods starting from t = 0

Explanatory techniques

Though time series techniques depend on the historical opinions of information towards forecasting, illustrative techniques search for ways to build an equation that the variable to be forecast have an instructive association with one or more autonomous variables. That is, if we understand the values of the autonomous variables, we can originate the worth's of factors to be projected. The tenacity of the descriptive prototype is to derive the association among forecasted and autonomous factors and apply it to project future worth's of projected factors. Explanatory approaches depend on regression to discover these connections and make available forecasts Makridakis et al., 1998 (as cited by Niilo, 2013). The difficult for demand predicting is to look for a pointer that associates well with demand and happens before demand (Kerkkänen, 2010). So, the pointer desires

towards observing steadfastly earlier than demand is encompassed in prototype. Even though such pointers are not unmanageable to locate, regression techniques are out of the range of this investigation for the reason that useful software boundaries in the part of experimental.

Qualitative methods

When sufficient objective data is not available, a number of qualitative techniques can be applied. The term judgmental forecasting is generally applied when describing forecasting with qualitative means (Kerkkänen, 2010). The definite techniques used in employing judgment range from informal (i.e. pure intuition) to structured methods, up to modeling methods that try to reproduce human decision making. Quantitative techniques such as time series and causal forecasts are based on historical data in its place of judgment. A time series forecast is an endogenous method that relies only on the historical data of the forecasting variable while causal models also use exogenous data from other causes (Decoster, 2012).

Judgmental Forecasting

This technique permits us to draw conclusions on present designs in addition associations into the prospect. Consequently, they convey the obvious hypothesis that designs would not adjust for the duration of the projection distance. Though, in actual domain unexpected in addition to dramatic variations will occur and when it happened, the conclusion is desirable to convey them into account in predicting (Makridakis et al., 1998). Judgmental methods are most valuable in forecasting situations where large changes are normal, since historical data is then not relevant due to the rapid changing circumstances. Qualitative forecasting is also preferable at the time where historic records on the variable of concern is not obtainable or too expensive to obtain, and when there is relevant knowledge of the item to forecast. Disadvantages of qualitative forecasts are the considerable amount of needed personnel time and the often biased and limited opinions (Decoster, 2012). Forecasting biases due to deliberately under or over-estimating the forecasts are common in organizations. In a survey of sales managers, Peterson (1990) showed this to be one of the major problems associated with judgmental forecasting. Cyert, March, and Starbuck, 1961 (as cited by Decoster, 2012) showed that the judgmental forecasting bias depends on the forecaster's role in the company. This is confirmed by a survey of sales forecasting practices by Sanders and Manrodt, 1994 (as cited by Decoster, 2012): most respondents preferred under forecasts (70,4%) while over forecasting was preferred by 14.6% and 9.8% said they had no preference (5% did not respond). Most respondents gave this as the main reason why they prefer an under forecast, the fact that there are far fewer management reviews when the forecast is surpassed.

Methods

To examine the evaluation amid HW and ARIMA prototypes, fundamentally the historic information was used from the sales record (secondary data) of Nestle Nigeria period from 1990 to 2017. This data was used to assess the future sales of Nestle Nigeria Plc. using ARIMA forecasting model and Holt Winters forecasting model, the optimum forecasting model between ARIMA and Holt Winter was examined and the appropriate forecasting model for Nestle Nigeria Plc. short term forecasting was selected.

Minitab Version 17 was being used for relevant inferential statistical analysis of the study whose targeted at liken the prototypes-ARIMA and HW to forecast the future for either acceptance or rejection at the end, these models was be used to answer the research questions, upon which conclusions and recommendations are based as final output of the study.

Holt-Winters prototype (HW) and ARIMA prototype was used in this study. The MAPE, MAD and MSD were used as a performance metrics. The two methods are based on the foundation of Box Jerkins procedure that give room to a stationary series in advance of model estimate.

ADF equation with no intercept and no trend: $\Delta Xt = \rho Xt - 1 + \sum \delta i \Delta Xt - i + \epsilon t \ pi = 1 \ (1)$

ADF equation with intercept: $\Delta Xt = \beta 0 + \rho Xt - 1 + \Sigma \delta i \Delta Xt - i + \epsilon t \ pi = 1$ (2)

ADF equation with intercept plus trend: $\Delta Xt = \beta 0 + \beta 1t + \rho Xt - 1 + \Sigma \delta i \Delta Xt - i + \epsilon t pi = 1$.

Data Analysis and Discussion of Findings Analysis of Data According to Objectives

Objectives 1: Assess the future sales of Nestle Nigeria Plc. using ARIMA forecasting

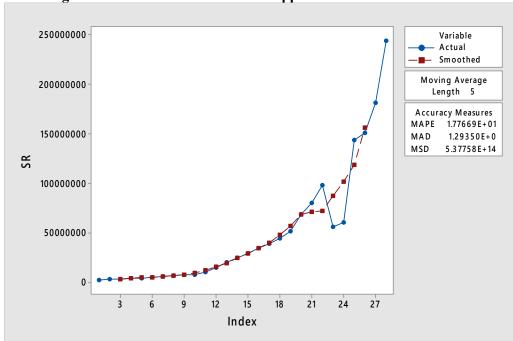
Table 1: ARIMA Model for Nestle Nigeria from 1990 to 2017

Accuracy Measures	ARIMA	
	Length 10	Length 5
MAPE	2.10619E+01	1.77669E+01
MAD	2.08660E+0	1.29350E+0
MSD	1.54006E+15	5.37758E+14

Source: Research Data, 2018

From the table 1, the ARIMA model using length 5 and 10 were generated to derive the best fitting model. MAPE, MAD, and MSD was 2.1, 2.0, and 1.5 respectively on the length 10, while it is 1.8, 1.3, and 5.4 respectively on length 5. The best of this model is the accuracy measure of the model at length 5.

Figure 1: Actual sales revenue and application of ARIMA



Source: Research Data, 2018

The adjustment of prediction was made from 1990 to 2017 to foresee future forecast for year 2018, 2019 and above as we can see in figure 1 in graphical form. The result was obtained with the use of ARIMA model which shows an upward movement of actual demand of Nestle sales revenue.

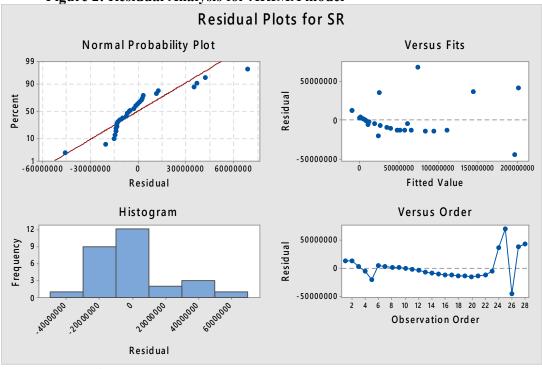


Figure 2: Residual Analysis for ARIMA model

Source: Research Data, 2018

Centered on the residual analysis of ARIMA model, in figure 2 we observed that the model is within the required parameters established on time series.

Objectives 2: Evaluate the future sales of Nestle Nigerian Plc. using Holt Winters forecasting model.

Table 2: Holt Winters model for Nestle Nigeria from 1990 to 2017

Accuracy Measures	Winters'	Winters'	
	Additive	Multiplicative	
MAPE	8.76847E+01	2.31176E+02	
MAD	1.53454E+07	1.70518E+07	
MSD	4.89489E+14	4.84524E+14	

Source: Research Data, 2018

From the table 2 Holt Winters using additive and multiplicative model to derived best fitting model. Additive model shows that MAPE, MAD, and MSD were 8.8, 1.5, and 4.8 respectively, while it is 2.3, 1.7, and 4.8 respectively on multiplicative model. The best of this model based on accuracy measure of the model is the multiplicative model.

Winters' Method Plot for SR Multiplicative Method 250000000 Variable Actual Fits 20000000 **Smoothing Constants** α (level) 0.2 γ (trend) 0.2 150000000 δ (seasonal) **Accuracy Measures** 8.76847E+01 MAPE 100000000 MAD1.53454E+07 4.89489E+14 50000000 12 15 24 18 21 27 Index

Figure 3: Actual sales revenue and application of Winters Multiplicative method

Source: Research Data, 2018

The adjustment of prediction was made from 1990 to 2017 to foresee future forecast for year 2018, 2019 and above as we can see in figure 1 in graphical form the result shows obtained with the use of ARIMA model shows an upward movement of actual demand of Nestle sales revenue.

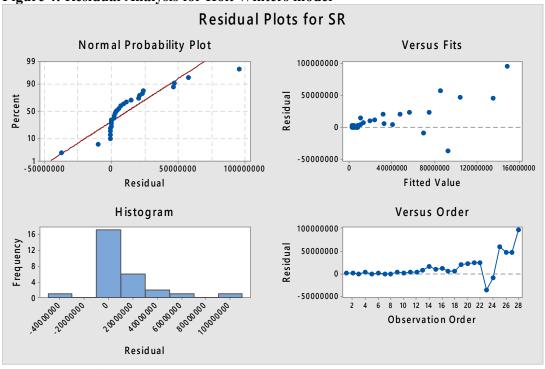


Figure 4: Residual Analysis for Holt Winters model

Source: Research Data, 2018

Centered on the residual analysis of Holt Winters model, in figure 2 we observed that the model is within the required parameters established on time series.

Objectives 3: Examine the optimum forecasting model between ARIMA and Holt Winter for Nestle Nigeria Plc.

Table 3: ARIMA and Holt Winters model Accuracy for Nestle Nigeria from 1990 to 2017

Accuracy Measures	ARIMA Length 5	Holt Winters Multiplicative
MAPE	1.77669E+01	2.31176E+02
MAD	1.29350E+0	1.70518E+07
MSD	5.37758E+14	4.84524E+14

Source: Research Data, 2018

From the table 3, we compare both ARIMA and Holt Winters model accuracy measure to derived best fitting model. From the Holt winters model MAPE, MAD, and MSD were 2.3, 1.7, and 4.8 respectively, while ARIMA is 1.8, 1.3, and 5.4 respectively. The best of this model is ARIMA model of length 5, since its accuracy measure is lower compared to the Holt winters multiplicative model.

Objectives 4: Determine the appropriate forecasting model for Nestle Nigeria Plc. short term forecasting.

From accuracy measures of both ARIMA and Holt Winters model in table 1 and table 2 Holt winters model MAPE, MAD and MSD were 2.3, 1.7, and 4.8 respectively, while ARIMA is 1.8, 1.3, and 5.4 respectively. The best of this appropriate model is ARIMA model for Nestle Nig., to predict short term forecasting.

4. Discussion of findings

This study applies autoregressive integrated moving average (ARIMA) and Holt-Winters methods for optimum sales forecasting of Nestle Nigeria Plc. The study assesses the future sales of Nestle Nigeria Plc. using both ARIMA and Holt-Winters forecasting methods. Several studies have attempted to use both methods to forecast sales revenue. For instance, Makatjane & Moroke (2016), did a comparative study of Holt-Winters exponential smoothing and Seasonal ARIMA to forecast car sales in South Africa. Shiva & Muniyappa (2014) compared ARIMA and Holt-Winter forecasting accuracy with respect to Indian motorcycle industry. On the research question one the study revealed that forecasted sales revenue of Nestle Nigeria Plc is increasing, going by ARIMA forecasting model and. On the research question two the study revealed that forecasted sales revenue of Nestle Nigeria Plc is increasing, going by HW forecasting model. This is in line with Omane-Adjepong, Oduro & Oduro (2013 on the study of determining the better approach to predicting in the short-term Ghana's inflation. SARIMA and HW approaches were used to attain short-horizon among the predicted sample. The precision of the sample estimate was measured via MAE, RMSE, MAPE and MASE.

For the research question three and four the result also revealed that ARIMA method seems more effective and powerful going by the MAPE and MAD results given above. This is in line with the study by Saayman and Saayman (2010) that revealed that SARIMA models bring maximum precise forecasts of arrivals for over the 3 times period. Moreover, our findings are not in agreement with the result of Makatjane & Moroke (2016) who revealed in their study that holt-Winter exponential smoothing forecasting is more effective and powerful in forecasting short-term seasonal car sales in South Africa.

5. Conclusions and Recommendations

Having studied and review related literature in the area of quantitative forecasting, the conclusion is that the Holt Winters' additive and multiplicative models are not the right option mainly due to the pattern of the data. In time series forecasting, selecting a particular method for the forecast of products cannot be a right decision. It is based on the behaviour of data on which the analysis should be made. The ARIMA model provided forecasts that were more accurate than those of the HW models. Because of this we are not just able to conclude that ARIMA model give the best and most accurate predictions but discuss the complexity in addition robustness of the contending models in food and beverages market. Therefore, we recommend that more complex methods of forecasting, rather than the simple methods as they do not reveal the full state of event in the organization. Furthermore, multi-approach system is recommended in making accurate sales and operational predictions for optimal firm performance.

References

- 1. Cyert, R. M., March, J. G., & Starbuck, W.H., 1961. Two experiments on bias and conflict in organizational estimation. Management Science, 7(3), pp.254-
- 2. Decoster, R., 2012. Sales forecasting and the financial crisis How to forecast market-driven effects? Voorwoord.

- 3. Guptar, S. & Starr, M., 2014. Production and operations management systems. USA: CRC Press.
- 4. Hyndman, R.J. & Koehler, A.B., 2006. Another look at measures of forecast accuracy. International journal of forecasting, 22(4), pp. 679-688.
- 5. Incesu, G., Asikgil, B. & Tez, M., 2012. Sales forecasting system for newspaper distribution companies in Turkey. Pakistan Journal of Statistics and Operation *Research*, 8(3), pp.685–699.
- 6. Kerkkänen, A., 2010. Improving demand forecasting practices in the industrial context. In lutpub.lut.fi. Lappeenranta University of Technology.
- 7. Makatjane, K. & Moroke, N., 2016. Comparative study of holt-winters triple exponential smoothing and seasonal Arima: forecasting short term seasonal car sales in South Africa. Risk Governance and Control: Financial Markets & Institutions, 6(1).
- 8. Makridakis, S., Wheelwright, S.C. & Hyndman, R.J., 1998. Forecasting: methods and applications, 3a. Ed. EUA: John Wiley& Sons.
- 9. Manjunath, M., Prasad, H.C.S., Kumar, K.S. and Puthran, D., 2014. Value Stream Mapping as a Tool for Lean Implementation: A Case Study. International Journal of Innovative Research and Development, 3, pp. 477-481.
- 10. Omane-Adjepong, M., Oduro, F.T. & Oduro, S.D., 2013. Determining the better approach for short-term forecasting of ghana's inflation: Seasonal ARIMA Vs holt-winters. International Journal of Business, Humanities and *Technology*, 3(1), pp.69-79.
- 11. Pereira, C., Veiga, D., Rita, C., Tortato, U., Vieira, W. & Silva, D., 2014. Demand forecasting in food retail: a comparison between the Holt- Winters and ARIMA models, 11, pp. 608–614.
- 12. Peterson, R.T., 1990. The role of experts' judgment in sales forecasting, *The Journal of Business Forecasting*, 9(2), pp.16-21.
- 13. Saayman, A. & Saayman, M., 2010. Forecasting tourist arrivals in South Africa, Acta Commercii North-West University 214–215.
- 14. Suwanvijit, W., Lumley, T. & Choonpradub, A., 2011. Long-Term Sales Forecasting using Lee-Carter and Holt-Winters Methods.
- 15. Thoplan, R., 2014. Simple vs. sophisticated methods of forecasting for Mauritius monthly tourist arrival data. International Journal of Statistics and *Applications*, 4(5), pp.217-223.
- 16. Williams, J., 2015. Operations Management, 12ed. New York: McGraw-Hill Education.
- 17. Yan, H. & Tu, X., 2012. Short-term sales forecasting with change-point evaluation and pattern matching algorithms. Expert Systems with Applications, *39*(5), pp.5426–5439.
- 18. Zheng, X. & Kim, S., 2015. A study on the comparison of electricity forecasting models: Korea and China. Communications for Statistical *Applications and Methods*, 22(6), pp.675–683.