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Skopje, April, 2022

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(Original scientific paper)

NEDA MALESKA SACHMAROSKA

TOP MANAGEMENT CIVIL SERVICE (TMS) - MODELS FOR DEPOLITICIZATION AND PROFESSIONALIZATION

Abstract

The professionalization of the Top Management Civil Service (TMS) in the Republic of North Macedonia (MK) is one of the key challenges for depoliticization and professionalization of the public administration and a step towards establishing a clear distinction between the political and professional level of management in the selection and appointment of top management civil servants (TMS). The criteria for selection and appointment of senior management officials in MK are not yet based on a merit system, nor on a serious assessment of the professional and managerial capacities of the candidates who should lead the institutions. Regulating this issue through a coherent system will contribute to the modernization of the public sector, strengthening the principles of good governance and management, and restoring the lost trust of citizens in the institutions and the political system. The subject of this research paper are the models of recruitment and selection of TMS, their roles and competencies in Belgium, Portugal and Great Britain, compared to MK. The findings and recommendations arising from this research should contribute to the process of depoliticization and professionalization of the public administration in MK.

Key words: depoliticization, professionalization, recruitment, selection, top management

JEL classification: J53

Introduction

Many governments around the world raise the issue of the role and importance of top management in the way institutions are governed and managed. The principle of such debates, in OECD countries, raises the question of who manages the institutions, how to ensure greater professionalism of the bureaucratic apparatus, autonomy in management and to strengthen the responsibilities of operational structures and leadership.

Although within the EU and OECD countries there is no unified system of procedures for selection of professionals and capable people in the top management positions, nevertheless there are common principles based on the expectation that only quality staff with knowledge and skills can enter strategic positions and lead state institutions as part of the TMS. The principles governing top management (TMS) most often relate to the system of recruitment and selection of top managers, the key roles and responsibilities, and the manner in which the performance of selected and appointed persons is monitored.

Hence, the system of recruitment and selection of the highest management structures that we find in the EU member states, usually takes place through an open and transparent procedure in order to attract the best staff from the administration, but also from the business and civil sector. Certain countries use central recruitment and selection units to ensure greater visibility, openness and transparency of the process itself, as well as improved information for potential candidates. Others set up independent selection committees or oversight bodies to oversee the selection process of the top-ranked candidates. The criteria for selecting candidates through such a transparent process are a guarantee that the best candidates will be selected on the basis of competencies without favoritism and political influence.

Many theorists will argue that the creation of the so-called TMS, within the Union, has led to improved accountability and a shift from "advisors and administrators" to "transformational leadership, in which managers are public service providers and engineers for good governance" (Bourgault and Van Dorpe, 2011). Today, the number of countries that have a special TMS recruitment system within the OECD reaches up to 75%.

1. COMPARATIVE EXPERIENCES (BELGIUM, PORTUGAL AND GREAT BRITAIN)

The complex circumstances in which the public sector operates introduces new challenges for those who run the institutions. This especially refers to the possibility of perceiving complementary policies that should lead to improved services to citizens, ensuring well-being and economic security of citizens. In such circumstances, the citizens and the business sector have higher expectations from the government. Top executives are expected to create flexible, fluid, and adaptable institutions that have the capacity to transform and innovate. Starting from such reform efforts, each EU member state tries to deal with these processes in a different way. This overview will cover the comparative experiences of Belgium, Portugal and the United Kingdom as one of the most cited examples in this field.

1.1. Belgium

The modernization of the functioning of the human resource management in the Belgian federal state administration was one of the main pillars of Copernicus' reform in the beginning of 2000.[1] The Copernicus' reform arose as a result of citizens' distrust of the administration and required certain radical reforms such as a reorganization of the ministry structure; functional grouping of institutions; establishing enhanced accountability of managers; and increased professionalism in public administration.

The Central Employment Secretariat, at that time, was transformed into a modern staff selection agency for top management - the Federal Administration Employment Agency - CELOR.[2] Since its establishment until today, one of the key priorities of CELOR is to attract the best candidates for jobs in the state administration, by offering flexibility and security in the way of working, as well as balancing professional and personal life.

The hiring process is based on the candidate's expertise required to perform the tasks and on a system of managerial competencies (strategic awareness, people management, information management, team management,

1 https://www.nispa.org/files/conferences/2006/papers/200605241620510.Pelgrims_Brans_WGI.pdf

2 On average, CELOR annually employs people in about 7,249 jobs at various levels, which means both civil servants and senior positions in the state administration.,https://selor.be/nl/procedures/

task management and delivery of results), which are checked by interview or testing.

The institutions in which the position is announced are expected to create a generic profile with a description of the position, the competencies that are required and what the candidate is expected to achieve in that position. The requirements and criteria for these positions are high and relate to education, management experience in the field of interest and assessment of competencies. The employment procedure is organized in three steps: evaluation of the candidate's CV; generic competency test; and an assessment and interview in which the candidates' motivation, their vision and professional knowledge in the relevant field are assessed.

Upon completion of the process, CELOR[3] submits the ranking list of the best candidates to the competent minister or responsible body. The competent minister or responsible body organizes the last interview with the best candidates ranked with the highest grade for making a final decision. The final decision is validated by the Council of Ministers or the competent Minister (with the approval of the Minister of State Administration and the Minister of Budget / Finance).

What is expected of top executives is to meet their strategic and operational goals for which they have been given greater autonomy, but are also considered to be most responsible for the end results and consequences. Accordingly, in case of poor performance and unsatisfactory results, they may lose their position. The position of the TMS is also related to the salary which is determined according to the criteria needed to determine the weight of a given function, such as: knowledge and experience, multidisciplinary experience, complexity and innovation, intensity of institutional influence, etc. Wage growth depends on performance and met expectations. However, insufficient performance can lead not only to a slowdown in wage growth, but can also lead to job loss.

Copernicus reform in Belgium has led to a clear division between the political sphere and the administrative world - the minister is responsible for the success of policies and political choices (for example: Is building a motorcycle lane on the highway a good decision in terms of mobility and / or the

[3] The composition of the Commission that selects the candidates for TMS consists of eight members from the following groups: The chairman of the commission is a member of CELOR; Technical expert in the field (2); Management / Human Resources Expert (2); Senior manager (of the same level of responsibility) (2); Representative from the employer's organization; Representative of the unions

environment ?), and the TMS is responsible for the correct execution of the public policy and / or political choice (for example: Was the mentioned lane built on time and within the budget?).

1.2.Portugal

The introduction of the TMS in the state administration in Portugal is a result of the institutional and financial crisis that occurred in 2011. The challenge for change in these times in Portugal was seen more as an opportunity for development and change than as a threat.

Namely, at that time, the political system of Portugal was facing a serious problem of crisis of legitimacy. The strong feeling of civil dissatisfaction with the work of public institutions and public services was further deepened by the size of the public debt. Thus, the agreement between the government and the opposition resulted in the establishment of a central body responsible for employment and selection of the highest positions in the Portuguese administration, as one of the measures to combat the crisis, corruption and inefficiency of the system.

The new Public Administration Employment and Selection Committee (CReSAP) was seen as a strong step towards restoring citizens' lost trust in Portugal's public institutions and political system. Namely, those who have higher positions in the central administration of the country, from 2011 onwards, are no longer appointed according to selection of the government, as was the case until then.[4]

CReSAP has become a strong and independent agency whose permanent members are appointed for a term of five years. The chairman and members of the committee are appointed by the Government with the consent of Parliament. They are accountable to Parliament and cannot receive instructions from the Government or other public or private entities regarding the implementation of the recruitment and selection process.

In the TMS recruitment process, government institutions are responsible for developing the job description and defining the main responsibilities and functions associated with the management positions to be announced. Based on this, CReSAP compiles a candidate profile proposal which is further published on a public call[5]. The selection is overseen by a Commission usually composed of the CReSAP President, one of the permanent members, one

[4] https://www.cresap.pt/

[5] https://www.cresap.pt/procedimentos-concursais/item/808-1225-cresap-30-06-20-repeticao-do-pc-n-1084-cresap-30-06-20

non-permanent member and an expert with knowledge of the relevant duties and responsibilities, and the selection is made by the Selection Board, slightly expanded in terms of being composed of a few more members. Based on the assessment and scores of the basic requirements and the consideration of skills and competencies, only the top six highest ranked candidates are called for an interview. Prior to the interview, all candidates must take the Thomas International Test[6]. Finally, the selection board conducts a personal interview aimed at identifying the candidate's profile in terms of knowledge, skills and competencies. The commission is obliged to prepare a qualitative opinion in writing for each of the candidates. The commission, at the end of the process, must give the government three names in alphabetical order, which will ensure that everyone has the required merit.

The government is obliged to choose one of these three names. This process limits the arbitrary power of elected or political members.

The purpose of this transformation was to limit the power of appointment by elected political members and to strengthen the power of meritocracy exercised by an independent agency. This experience contributes to the technical and political balance in the process of appointing top executives in the Portuguese state administration and state corporations.

Today, the employment at high-ranking positions in the Portuguese state administration are goes exclusively through open competition. There are about 500 positions that are considered TMS positions. The TMS of these leading institutions should have the professional skills, ability, competencies, professional experience and appropriate training to fulfill these functions.

1.3. The United Kingdom of Britain and Northern Ireland

The process of selecting and appointing the highest management positions in the public administration in the UK provides for "merit-based selection on the basis of fair and open competition". The Top Management Officer Merit System means the appointment of the best person available to them, judged by the experience, skills and behaviors required for the role advertised in the job vacancy. No one can be assigned to a particular role if he or she is not competent to perform that function, and the selection is based on an assessment of the person who will best perform the function. An open competition for the

[6] Behavioral skills assessment, whose factors are the following: creativity; determination; will; individuality; trust; self-confidence; patience; concentration; persistence; scalability; perfectionism, etc., through the so-called "Personal Profile Analysis" (ALP).https://www.thomas.co/personal-profile-analysis-ppa

TMS means that appointment opportunities must be made public. Prospective candidates must be given reasonable access to information on the position and conditions, as well as information on the selection process.

The government policy from 2020 envisages all vacancies in the public administration of the United Kingdom to be advertised in public, outside of the administration, i.e. to be open to candidates from the private sector, and to reduce the number of internal advertisements in the administration[7]. In this way it is considered that novelties and innovations will be introduced in the management system coming from the private sector.

The process of selecting top management in the British administration must be objective, impartial and consistent. Each candidate must be judged according to the same published criteria. The evidence gathered for the evaluation of candidates must be equivalent in content and depth. The recruitment procedure is conducted by the Commission for State Administration, i.e. responsible Commissioners who lead the selection process.

The selection committee evaluates the merits of the candidates with the help of the best possible evidence and tests the questions raised by the Minister or the Prime Minister. This approach involves assessing whether candidates can work effectively with the minister and perform the role of TMS. The chairman of the board has the full responsibility to ensure that the selection process is in line with the legal framework. Before announcing the competition, the president must also approve the selection criteria (experience, skills, behaviors, etc.)

At the end of the hiring process, the president must prepare a report and confirm that the selection process was conducted in accordance with the legal framework.

Based on the evidence, the board finally prepares a list of the best candidates that can be nominated and ranks them on the basis of merit. Most often the most deserving candidate will get the position. If the most deserving candidate rejects the position, the ministry must either offer the position to the next on the merit list, or close the competition without appointing anyone.

The relevant government minister must be involved at every stage of the TMS selection process and have the opportunity to complain to the Commissioner about the selection process or the candidates if he or she deems that the principles of merit-based appointment have been violated. The Prime

[7] https://civilservicecommission.independent.gov.uk/

Minister must be informed of progress and have the opportunity to express his/her views.

The names of the nominated candidates are then submitted to the Prime Minister. The Prime Minister makes the final decision between the nominated candidates in consultation with the Head of State Administration and the High Commissioner of State Administration.

2. TOP ADMINISTRATIVE OFFICE IN THE REPUBLIC OF NORTHERN MACEDONIA: WHO MANAGES US?

One of the crucial remarks of the European Union through the report of the expert group of Reinhard Priebe[8] and the Proposal for Urgent Reform Priorities[9], prepared by a group of civil society organizations and experts, during the political crisis in 2015 caused by wiretapping conversations, referred to the "captured state" through the institutions of the system. Namely, the process of selection and appointment of top management positions, often underlined in the country's progress reports, is not based on open competition, which completely violates the principle of "merit" and selection of the best candidate for the job.

Today, several years after the political and institutional crisis, the top management service in MK is still not clearly defined and determined, nor is there a coherent TMS system. This points to a lack and a clear distinction between the political and professional level of management in public administration.

The manner in which the issue of election and selection is regulated and the conditions for appointing the highest management structures in the institutions and their competencies are fragmented and they are regulated in separate laws. For the purposes of this research, 32 independent bodies of state administration and administrative organizations were reviewed (Annex 1) and the relevant laws that regulate them.

If we look at the criteria for selection of managerial positions in all institutions except ministries, such as independent state administration bodies,

8 Recommendations of an experienced expert group, regarding the systematic issues related to the rule of law related to interception of communications, discovered in the spring of 2015 "; Brussels, June 2008;http://ec.europa.eu/enlargement/news_corner/news/news-files/20150619_recommendations_of_the_senior_experts_group.pdf

9 https://idscs.org.mk/wp-content/uploads/2017/07/Blueprint_2017_MK-01.pdf

bodies within ministries, directorates, bureaus, agencies, commissions, as well as public enterprises, etc., the diversity is more than evident.

In 15 of the 32 independent bodies of the state administration and administrative organizations, in addition to the director, a deputy director is also appointed. In these bodies, the governing body (Government or ministries, etc.) is the one that elects or dismisses the director, i.e. his deputy. However, the general conditions for appointment of a director or deputy director refer only to the general conditions prescribed by law, which is that the director or deputy director is a citizen of the Republic of North Macedonia; not to have been sentenced or sentenced in a court of law at the time of election; to have 240 credits according to ECTS or completed higher education; have at least five years of work experience without specifying what experience is required, and have an internationally recognized English language certificate not older than five years.

In none of the 29 substantive laws[10] is there an established merit-based principle for selecting top executives, nor a procedure for verifying competencies through some form of testing or interview, although the law states that they are selected in an advertisement that must be published in at least three daily newspapers. In the end, the Government, i.e. the Board of Directors have discretionary power over who they will elect as a top manager.

The mandate of the top managers in the independent bodies of the state administration and the administrative organizations is four years, and the termination of the mandate is conditioned by several factors such as possible resignation or death; loss of legal capacity or sentencing by a criminal court, etc. No law stipulates what responsibility a top executive bears in the event of poor performance. The laws themselves, as well as the current practice, confirm that there is no procedure at all for monitoring the performance of top managers, although for the employees in these institutions the Law on Administrative Servants[11] and the Law on Public Employees[12] stipulate strong mechanisms for monitoring the work, i.e. the performance of the employees in the service.

Top executives do not have managerial contracts with pre-defined priorities and responsibilities as a basis for accountability to ministers, i.e. the government, over their achievements, which would lead to better results and clear lines of accountability.

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[10] The list of laws, the subject of this analysis are part of the bibliography

[11] Law on Administrative Servantshttps://www.mioa.gov.mk/sites/default/files/pbl_files/documents/legislation/zakon_za_administrativni_sluzhbenici_2020.pdf

[12] Law on Public Employees,https://www.mioa.gov.mk/?q=mk/documents/legislation

Additionally, research by the Societas Civilis Institute for Democracy[13] showed that almost half of the appointed directors are so-called acting directors. This manner of appointment does not provide for a legal obligation to conduct a competitive process, and is often one of the ways of circumventing the regular procedure. Additionally, the analysis of the CVs showed that 45% of the appointed persons do not have managerial experience, and the advertisements, apart from the formal criteria, do not have a clear definition of the expected qualifications or managerial competencies.

This confirms what is evident in the analysis of the legal framework, but also the practice that regularly occurs in the selection and appointment of top managers, which is the division of responsibilities between coalition partners in government and appointments based on party affiliation instead of on merit.

This selection and appointment of top managers, without criteria and without a merit system, puts at risk the overall work based on the principle of protection of public interest, reduces the quality of public services and hinders the country's progress in European integration processes.

Conclusion

Today, in conditions of economic and health crisis, probably more than ever, Macedonia needs professional, motivated and competent staff who will lead the institutions and seek innovative solutions to the complex situation we face.

Following the example of Great Britain, Belgium and Portugal, but also other EU member states, the appointment of the TMS must be based on merit, fair and open selection procedure, i.e. to choose the best candidate, who with his qualifications and competencies is most suitable for that job. This will ensure a clear distinction between the political and professional level of governance, and it is a key measure to restore the lost trust of citizens in institutions and the political system.

The practices of these three countries, but also of other countries within the EU have shown that the openness of jobs from one central position enhances transparency and is a greater guarantee for better information of all interested candidates. This ensures the attraction of the highest quality staff to these prestigious functions in the administration.

[13] Popovic, M. & Simjanovska, V. (2021) Who manages it there?https://idscs.org.mk/wp-content/uploads/2021/04/Koj-toa-tamu-upravuva-Finalna.pdf

Monitoring the performance of top executives, especially in the United Kingdom, but also in other member states of the Union is one of the key preconditions for improving efficiency and effectiveness in the work, but also extending the mandate of officials.

Hence, in MK it is proposed to adopt a Law on Top Management Service and to establish a central body for selection according to the principle of merit, in the procedure of appointment and appointment of the highest management structures in the state administration. This will ensure an open competition procedure that prevents the appointment or selection of incompetent top executives.

The process of selection of the top management service and the credibility of those who will make the choice, but also those who will be elected, through such a procedure, must demonstrate independence from political and corporate influences, have a good reputation and moral authority. This way of governing and management should strengthen the concept of professional administration that will defend the public and state interest, preserving the principles of good governance.

Introducing strong criteria for selection of these candidates, through such a legal solution and a central governing body, will be a guarantee that the best candidates will be selected on the basis of competencies without favoring certain solutions and political influences.

In the process of regulating this area, a performance appraisal system should be introduced which will strengthen the concept of management based on results, and the review of TMS achievements should be based on indicators of effectiveness, efficiency and quality, based on official duties of the TMS.

Finally, the management structures of such a top management service should seek the best solutions to those problems that have been identified, and the solution of which should improve the quality of life of citizens.

Annex 1. Independent state administration bodies in the Republic of North Macedonia in which a director is appointed

	ENERGY AGENCY
	EMIGRATION AGENCY
	REAL ESTATE CADASTRE AGENCY
	AGENCY FOR QUALITY AND ACCREDITATION OF HEALTH INSTITUTIONS
	AGENCY FOR DRUGS AND MEDICAL PRODUCTS
	YOUTH AND SPORTS AGENCY
	AGENCY FOR EXERCISE OF COMMUNITY RIGHTS
	SPACE PLANNING AGENCY
	ENTREPRENEURSHIP SUPPORT AGENCY
	AGENCY TO INITIATE AGRICULTURAL DEVELOPMENT
	AGENCY FOR PROMOTION AND SUPPORT OF TOURISM
	COMMODITY RESERVES AGENCY
	FOREIGN INVESTMENT AGENCY AND EXPORT PROMOTION
	SEIZURE PROPERTY MANAGEMENT AGENCY
	FILM AGENCY
	AGENCY FOR FINANCIAL SUPPORT IN AGRICULTURE AND RURAL DEVELOPMENT
	FOOD AND VETERINARY AGENCY
	CLASSIFIED INFORMATION SECURITY DIRECTORATE
	DIRECTORATE FOR OBLIGATORY RESERVES OF OIL AND OIL DERIVATIVES,
	DIRECTORATE FOR PROTECTION AND RESCUE
	RADIATION SAFETY DIRECTORATE
	DIRECTORATE FOR TECHNOLOGICAL INDUSTRIAL DEVELOPMENT ZONES
	STATE ARCHIVE
	STATE OFFICE FOR INDUSTRIAL PROPERTY
	STATE STATISTICAL OFFICE
	ACCREDITATION INSTITUTE
	INSTITUTE FOR STANDARDIZATION
	COMMITTEE ON RELATIONS WITH RELIGIOUS COMMUNITIES AND RELIGIOUS GROUPS

	NATIONAL AGENCY FOR EUROPEAN EDUCATIONAL PROGRAMS AND MOBILITY
	STATE OMBUDSMAN
	AUDIT BODY FOR AUDIT OF THE PRE-ACCESSION INSTRUMENT
	CENTER FOR CRISIS MANAGEMENT

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26. Law on Scientific Research, Ministry of Education and Science

27. Law on Primary Education, Ministry of Education and Science

28. Law on Higher Education, Ministry of Education and Science

29. Law on Student Standard, Ministry of Education and Science

30. Law on Secondary Education, Ministry of Education and Science

31. Law on Balanced Regional Development, Ministry of Local Self-Government

32. Law on Personal Data Protection, Ministry of Justice

33. Law on Execution of Sanctions, Ministry of Justice

34. Law on Real Estate Cadastre, Ministry of Justice

35. Law on Judicial Service, Ministry of Justice

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NEDA MALESKA SACHMAROSKA

OPENNESS AND ACCOUNTABILITY OF THE LOCAL SELF GOVERNMENTS IN THE REPUBLIC OF NORTH MACEDONIA

Abstract

In conditions of enhanced information and communication technology, the conceptual significance of openness and transparency of data is inevitably associated with a fast, accessible, timely and responsible information management system across many channels, through which citizens, businesses and civil society organizations have easy access to services and information. The application of information technology as a tool to improve transparency changes the way institutions have communicated with citizens so far and requires a complete transformation in the sharing of information and data of public interest. Key channels of information today are the websites of the institutions.

The purpose of this paper is to investigate the openness and transparency of local self-government units (LSGUs) in the Republic of North Macedonia (MK) by analyzing the legislation in the field of access to information and the practice of sharing information by LSGUs through modern communication channels, such as their websites. The paper covers research on the websites of 80 municipalities and the City of Skopje. The focus is on three key areas: (1) openness and transparency in decision-making processes; (2) openness and transparency of key documents in local policy making; and (3) openness transparency of public finances. The results of the research should serve to open a dialogue on the importance of improving access to information and data in local self-government.

Key words: openness, transparency, accountability, information, local self-government, public sector, institutions, public policies
JEL classification: L32

INTRODUCTION

Transparency and accountability of public institutions are key preconditions for democratic governance. The concept of accountability is often equated with a “sense of responsibility” and a commitment to act transparently, fairly and equally for all. Transparency and accountability are also seen as a tool by which governments have greater responsibility in delivering on their promises, while at the same time being exposed to checks and balances, as well as public criticism of their achievements and results.

The development of technology has massively changed the nature and the way people perform their work and made enormous changes in the access to information of people of all ages. As a consequence, in the last ten years, new initiatives have emerged on a global level, such as the concept of Open Government Partnership and **Open Data,** whose main function is to strengthen the governance processes using new technologies, as well as to change the culture of working in the institutions. E-government provides opportunities for much more accountable government and overcomes bureaucratic barriers to accessing information and data. For the citizens, this will mean greater control over the spending of public funds and participation in decision-making; for the authorities – improvement of the effectiveness of the management and promotion of services to the citizens and to the business community; for the society it means opportunities for better utilization of the potential in the economic growth and development of the country.

The subject of this research is the availability of data and information on the websites of 81 LSGUs (80 municipalities and the City of Skopje) based on 3 key parameters:

(1) openness and transparency of the decision-making processes of the Municipal Council;

(2) openness and transparency of key documents in creating local policies relevant to the economic development of the municipality;

(3) openness and transparency in the management of public finances.

A total of 21 transparency indicators have been identified (Annex 1). The indicators are based on identified data and information that local government units are required to publish based on the relevant legal framework. The availability of data and information on the websites of all municipalities in MK is analyzed in three key areas: the documents of the Municipal Council, strategic documents and public finances.

The time frame of the research covers the period February-March 2020, and at the same time a comparison is made of the available indicators from previously conducted research on this topic for 2016 and 2018. The displayed results after each of the listed indicators are obtained as a weighted average of the results of all LSGUs.

1. TRANSPARENCY AND ACCOUNTABILITY IN THE LOCAL SELF-GOVERNMENT UNITS IN THE REPUBLIC OF NORTH MACEDONIA – LEGAL FRAMEWORK

Transparency and accountability in the Republic of Macedonia is partially regulated in three systemic laws - Law on Local Self-Government[1], Law on Free Access to Public Information[2] and in the Law on the Use of Public Sector Data.[3]

The *Law on Local Self-Government (LLSG)*[4] regulates the competencies of the municipality, as well as the manner of informing the citizens (Article 7). Article 8 regulates the right of citizens to be informed about the work of municipal bodies, commissions, council and public services, free of charge, in a manner determined by the statute of the municipality.

On the other hand, in the statutes, as acts of the highest rank that regulate important issues for the operation of the municipality, little attention is paid to the proactive role of the municipality in informing the citizens, especially using modern technologies.

Another important segment that regulates the public in the work of the municipality is the Law on Local Self-Government (Article 42) which refers to the openness in the work of the Municipal Council, and which clearly states that the sessions of the Council are public. This in a way satisfies the minimum criteria for publicity in the work of the local government, but in essence does not speak of more serious solutions and standards for what should be public data published by the local government, especially not for the ways of its publication through ICT.

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1 Law on Local Self-Government (Official Gazette of the Republic of Macedonia No. 5 of January 29, 2002)

2 Law on Free Access to Public Information ("Official Gazette of the Republic of Macedonia", No. 13/2006)

3 Law on the Use of Public Sector Data (Official Gazette of the Republic of Macedonia, No. 27/2014)

4 Official Gazette of RM no. 5 of 29 January 2002

The *Law on Free Access to Public Information*[5] provides a legal framework that enables the citizens to access public information. The basic principles on which this law is based are the right of citizens to access information and the obligation of state institutions to provide the public with access to information; obligation for proactive disclosure of information of public interest by institutions and procedures or internal mechanisms that facilitate access for quick and easy access to information by the public.

The Law on the Use of Public Sector Data[6] stipulates the obligation of the bodies and institutions from the public sector for public disclosure of the data they create in performing their competencies, in order to enable the use of that data by legal or natural persons for creation of new information, contents, applications or services.

Additionally, other laws (lex specialis) that regulate the specific areas often impose obligations on the LSGU to maintain essential registers of data and information and provide insight into the situation at the local level.

The analysis of the three basic (systemic) laws listed above, as well as some lex specialis laws, showed that they formally provide normative conditions for transparency and publicity of the data held by the local self-governments. However, no roadmaps or standards for publishing data and information by local governments were developed, especially referring to electronic format. This leaves room for LSGUs to independently design the manner of fulfilling this obligation, which results into variety of published data in terms of form and substance.

2. OPENNESS AND TRANSPARENCY OF THE WORK OF THE MUNICIPAL COUNCILS

One of the key decision-making bodies in the LSGU is the Municipal Council as a representative body of the citizens. The council is responsible for creating local policies and making decisions on program priorities to making decisions about the municipal budget, adoption of the final account and other important regulations in the operation of the municipality. The members of the Council are elected in direct elections. Hence, the citizens' trust in the institu-

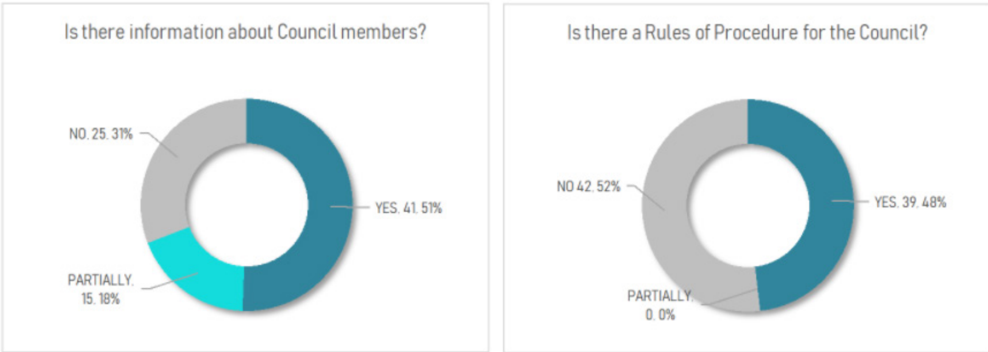
5 Law on Free Access to Public Information ("Official Gazette of the Republic of Macedonia", No. 13/2006)

6 Law on the use of public sector data("Official Gazette of the Republic of Macedonia", no.27/2014)

tions largely depends on the integrity, transparency and accountability of the councilors.

The openness and publicity in the work of the Municipal Councils in the Republic of North Macedonia can be assessed through the following indicators: published information on the members of the Council; published Rules of Procedure of the Council and information for the citizens on the agenda of the sessions and minutes from the sessions of the Council and the Commissions.

Chart 1. Information on the Municipal Council in 2020



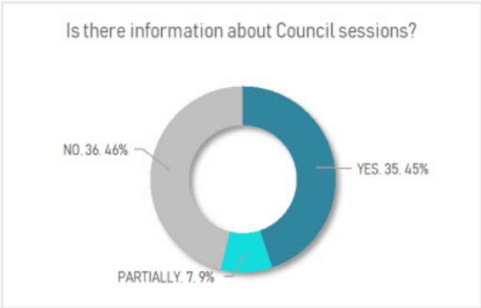
Source: Web Transparency Barometer 2020, Center for Change Management (CUP), 2020[7]

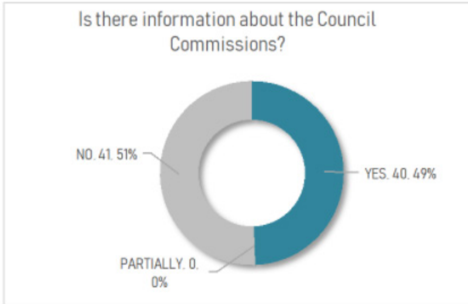
Graph 1 shows that almost half of the municipalities (41) in 2020 have no information or no complete information about the members of the Council – name and surname; which political party they represent; where and how the citizens could contact them (contact phone, e-mail address) and a picture – what "my advisor" looks like[8]. Regarding the sessions of the Council and the commissions of the Council (Chart 2), the situation is similar, i.e. most of the LSGUs do not provide publicly available information.

[7] Web Transparency Barometer 2020 https://cup.org.mk/publication/9276_Barometar%20 2020.pdf

[8] The profile of "my MP / advisor" is a tool that indicates openness and transparency. This tool and term is often used by the British Administration and symbolizes the rights and duties of councilors / MPs - to represent citizens and be accessible to citizens.

Chart 2. Information on the work of the Council and the Council Commissions in 2020





Source: Web Transparency Barometer 2020, Center for Change Management (CUP), 2020[9]

The work of the Municipal Councils in the Republic of North Macedonia is regulated by the Rules of Procedure which prescribe the organization and the manner of functioning of the Council and the working bodies of the Council. The survey showed that only 39 municipalities or 48% published the Rules of Procedure in 2020, while data and information on council sessions - agenda, minutes and decisions are available in only 35 municipalities or 45% of LSGUs. The situation is similar with the work of the Council Commissions. Data and information on key decisions affecting the lives of citizens in the community are published in only half of the municipalities throughout the Republic of North Macedonia.

Table 1 presents comparative indicators for 2016 and 2018, through which a trend of the analyzed indicators in 2020 could be seen. The indicators for 2016 and 2018 are taken from the Web Transparency Barometer 2016[10] and the Center for Change Management (CUP) internal database for 2018.

[9] Web Transparency Barometer 2020, https://cup.org.mk/publication/9276_Barometar%20 2020.pdf

[10] Web Transparency Barometer 2016, https://cup.org.mk/publication/barometer-for-web-transparency-2016

Indicator	2016	2018	2020
Statute of the municipality	49.38%	54.94%	67.90%
Official Gazettes	61.73%	63.58%	72.84%
Information for the members of the Council with contacts	48.77%	59.26%	59.88%
Information on the sessions of the Council (agenda, minutes and decisions)	26.54%	31.48%	47.53%
Rules of procedure of the council	25.31%	32.10%	48.15%
Council Committees	45.68%	41.36%	49.38%
Public information mediation official	28.40%	50.00%	61.73%
List of public information	32.10%	45.68%	56.79%

Table 1. Comparative overview of indicators for openness and transparency in the work of the LSGU Councils for 2016, 2018, 2020

Over the years, some improvement and upward trends are visible in terms of transparency and accountability of municipalities. In 2016, only 26% of the municipalities published data on the work of the Council, agenda, minutes and decisions, while in 2020, this indicator was 47% (Table 1). The improvement in terms of appointing an official for mediation of public information is also noticeable, i.e. 61.7% of the municipalities in 2020 fulfilled this legal obligation.

The Official Gazette is legally stipulated tool to demonstrate the transparency and accountability of the municipalities. According to the survey, 73% of the municipalities publish data and information in the Official Gazette which is available on the websites. However, this is an outdated mechanism, i.e. not adapted to the new technologies and standards for data openness and availability of documents in 3 clicks.

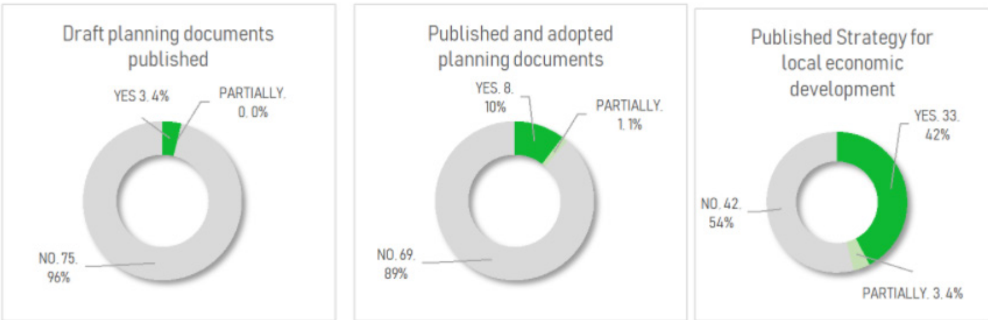
Good practice in developed democracies, especially in United Kingdom and Northern Ireland, shows that the minutes of the municipal commissions are published and structured in a way that ensures easy follow-up of procedures and conclusions, but more importantly, each piece of data contains recommendations made by the Council to overcome certain problems or situations. At the same time, the personal responsibility of councilors is extremely important in the implementation of local policies.[11]

[11] Shikova, N., Maleska-Sachmaroska, N., Bochvarska, V., (2014) Greater participation, better policies and regulations, Center for Change Management

3. OPENNESS AND TRANSPARENCY OF KEY DOCUMENTS IN CREATING LOCAL POLICIES

A second important area in the work of local self-government is the way in which local policies are created. The planning documents of the municipalities reflect the priorities of the local authorities and their intention to invest in certain areas such as production, agriculture, shopping malls, etc. Along to the Local Economic Development Strategies, they talk about investment opportunities and development potential. Given the relevance of these issues, the policy-making documents of the municipality, together with the movable and immovable property of the LSGUs should be made public.

Chart 3. Published and adopted planning and program documents in 2020



Source: Web Transparency Barometer 2020, Center for Change Management (CUP), 2020[12]

The data from Chart 3 show that the draft planning documents are published in only 3 municipalities (4%) out of 81; the adopted planning documents are published in 8 municipalities or 10% of the municipalities, while the data on the movable and immovable property of the municipality cannot to be found on the websites of the municipalities. In the UK, for example, disclosure of municipal property data, including planning and programming documents, is mandatory and required by the Transparency and Accountability Act.[13].

[12] Web Transparency Barometer 2020, https://cup.org.mk/publication/9276_Barometar%20 2020.pdf

[13] Local Government Transparency Code 2014;https://www.gov.uk

Table 2. Comparative overview of indicators for openness and transparency of planning and strategic documents of the municipalities for 2016, 2018 and 2020

Indicator	2016	2018	2020
Proposed planning documents	5.56%	9.26%	3.70%
Adopted planning documents	21.60%	23.46%	10.49%
Strategy / Program for local economic development	36.42%	29.63%	42.59%
Environmental Strategy / Program	28.40%	24.07%	18.52%
Education Strategy / Program	4.94%	14.81%	10.49%
Online tool for communication / consultation with citizens	34.57%	21.60%	71.60%
Real estate owned by the municipality	0.62%	3.70%	1.23%
Real estate owned by the municipality	2.47%	3.70%	0.00%

Source: Web Transparency Barometer 2020, Center for Change Management (CUP), 2020[14]

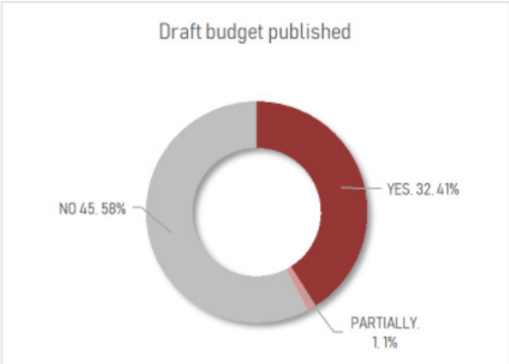
Looking at the comparative data (Table 2), the research shows that the transparency and accountability in relation to the strategic documents that determine the directions of development of the municipalities, is completely absent. There is a downward trend in the publication of planning documents. Only the Strategies / Programs for local economic development show improvement and they are publicly announced in 42% of the municipalities. What is visible is an improvement in terms of two-way communication and consultation with citizens, where 71% of municipalities have such tools. Their functioning was not the subject of this research.

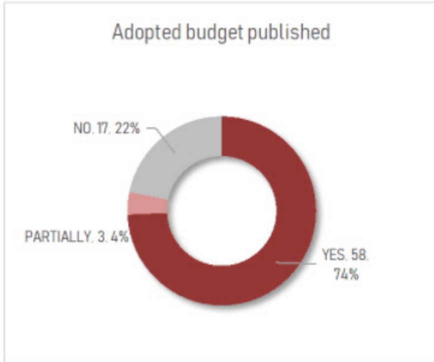
4. OPENNESS AND TRANSPARENCY IN PUBLIC FINANCIAL MANAGEMENT

Financial transparency is another interesting area for analysis in order to improve transparency and accountability, but also a better insight into how public money is spent. Budget is a key place from where citizens can get information on how much municipal funds are available for next year, the sources of revenues and how they are distributed. The processes of monitoring and evaluating local policies and budgets mean finding ways to improve the quality of decisions in the interest and prosperity of both citizens and communities. As a precondition, it is necessary to have publicity and debate in the way public money is spent and for what purpose.

[14] Web Transparency Barometer 2020, https://cup.org.mk/publication/9276_Barometar%20 2020.pdf

Chart 4. Openness and transparency of the municipal budget in 2020

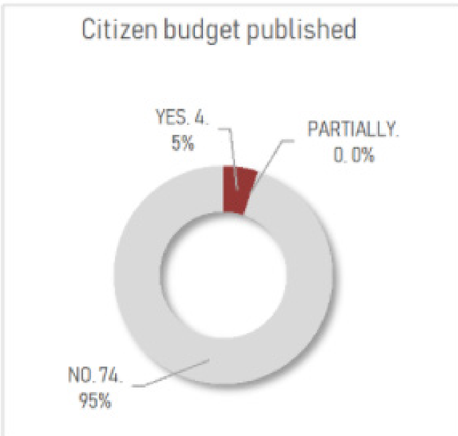




Source: Web Transparency Barometer 2020, Center for Change Management (CUP), 2020[15]

The data from the survey of Chart 4 show that only 41% of the municipalities published the draft budget on their websites, while the number of municipalities that published the adopted budget is higher, i.e. 58% (Chart 4).

Chart 5. Published citizen budget



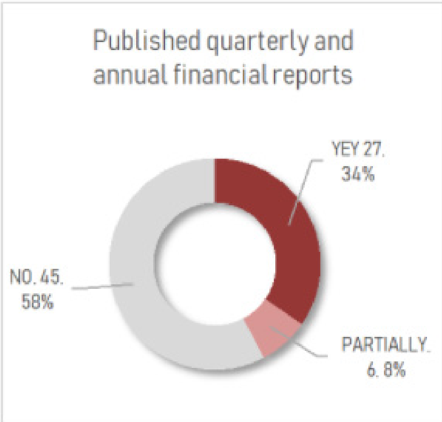
Unfortunately, additional analyzes show that due to the absence of program budgeting and publication of the so-called citizen budget, it is difficult

[15] Web Transparency Barometer 2020, https://cup.org.mk/publication/9276_Barometar%20 2020.pdf

for citizens to understand the sources of the revenues in the municipal budget and how the resources are distributed (Chart 5).

Additionally, only 34% publish the quarterly and annual reports about the realization of the budget in a visible and accessible place on their web pages (Chart 6). This clearly speaks of the need to improve the financial transparency of local self-governments in the Republic of North Macedonia.

Chart 6. Published reports



On the other hand, good practices indicate that local governments in the UK, for example, are obliged to tell citizens “How your money is spent”, where simple graphic representations can track the inflow of funds into the municipality and their source, their distribution in ratio of costs, i.e. what percentage and in what proportion the citizens’ money is used for: health, education, culture and art, recreational activities, etc.

Table 3. Comparative overview of indicators for openness and transparency of public finances of LSGUs for 2016, 2018, 2020

Indicator	2016	2018	2020
Draft budget	9.88%	19.14%	40.12%
Adopted budget	61.73%	70.99%	73.46%
Citizen budget	3.70%	2.47%	4.94%
Final bill	35.19%	69.75%	58.02%
Quarterly and annual financial statements	8.64%	29.01%	37.04%
Program financial statements	1.85%	8.64%	17.28%
Public procurement plan	16.67%	30.86%	50.62%
Public Procurement Report	4.94%	4.94%	32.72%
Report of the State Audit Office	8.64%	16.05%	17.90%

Source: Web Transparency Barometer 2020, Center for Change Management (CUP), 2020[16]

Although the data for 2020 are not particularly encouraging, however, the comparative data referring to 2016 and 2018 indicate serious improvements. In 2016 only 10% of the municipalities have published the draft budget before its adoption (for discussion and consideration by the citizens), while this indicator rose to 40% in 2020. The situation is similar in terms of reporting on budget implementation through quarterly and annual financial statements. In 2016, only 8.6% of the municipalities reported on the work done, while 37% of the municipalities published their financial statements in 2020. With regards to publishing public procurement plan and the reports on their implementation, there was leap from 4% in 2016 and 2018 to 32% in 2020, which is significant improvement, but still additional efforts are needed in this field.

The data provided above indicate that transparency, accountability, and accordingly, the democratic control of the government and institutions in the Republic of North Macedonia needs to be a part of continuous debate and under constant public pressure.

CONCLUSION

Improving the transparency and accountability of local self-governments and participation of the citizens and the business community in creating better and justified decisions and policies should contribute not only to strengthening the democratic processes in the local self-government and the principles of good governance, but also to reducing opportunities for corrup-

16 Web Transparency Barometer 2020, https://cup.org.mk/publication/9276_Barometar%20 2020.pdf

tion and improving the conditions for community development. In an era in which innovation and technological development are gaining momentum, local governments have a responsibility to use new methods of communicating with citizens and increase openness and transparency through their websites, and the data they publish should and must be accessible and understandable to citizens.

The analysis of the legal regulations indicates that the issue of transparency and accountability of the local self-government in Republic of North Macedonia is not fully regulated and does not take into account the development of information and communication technologies. The practice show that it is not enough for certain provisions to be included in legal stipulations, but to build, always through a collaborative approach, a unified system and standards (roadmaps) for publishing data that will apply to all local self-governments.

In general, through the websites, the municipalities and the City of Skopje provide partial transparency, but minimal accountability, especially in terms of determining the strategic priorities of the municipalities and the realization of the set goals. Furthermore, the the accountability with regards to public finances is not sufficient, despite the trend of improving over the last years. The establishment of a budget monitoring mechanism, publication of the citizens' budget, report of expenditures against key results, further evaluation of local policies and dialogue on issues important to the citizens in the municipality are key preconditions for community development. Finally, the openness and accountability of local government improves communication, strengthens integrity and restores the citizens' trust in the institutions and those who lead them. Therefore, progress is this field is a must.

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11. Law on Personal Data Protection ("Official Gazette of the Republic of Macedonia" No. 7/05; No. 103/08; No. 124/10; No. 135/11; No. 43/14; No. 153/15; . 99/16)
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ANNEX 1: MEASUREMENT INDICATORS

Indicator
Statute of the municipality
Official Gazettes
Information for the members of the Council with contacts
Information on the sessions of the Council (agenda, minutes and decisions)
Rules of procedure of the council
Council Committees
Public information mediation official
List of public information
Draft budget
Adopted budget
Citizen budget
Final bill
Quarterly and annual financial statements
Program financial statements
Public procurement plan
Public Procurement Report
Report of the State Audit Office
Proposed planning documents
Adopted planning documents
Strategy / Program for local economic development
Environmental Strategy / Program
Education Strategy / Program
Online tool for communication / consultation with citizens

ANNEX 2. LIST OF WEBSITES OF THE MUNICIPALITES CONSULTED IN THE RESEARCH

1. Aerodrom www.aerodrom.gov.mk
2. Arachinovowww.opstinaaracinovo.gov.mk
3. Berovowww.berovo.gov.mk
4. Bitolawww.bitola.gov.mk
5. Bogdanciwww.bogdanci.gov.mk
6. Bogovinjewww.komunabogovine.gov.mk
7. Bosilovowww.opstinabosilovo.gov.mk
8. Brvenicawww.brvenica.gov.mk
9. Butelwww.opstinabutel.gov.mk
10. Valandovowww.valandovo.gov.mk
11. Василевоwww.optinavasilevo.gov.mk
12. Vevcani www.vevcani.org.mk
13. Veleswww.veles.gov.mk
14. Vinicawww.opstinavinica.gov.mk
15. Sparrowwww.komunavrapcisht.gov.mk
16. Gazi Babawww.gazibaba.gov.mk
17. Gevgelijawww.gevgelija.gov.mk
18. Gorche Petrovwww.opstinagpetrov.gov.mk
19. Gostivarwww.gostivari.gov.mk
20. The City of Skopjewww.skopje.gov.mk
21. Gradskowww.gradsko.gov.mk
22. Debarwww.dibra.gov.mk
23. Debrcawww.debarca.gov.mk
24. Delchevowww.delcevo.gov.mk
25. Demir Kapijawww.demirkapija.gov.mk
26. Demir Hisarwww.demirhisar.gov.mk
27. Dojranwww.opstinadojran.gov.mk
28. Dolneniwww.dolneni.gov.mk
29. .Elinowww.mkd.zhelina.gov.mk
30. Zelenikovowww.zelenikovo.gov.mk
31. Zrnovciwww.zrnovci.gov.mk
32. Ilindenwww.ilinden.gov.mk
33. Jegunovcewww.opstinajegunovce.gov.mk
34. Kavadarciwww.kavadarci.gov.mk
35. Carbinciwww.karbinci.gov.mk

36. Karposhwww.karpos.gov.mk
37. Kisela Voda www.kiselavoda.gov.mk
38. Kichevowww.kicevo.gov.mk
39. Konchewww.konce.gov.mk
40. Kochaniwww.kocani.gov.mk
41. Kratovowww.opstinakratovo.gov.mk
42. Kriva Palankawww.krivapalanka.gov.mk
43. Krivogashtaniwww.krivogastani.gov.mk
44. Krushevowww.krusevo.net.mk
45. Kumanovowww.kumanovo.gov.mk
46. Lipkovowww.opstinalipkovo.gov.mk
47. Lozovowww.opstinalozovo.gov.mk
48. Mavrovo and Rostushawww.rostuse.gov.mk
49. Makedonska Kamenicawww.makedonskakamenica.gov.mk
50. Makedonski Brodwww.mbrod.gov.mk
51. Mogila www.mogila.gov.mk
52. Negotinowww.negotino.org.mk
53. Noviceswww.opstinanovaci.gov.mk
54. New villagewww.novoselo.gov.mk
55. Ohridwww.ohrid.com.mk
56. Petrovecwww.opstina-petrovec.gov.mk
57. Pehchevowww.opstinapehcevo.gov.mk
58. Plasnicawww.plasnica.gov.mk
59. Prilepwww.prilep.gov.mk
60. Probistipwww.probistip.gov.mk
61. Radovishwww.radovis.gov.mk
62. Rankovcewww.rankovce.gov.mk
63. Resenwww.resen.gov.mk
64. Rosomanwww.opstinarosoman.gov.mk
65. Sarajwww.saraj.gov.mk
66. Sveti Nikolewww.svetinikole.gov.mk
67. Sopishtewww.sopiste.gov.mk
68. Staro Nagoricanewww.staronagoricane.gov.mk
69. Strugawww.struga.gov.mk
70. Strumicawww.strumica.gov.mk
71. Studenichaniwww.optinastudenicani.gov.mk
72. Tearcewww.tearce.gov.mk
73. Tetovowww.tetovo.gov.mk;

74. Centerwww.opstinacentar.gov.mk
75. Zupa Centerwww.merkezjupa.gov.mk
76. Chairwww.cair.gov.mk
77. Cashka www.caska.gov.mk
78. Cheshinovo - Obleshevowww.cesinovo.gov.mk
79. Cucer Sandevowww.cucersandevo.gov.mk
80. Stipwww.stip.gov.mk
81. Shuto Orizariwww.sutoorizari.org.mk

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(Original scientific paper)

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IMPACT OF COVID-19 PANDEMIC ON THE MORTALITY IN REPUBLIC OF NORTH MACEDONIA

Abstract:

The aim of the paper is to determine the impact of the Covid-19 pandemic on the mortality in Republic of North Macedonia. In terms of identifying the influence of Covid-19 on mortality changes, demographic and other features, as well as causes of death, are analyzed in pre-pandemic and in 2020-2021. The available data of State Statistical Office, Institute of Public Health and foreign data sources are used. The analysis shows great increase of the mortality, due to Covid-19 as well as non-Covid deaths. The provisional data for 2021 shows that total mortality is about 40% higher than in 2019. Besides that, significant changes in the demographic and ethnic structure of deaths happened in 2020 compared to 2019, accompanied with changes in the causes of death. One of the main impacts of Covid-19 in Republic of North Macedonia is the high excessive mortality.

Key words: mortality, causes of death, Covid-19 pandemic, Republic of North Macedonia
JEL classification: J1, I3

Introduction

The mortality during the Covid-19 pandemic has reached extremely high levels. Whether it was direct cause of the pandemic or indirect mortality

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as a result of other diseases, the world faced numbers surpassing the expectable deaths.

The aim of the paper is to determine the impact of Covid-19 pandemic on the mortality in Republic of North Macedonia in a broader sense, including its implications on the excessive mortality. Therefore, the research provides brief insight on the mortality by Covid-19 and non-Covid deaths. In order to identify the consequences of the pandemic an analysis of the mortality in the pre-pandemic period is made. It is focused on the changes in total mortality as well as mortality by sex, age, ethnic affiliation and causes of death, as a basis for identifying present and delayed effects of the pandemic.

In the study the data on the mortality from State Statistical Office of the Republic of North Macedonia and Institute of Public Health are used, but also, available data from relevant international data sources is considered. The paper offers insight on the changes in the mortality in pre-pandemic period (2005-2019), as well as in the pandemic period from 2020 until the last available data. For 2021 there are provisional data only for total mortality.

1. IMPACT OF COVID-19 ON GLOBAL MORTALITY CHANGES

The Covid-19 pandemic has caused more or less emphasized changes in the mortality in all countries worldwide. In 2020 total number of deaths by Covid-19 in the world amounts 1,869,175 persons, and in 2021 it is almost three times higher (5,427,351 persons).[3] The structure of the total number of deaths in 2020 and 2021 (7,296,526 persons), by continents shows that Europe stands out with the largest share (28.4%), followed by North America (23.7%), South America (22.0%) and Asia (21.8%). Smallest is the participation of Africa (4.0%) and Oceania (0.1%).

The pandemic has affected mortality by causing significant number of deaths from Covid-19, but also non-Covid deaths due to lockdown restrictions, delays in accessing health care and bottlenecks in providing usual health care. Overwhelmed health systems and stretched capacity could potentially result in substandard management of non-Covid-19 related conditions, intensifying pre-existing deficiencies and inequities contributing to excess mortality.

[3] Our World in Data, https://ourworldindata.org/grapher/cumulative-covid-deaths-region, Approached on: 10.3.2022

There are several factors impacting on Covid-19 and non-Covid deaths during the pandemic. They are ranging from individual risk factors and attitudes to restriction measures, to public health policies and changes in health systems. Individual fears of contracting the disease or of overburdening the system may influence the health-seeking and lead to increased deaths from non-Covid causes. There are examples, where the number of patients presenting with heart attacks and stroke has declined during the outbreak. Urgent referrals for suspected cancer have fallen in many countries, which may reflect a decrease in patients presenting with serious symptoms or changes to clinician thresholds for referral due to health system pressures, leading to both short- and long-term impacts on indirect mortality.[4] Globally, the World Health Organization has found that 42% of countries have experienced disruptions to cancer services, 49% for diabetes and 31% for cardiovascular disease services.[5]

Recent research points out that some vulnerable individuals who died of Covid-19 might otherwise have died from alternate causes, a concept known as “mortality displacement”. Short-term increases in mortality due to Covid-19 may result in a relative reduction in mortality from other causes in subsequent weeks and a gradual fall in total excess mortality over time. However, mortality displacement is unlikely to explain the falls in mortality in younger age groups where mortality from Covid-19 is low. Factors such as a lowering of air pollution during the pandemic may have had positive impacts on mortality. Deaths from suicide, injury and poisoning are the leading causes of death in younger adults in some countries, and social restrictions may have led to falls in deaths from these causes.[6]

Many countries reported more than 50% increase in mortality at the peak of the pandemic, while few countries that imposed early and strict lockdown measures, reported none or a reduction. Also, there were differences between countries in the proportion of excess deaths from historical rates that were registered as Covid-19-related. It was a result of the differences in healthcare systems, case definitions and availability of testing, variations in the historical baseline of all-cause death rates from which the number of excess deaths was

[4] Beaney T., Clarke M. J. , Jain V., Et al., Excess mortality: the gold standard in measuring the impact of COVID-19 worldwide?, Journal of the Royal Society of Medicine, https://doi.org/10.1177/0141076820956802

[5] World Health Organization, COVID-19 Significantly Impacts Health Services for Non-communicable Diseases, https://www.who.int/news-room/detail/01-06-2020-covid-19-significantly-impacts-health-services-for-noncommunicable-diseases

[6] Beaney T., Clarke M.J., Jain V., Et al., Excess mortality… op.cit.

estimated and other factors that contributed to deaths from causes other than Covid-19. Potential explanations for the greater increase in all-cause mortality than reported Covid-19 related deaths include misclassification of deaths due to Covid-19 attributed to another cause, and deaths from causes indirectly related to Covid-19 such as cardiovascular and thrombotic events.[7]

Determining the causes of the indirect Covid-19 deaths is difficult, as the complex set of social and economic changes induced by the pandemic may have changed people's decision-making and overall wellbeing, leading to higher mortality. A research shows that the number of patients presenting to the emergency room with heart attacks in 2020 decreased drastically as the hospitalization rates for Covid-19 increased. The stress of the pandemic has caused people to allow their health to worsen by gaining weight or cutting back on medication.[8]

Stokes et al. estimated that 17% of excess deaths attributable to the pandemic were not assigned to Covid-19 on death certificates. These deaths could include mortality caused directly by Covid-19 that was misclassified and indirect mortality related to Covid-19. They also found that these excess deaths occurred at higher rates in countries with lower socioeconomic status and among people with comorbidities, which may indicate that indirect Covid-19 deaths account for a large percentage of the excess deaths. Regardless of the exact causes and statistics surrounding Covid-19's indirect impact on mortality, it is clear that the virus caused more deaths than the official death counts would suggest.[9]

2. MORTALITY FEATURES IN PRE-PANDEMIC PERIOD

In the last two decades mortality in the Republic of North Macedonia noticed changes that more or less correspond with the process of demographic ageing (Figure 1). At the same time the mortality rates increased from 8.4% (2000), to 9% (2005), 9.3% (2010), 9.9% (2015) and 9.8% (2019). Regarding

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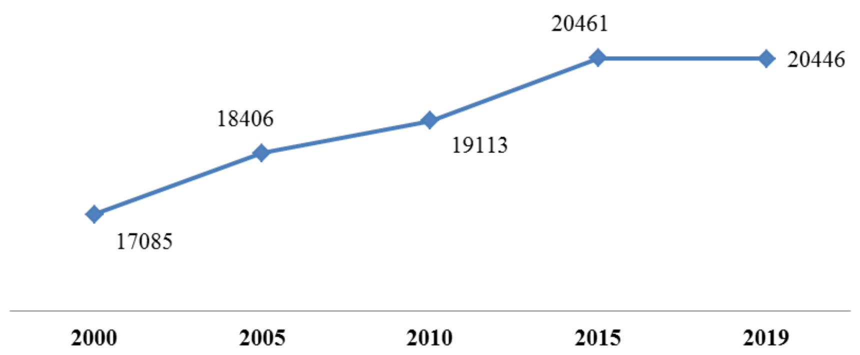
7 Kung S., Doppen M., Black M., et al., Underestimation of COVID-19 mortality during the pandemic, ERJ open research., https://openres.ersjournals.com/content/erjor/7/1/00766-2020.full.pdf

8 CNBS, U.S. Deaths from Heart Disease and Diabetes Climbed amid Covid, CNBC, 9 June 2021, www.cnbc.com/2021/06/09/us-deaths-from-heart-disease-and-diabetes-climbed-amid-covid.html

9 Stokes, A. C., et al. "COVID-19 and Excess Mortality in the United States: A County-Level Analysis." *PLOS Medicine*, vol. 18, no. 5, 2021, doi:10.1371/journal.pmed.1003571

these indicators, one should have in mind that after 2005 this indicator was gradually losing its relevance, due to lack of relevant data on the total population of the country. The population projections didn't include the migration, i.e. the emigration abroad, which recorded continuous and great increase in last two decades.

Figure 1. Total number of deaths in North Macedonia, 2005-2019



Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef *(Approached on: 10.2.2022).*

Relatively large changes can be seen in terms of the demographic and ethnic characteristics of the mortality, as well as of the causes of death in the period 2005-2019. The data for *deaths by gender* shows that the number of deaths of men has increased for 8.2%, i.e. from 9815 (2005) to 10616 persons (2019), while the number of deaths of women rose for 14.4% or from 8591 to 9830 persons, respectively. Due to these changes the share of dead men in the total number of deaths decreased from 53.3% to 51.9%.

Regarding the *age structure* of deaths in the country, in the period 2005-2019 it has decreased for all age groups, with exception of those aged 65 and over (Table 1). Thus, the decline is very high at the age group of 15-24 for 46.7%, then at the age groups of toddlers (1-4) for 27.8% and of children (5-14) for 28.3%. The lowest decrease is noticed for the persons aged 45-64 (for 1.4%). Due to this trend, evident is change in the structure of deaths by age groups. They are manifested in the decreased participation of all mentioned age groups, except those aged 65 and over, which share rose from 73.4% (2005) to 78.2% (2019).

Table 1. Total number and structure (in %) of deaths by age groups, North Macedonia, 2005-2019

	Total	Under 1 year	1-4	5-14	15-24	25-44	45-64	65 and over
	Number							
2005	18406	287	36	46	135	606	3787	13509
2010	19113	185	17	36	111	598	3907	14259
2015	20461	198	26	52	96	526	3964	15599
2019	20446	112	26	33	72	476	3733	15994
	Structure (in %)							
2005	100.0	1.6	0.2	0.2	0.7	3.3	20.6	73.4
2010	100.0	1.0	0.1	0.2	0.6	3.1	20.4	74.6
2015	100.0	1.0	0.1	0.3	0.5	2.6	19.4	76.2
2019	100.0	0.5	0.1	0.2	0.4	2.3	18.3	78.2

Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 12.2.2022)

The most significant change is characteristic for the *infant mortality*. According to a previous research, the available data are showing that the infant mortality rate have decreased from 31.6 per 1,000 (1990) to 11.8 per 1,000 live births (2000).[10] After 2000 it is noticing considerable oscillations and in 2013 it reaches the level from 2002. In the period 2005-2019 the total number of dead infants decreased for more than 60%, and infant mortality rate declined from 12.8 to 5.6 per 1,000 live births respectively. The drop of infant mortality is most emphasized after 2015.[11]

In terms of the *ethnic structure of the mortality*, the available data show that in the period 2010-2019 the highest increase is characteristic for the Bosnians (31.5%), and then come the Albanians (11.7%) and Macedonians (6.4%). The mortality stagnates for the Serbian and Roma ethnics, while decreases for the Turkish and Vlachos ethnicities (Table 2). In 2019 the share of Macedonians in the total number of deaths was 74.4%, of the Albanians was 16.8%, while of all other the ethnic groups are significantly lower.

[10] Lozanoska A., Janeska V., *Infant Mortality in the Republic of Macedonia*, Proceedings from the Fifth International Conference of the Balkans Demography: *The population of the Balkans at the dawn of the 21st century*, Skopje, 2017, p. 175-176.

[11] State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 12.2.2022)

Table 2. Number of deaths by ethnic affiliation, North Macedonia, 2010-2019

	2010	2015	2019	2010	2015	2019
	Total number			Structure in % (total=100)		
Total	**19113**	**20461**	**20446**	**100.0**	**100.0**	**100.0**
Macedonian	14298	15163	15206	74.8	74.1	74.4
Albanian	3073	3402	3432	16.1	16.6	16.8
Turkish	450	466	442	2.4	2.3	2.2
Roma	457	479	458	2.4	2.3	2.2
Vlach	62	58	58	0.3	0.3	0.3
Serbian	427	435	429	2.2	2.1	2.1
Bosniak	92	147	121	0.5	0.7	0.6
Other and unknown	254	311	300	1.3	1.5	1.5

Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 12.2.2022)

Analysis of the mortality by causes of death indicates that in the period 2005-2019 the highest number of deaths was caused by the diseases of the circulatory system and neoplasms (Table 3). Their share in the total number of deaths has oscillating trend, and in 2019 it has decreased on 51.8% (diseases of the circulatory system) and 18.6% (neoplasms).

Table 3. Mortality in North Macedonia by causes of death*, 2005-2019

	Number of deaths				Structure in % (total=100)			
	2005	2010	2015	2019	2005	2010	2015	2019
Total	**18 240**	**19113**	**20 461**	**20 446**	**100.0**	**100.0**	**100.0**	**100.0**
Diseases of the circulatory system	10 756	11 069	11 939	10 586	59.0	57.9	58.4	51.8
Neoplasms	3 212	3 705	3 741	3 800	17.6	19.4	18.3	18.6
Symptoms, signs and abnormal clinical findings, not elsewhere classified	1 337	1 245	1 335	2 188	7.3	6.5	6.5	10.7
Diseases of the respiratory system	722	712	761	903	4.0	3.7	3.7	4.4
Endocrine, nutritional and metabolic diseases	698	741	878	950	3.8	3.9	4.3	4.6
Diseases of the nervous system	121	158	353	649	0.7	0.8	1.7	3.2
Diseases of the genitourinary system	263	262	323	364	1.4	1.4	1.6	1.8
Injury, poisoning and certain other consequences of external causes	587	588	513	455	3.2	3.1	2.5	2.2
Diseases of the digestive system	332	370	378	341	1.8	1.9	1.8	1.7
Certain conditions originating in the perinatal period	47	125	145	62	0.3	0.7	0.7	0.3
Infectious diseases	100				0.5			
Other	65	138	95	148	0.4	0.7	0.5	0.7

** International Statistical Classification of Diseases and Related Health Problems, 10th Revision*

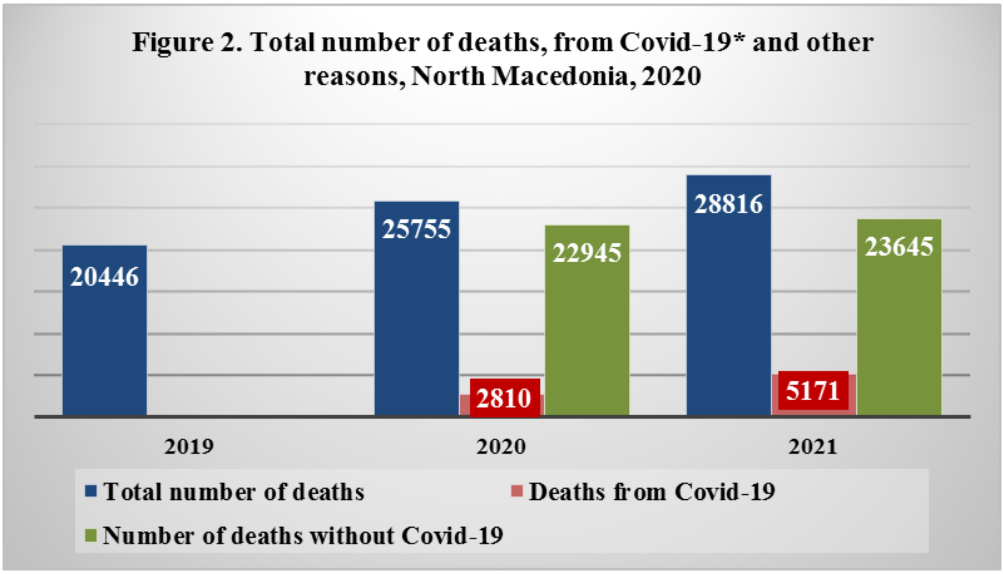
Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 13.2.2022)

Very large increase was noticed in the number of deaths from diseases of the nervous system (more than five times) and from symptoms, signs and abnormal clinical findings, not elsewhere classified (for 63.5%), diseases of the genitourinary system (for 38.4%) and endocrine, nutritional and metabolic diseases (for 36.1%).

3. MORTALITY CHANGES DURING THE COVID-19 PANDEMIC

The mortality in Republic of North Macedonia in 2020 and 2021 noticed great increase and significant changes in its demographic and other features. Compared to 2019, total number of deaths in 2020 increased for 5309 persons (26%), while in 2021 for 8370 persons and 40.9%. As a result, mortality rate increased from 9.8% (2019) to 12.4% (2020). These changes mostly are consequence of the Covid-19 pandemic, but also of the increase in deaths caused by other reasons (non-Covid deaths).

The number of Covid-19 deaths rose from 2810 (2020) to 5171 persons (2021), or for 84% (Figure 2). The share of Covid-19 deaths, in the above mentioned increase of the total number of deaths, amounts 52.9% and 61.8%, respectively. At the same time, the number of non-Covid deaths in 2020 and 2021 related to 2019 rose for 2499 (12.2%) and 3199 persons (15.6%), and they participate in the increase of total number of deaths with 47.1% and 38.2%, respectively.



** The data on the number of deaths in 2020 is from the State Statistical Office, while in 2021 from the Institute of Public Health*

Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 13.2.2022)

The great increase in mortality since the beginning of the Covid-19 pandemic has had an impact on the changes of the life expectancy and average age of the population in the country (Table 4). According data for 2018-2020 the decrease in the life expectancy of the total population, men and women is evident. It was accompanied by a significant increase in the gap between men and women. As for the indicators for the average age, they show that demographic aging continues with the same intensity as in previous years.

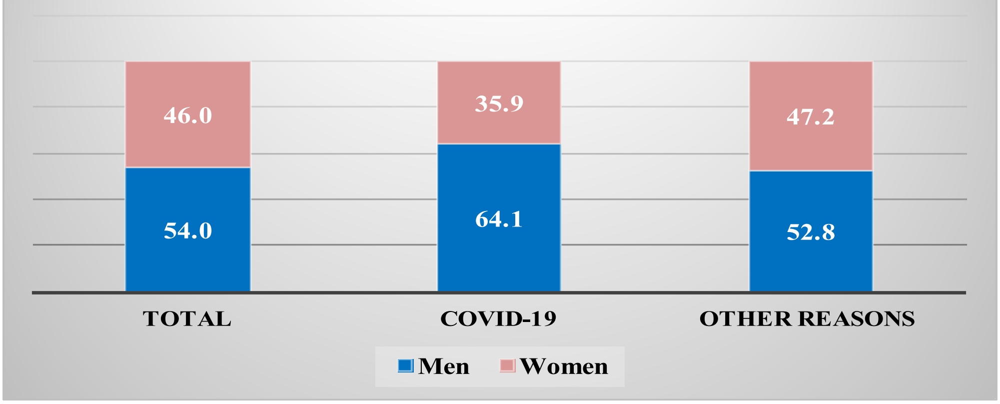
Table 4. Life expectancy and average age of the population, North Macedonia

	Life expectancy			Average age		
	2016-2018	**2017-2019**	**2018-2020**	**2018**	**2019**	**2020**
All	**75.95**	**76.34**	**75.74**	**39.2**	**39.5**	**39.8**
Male	74.00	74.39	73.62	38.4	38.6	38.9
Female	77.94	78.29	77.87	40.1	40.4	40.6

Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 17.2.2022)

During the Covid-19 pandemic, there were major changes in the gender and age structure of the total number of deaths. In 2020, the share of dead men raised (54%) compared to 2019 (51.9%). This is mainly caused by higher male mortality from Covid-19 (Figure 3). Its share in the total number of Covid-19 deaths is about two thirds (64.1%).

Figure 3. Gender structure (in %) of deaths - total, Covid-19 and other reasons, North Macedonia, 2020



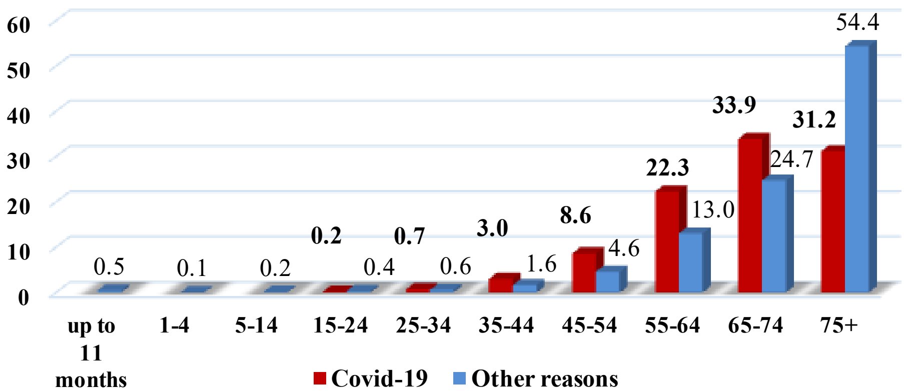
Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 17.2.2022)

Regarding the age of deaths in 2020 compared to 2019, above-average growth (26%) is characteristic for the population aged 35-54 (33.6%) and 55-

74 (35.5%), and relatively lower increase for the aged 75+ (19.4%). Mortality rates by five-year age groups, for men and women, in this period indicate their progressive growth for the population aged 60 and over, with more emphasized increase for men. In 2020 the share of the population aged 55-74 (39.8%) and of those aged 75 and over (51.8%) dominates in the total number of deaths. In 2020, infant mortality is almost same as in 2019.

The influence of the Covid-19 pandemic on the change in the age structure of the total number of deaths in Republic of North Macedonia is also evident (Figure 4). A comparison of the share of deaths from Covid-19 and non-Covid deaths by age groups shows progressively increased differences at older population. The share of deaths due to Covid-19, compared to those who died due to other reasons, is almost twice as high in the age groups 35-44 and 45-54, and significantly higher in the age groups 55-64 and 65-74. More than half (56.2%) of those who died by Covid-19 were aged 55-74. As for those aged 75 and over, the share of non-Covid deaths (54.4%) is higher than Covid-19 deaths (31.2%)._

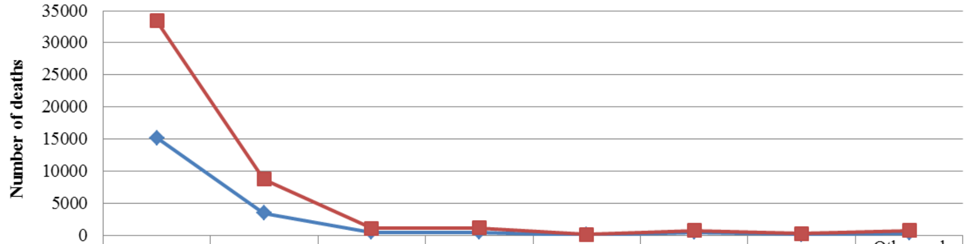
Figure 4. Age structure (in %) of deaths caused by Covid-19 and other reasons, North Macedonia, 2020



*Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 17.2.2022)_*

There are significant differences in the increase of deaths by ethnic affiliation in 2020 compared to 2019 (Figure 5). It is highest among Albanians (54.7%), Roma (41.7%), Turks (40.0%), Bosnians (34.7%), and relatively lower for Macedonians (19.9%). Due to these changes the share of Macedonians in total number of deaths decreased from 74.4% (2019) to 70.8% (2020), while of Albanians increased from 16.8% to 20.6%, respectively.

Figure 5. Number of deaths by ethnic affiliation, North Macedonia, 2019 and 2020



	Macedonian	Albanian	Turkish	Roma	Vlach	Serbian	Bosniak	Other and unknown
2020	18227	5308	619	649	60	322	163	407
2019	15206	3432	442	458	58	429	121	300

Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 22.2.2022)

Apart from Covid-19 as cause of death, in 2020 in Republic of North Macedonia, 2499 more persons have died compared to the previous year. The causes for their death give certain knowledge about the increased non-Covid mortality in the country. They show that the dominant causes of mortality remain diseases of circulatory system and neoplasms, which noticed small increase (Table 5).

In 2020, compared to 2019, with the largest increase, stand out diseases of: respiratory system (65.5%); nervous system (47.3%); endocrine, nutritional and metabolic diseases (44.7%); genitourinary system (42.0%). Relatively high is the increase of deaths due to Symptoms, signs and abnormal clinical findings, not elsewhere classified (30.1%). At the same time the number of deaths from other reasons is twice as high. Due to these changes, the structure of deaths according the causes of death in 2020 was significantly changed.

Table 5. Deaths by causes of death[*] in North Macedonia, 2019 and 2020

	Number of deaths		Increase / decrease (in %) 2020/2019	Structure in % (total=100.0)	
	2019	2020		2019	2020
Total	**20 446**	**22945****	**12.2**	**100.0**	**100.0**
Diseases of the circulatory system	10 586	10 726	1.3	51.8	46.7
Neoplasms	3 800	3 908	2.8	18.6	17.0
Symptoms, signs and abnormal clinical findings, not elsewhere classified	2 188	2 847	30.1	10.7	12.4
Diseases of the respiratory system	903	1 495	65.6	4.4	6.5
Endocrine, nutritional and metabolic diseases	950	1 375	44.7	4.6	6.0
Diseases of the nervous system	649	956	47.3	3.2	4.2
Diseases of the genitourinary system	364	517	42.0	1.8	2.3
Injury, poisoning and certain other consequences of external causes	455	438	-3.7	2.2	1.9
Diseases of the digestive system	341	381	11.7	1.7	1.7
Certain conditions originating in the perinatal period	62			0.3	0.0
Communicable diseases					0.0
Other	148	302	104.1	0.7	1.3
Covid -19		**2 810**			

** International Statistical Classification of Diseases and Related Health Problems, 10th Revision*
***Without Covid-19 deaths*
Source: State Statistical Office of the Republic of North Macedonia,
https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef
(Approached on: 22.2.2022)

In determining the impact of Covid-19 pandemic on mortality changes in Republic of North Macedonia it is important to keep in mind deaths, grouped according to where death occurred and medical treatment received before death (Table 6). Related to place where death occurred in 2020 evident is the rise of death in a medical facility, which compared to 2019 increased for 36.7%, and its share reach more than one third (34.3%). Due to that, the number of those received treatment before death increase for 27.4%. In 2020 significant increase is characteristic for deaths confirmed by physician (29.7%) and cause of death given by physician (27%).

Table 6. Deaths, grouped according to where death occurred and medical treatment received before death, North Macedonia, 2016-2020

	2016	2017	2018	2019	2020
Total	**20 421**	**20 318**	**19 727**	**20 446**	**25 755**
Place where death occured					
Medical facility	6 552	6 537	6 159	6 464	8 837
Elsewhere	13 869	13 781	13 568	13 982	16 918
Percentage of deaths in a medical facility	32.1	32.2	31.2	31.6	34.3
Received treatment before death					
Treatment received	19 119	18 925	18 138	18 640	23 755
Treatment not received	1 302	1 393	1 589	1 806	2 000
Percentage of medically treated before death	93.6	93.1	91.9	91.2	92.2
Death confirmed by:					
Physician	15 546	15 691	15 170	15 858	20 564
Other person	4 875	4 627	4 557	4 588	5 191
Cause of death given by:					
Physician	20 274	20 104	19 306	20 196	25 643
Other person	147	214	421	250	112
Percentage of deaths for which causes were given by a physician	99.3	98.9	97.9	98.8	99.6

Source: Source: State Statistical Office of the Republic of North Macedonia, https://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Approached on: 22.2.2022)

In the periods of large inflow of patients infected with Covid-19, apart from the Infectious Diseases Clinic, other clinics were repurposed to receive these patients (alongside that, modular Covid-19 hospitals were built and put into operation). Under these circumstances, many patients were unable to undergo regular control health examinations (which were cancelled or rescheduled) or to receive specialist's treatments. This could be seen as one of the reasons for non-Covid mortality increase. Besides that, many Covid-19 patients faced with post-Covid complications which lead to other diseases as causes for death.

4. EXCESSIVE MORTALITY IN REPUBLIC OF NORTH MACEDONIA

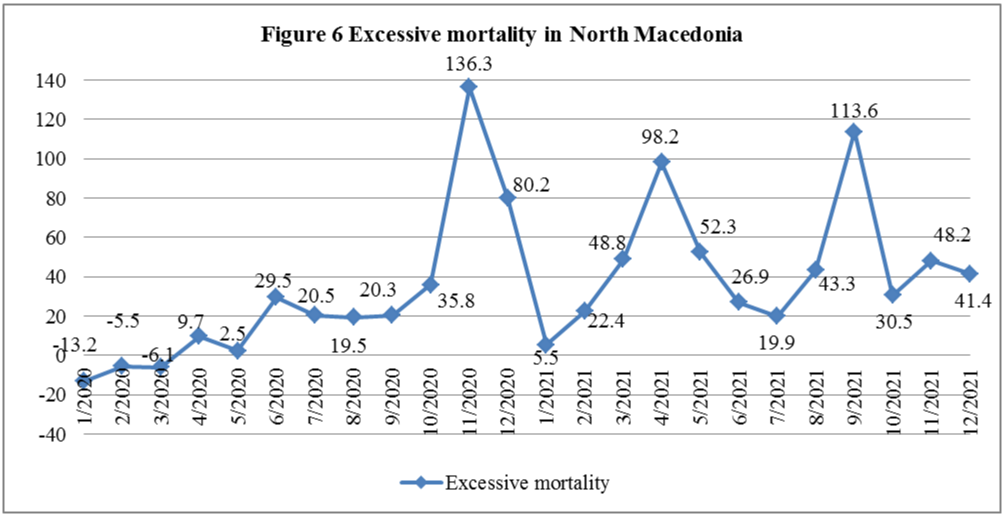
Excess mortality refers to the number of deaths from all causes measured during a crisis, above what could be observed under 'normal' conditions. The excess mortality indicator simply takes the number of people who died from any cause, in a given period, and compares it with a historical baseline from previous years in a period which was not affected by the pandemic. The higher the value, the higher the amount of additional deaths compared to the baseline.[12]

The total number of deaths caused by the pandemic may be even higher, for several reasons. First, the official statistics of the country can exclude victims who did not test positive for corona virus before dying. Second, hospitals and civil registries may not process death certificates for several days which create lags in the data. And third, the pandemic has made it harder for doctors to treat other conditions and discouraged people from going to hospital, which may have indirectly caused an increase in deaths from diseases other than Covid-19.[13]

The number of deaths during the Covid-19 crisis rose rapidly in Republic of North Macedonia, particularly when compared to the average number of deaths in the previous period (2015-2019). The available data show that during this pandemic there were several periods when the excessive mortality in the country was particularly high (Figure 6).

[12] Eurostat, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Excess_mortality_-_statistics

[13] The Economist, https://www.economist.com/graphic-detail/coronavirus-excess-deaths-tracker



Source: Our World in Data, https://ourworldindata.org/grapher/excess-mortality-p-scores-projected-baseline?country=~MKD (Approached on 1.3.2022).

When compared the number of excess deaths and official Covid-19 deaths over the time, in November 2020 the deviation from the expected deaths was extremely high +136%, while in December it reached +80.2%. In 2021 this indicator was +98% in April and +113.6% in September. As a result, in the period from April 2020 until December 2021, the excess deaths since country's first 50 Covid-19 deaths rose from 7950 to 15340 persons meaning 736 deaths per 100 thousand people.[14]

The excessive mortality mainly caused by Covid-19, although in different periods and with different intensity, is present more or less in all countries from the Balkan region. In November 2020 relatively high excessive mortality was noticed in Albania (120.2%), Bulgaria (127.6%) and Kosovo (103.0%), while in November 2021 they are significantly higher than in Republic of North Macedonia (48.2%) in Bulgaria (77.7%), Croatia (84.5%) and Serbia (86.4%).[15]

[14] The Economist, https://www.economist.com/graphic-detail/coronavirus-excess-deaths-tracker

[15] Our World in Data, https://ourworldindata.org/grapher/excess-mortality-p-scores-projected-baseline?country=~MKD

CONCLUSION

Most of the researches on the changes in the mortality during the pandemic period show that there was an increase in the total mortality caused by Covid-19, as well as by growth of non-Covid deaths. It was accompanied with significant changes in the number and structure of non-Covid deaths by other diseases, seen in decrease of the share of previously most represented diseases. There are many determinants for such modifications in the mortality structure, including the public health policies, capacities of health systems and their overload, reduced possibilities for regular health controls, individual risk factors and attitudes to restriction measures, individual fears of contracting the disease, etc.

In terms to identify the impact of Covid-19 on mortality in the Republic of North Macedonia brief analysis of the pre-pandemic mortality was made. It shows that the total mortality noticed changes which more or less correspond with the process of demographic ageing. They are accompanied with: increase of women deaths; decrease of deaths at all age groups (including infants), except those 65 and over; more pronounced differences of the largest ethnic groups i.e. more intensive increase of deaths of Albanians compared to Macedonians. Related to causes of death more than half of total deaths are by diseases of the circulatory system and about one fifth due to neoplasms.

During the pandemic the country was faced with historically the highest mortality since the end of Second World War. In 2020-2021 the total number of deaths by Covid-19 was 7981 persons. At the same time the number of non-Covid deaths, compared to the situation in 2019, is higher for about 5700 persons. This huge increase in mortality resulted in decline of the life expectancy for 2018-2020, accompanied with an increased gap between men and women. Besides that, it implicates significant changes in the demographic and other features of deaths. In 2020 compared to 2019 they are manifested in: higher increase of men mortality; above-average mortality growth for the population aged 35-54 and 55-74 and relatively lower increase for persons aged 75 and over (56.2% of deaths from Covid-19 are aged 55-74 years and 31.2% are aged 75+); more than two times higher increase of Albanians' mortality compared to Macedonians.

The number of deaths by the causes which were dominant in the pre-pandemic period, in 2020 remains almost the same. The growth in the non-Covid deaths is result of the increase of deaths by diseases of the: respiratory system; nervous system; genitourinary system; and endocrine, nutritional and metabolic diseases. These changes are consequence of the health system's burden and repurpose of some clinics, resulting in cancelled or rescheduled doctor's appointments, reduced regular health check-ups or possibility to receive specialist's treatments etc. At the same time there were post-Covid complications which led to other diseases as causes of death. Due to the previously mentioned reasons, more or less throughout entire pandemic, Republic of North Macedonia is facing with significant excessive mortality, mainly caused by Covid-19.

This research mostly is based on Covid-19 mortality data for 2020. If the data for 2021 for all relevant aspects were available, more profound analysis on the pandemic's impact on the mortality in Republic of North Macedonia could be done. Nevertheless, further researches on non-Covid deaths for 2021 and next years, considering expected prolonged and maybe today unknown consequences of Covid-19 on people's health, are necessary.

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(Original scientific paper)

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CLIMATE FINANCE: GLOBAL AND NATIONAL PERSPECTIVES IN THE CONTEXT OF COVID-19 PANDEMIC IMPACT

Abstract

In this paper we investigated global and national public climate finance. We provide a novel methodology for estimating public climate finance in the government budgets with its application to the case of the City of Skopje. Climate finance globally reached USD 632 bn in 2020 with an annual increase of only 10%, compared to previous years, which grew by about 25%. The achieved level is far from the required USD 4.35 trillion per year to meet climate objectives by 2030. We found that global pandemic of COVID-19 negatively affected the growth of the global climate finance in 2020 and lowered the level of public climate finance in many developing countries. North Macedonia is a small developing country with clear commitment to combating climate change. The Enhanced Nationally Determined Contributions (ENDC) include 63 mitigation policies and measures to reduce GHGs emissions by 51% by 2030, which require EUR 25.03 billion climate investments. Using the methodology for Climate Budget Tagging (CBT), we estimated that the amount of public climate finances of the City of Skopje in 2020 reached USD 6.09 million, which represents as much as 9.07% of the overall budget expenditures for the year, and an increase of 75% from the previous year.

Keywords: climate finance, climate budget tagging (CBT), UNFCC, Enhanced Nationally Determined Contributions (ENDC), North Macedonia

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JEL Classification: H72, Q51, Q54

Introduction

The earth's surface global mean temperature is currently 1.0° C higher (0.8° C - 1.2° C range) than in the pre-industrial period (1850-1900). It has increased faster in these 170 years than at any other time in the past 800,000 years. This trend is unequivocally linked to human activities responsible for the release of greenhouse gases (GHGs) (IPCC, 2018). To avoid catastrophic climate change, 197 countries adopted the Paris Climate Agreement in 2015. It aims to limit the increase of global average temperatures since pre-industrial levels to well below 2° C, while pursuing efforts to stay within 1.5°C. Climate change is one of the greatest threats to humanity triggering the risk of extreme drought, wildfires, floods, and food shortages for hundreds of millions of people.

Climate change is considered as the "greatest investment opportunity in history" valued at about 10 percent of global GDP, providing an unprecedented opportunity to unlock massive economic and social benefits that can help achieve the Sustainable Development Goals (SDGs). Bold climate action could trigger USD 26 trillion in economic benefits by 2030 and create around over 65 million new jobs (AICC, 2019). It is estimated that annually USD 1.6 – USD 3.8 trillion (with an average of about USD 3.5 trillion) energy system investments are needed between 2016 and 2050 to achieve a low-carbon transition (De Coninck, et al., 2018). The United Nations Environment Program (UNEP) estimates that the annual cost of adaptation could range from USD 40 to 300 billion annually by 2030 (Olhoff et al., 2016), while others estimate between USD 280 and USD 500 billion annually by 2050 (UNEP, 2016). Global climate finance flows reached USD 632 billion in 2019/2020, and to meet our climate objectives, by 2030 annual climate finance must increase by 588% to USD 4.35 trillion (CPI, 2021). Therefore, there is a preexisting shortfall between the approximated costs of green recovery and available financial resources, meaning that green development still has relatively lower investments compared to traditional investments (Shipalana and Chigwenya, 2021).

Underdeveloped and developing countries face several economic, political, and existential problems. Undertaking climate activities in these countries facing a shortage of climate finance is supported by developed industrialized countries. In line with the "common but differentiated responsibilities and respective capabilities" principle (Article 4, UNFCCC), developing countries have articulated their financial and capacity-building needs in their NDCs and made their contributions conditional on receipt of international support. At the 15th Conference of Parties (COP15) of the UNFCCC in Copenhagen in 2009, developed countries committed to a collective goal of mobilizing USD 100 billion per year by 2020 to assist and address the needs for climate action in developing countries, in context of meaningful mitigation actions and transparency in implementation. The goal was formalized at COP16 in Cancun (UNFCCC, 2010) and was reiterated for 2020 and extended to 2025 at COP21 in Paris (UNFCCC, 2015). At the request of developed countries, the OECD has, since 2015, produced analyses of progress towards this goal. The most recent historical OECD figures indicate that climate finance provided and mobilized by developed countries reached USD 79.6 billion in 2019, up by only 2% from 2018 (OECD, 2021). OECD has developed two forward-looking scenarios for climate finance provided and mobilized by developed countries to developing countries in 2021-2025 where significant growth is forecasted between USD 83 billion – USD 117 billion annually (OECD, 2021a).

In response to the climate change challenge, governments in both developed and developing countries have been increasingly planning and implementing adaptation and mitigation actions. International climate finance has also been available and is expected to significantly increase in the coming years now that the Green Climate Fund (GCF) is operationalized and committed to providing up to USD 100 billion per year. However, given that climate change is a cross-cutting issue affecting all sectors of the economy, effective responses to climate change require a whole-of-government approach, involving participation from both the public and private sectors. Central to this approach is the significant engagement of the planning and finance ministries, together with other line ministries, in fully integrating climate change within an overall national development strategy. Tracking of climate public expenditure as the first step to implementing such an approach needs to integrate climate change into the national budgetary and planning process (UNDP, 2019).

North Macedonia submitted an Enhanced Nationally Determined Contributions (ENDC) providing a roadmap to reduce greenhouse gas emissions by 51% by 2030, which is predicted to be implemented by means of 63 mitigation policies and measures (MASA, 2020). This requires EUR 25.03 billion climate investments, where the funding structure is planned to be by Government only (4%), other source of financing only (no government) (43%), and mixed financing (government + other - private sector, donors, consumer) (54%)

(McClellan, 2021). Moreover, North Macedonia has been preparing to initiate the process of integration of climate change issues into its national plans and budget. For that purpose a national methodology for Climate Budget Tagging (CBT) has been developed. CBT is a government-led process of identification, measurement, and monitoring of climate-relevant public expenditures, helping mainstreaming climate change in the public financial management system to mitigate and adapt to the economic, social, and environmental impacts of climate change in a systematic manner.

1. METHODOLOGY FOR TRACKING PUBLIC CLIMATE FINANCE

The assessment of the public climate finance was conducted using the newly developed methodology for Climate Budget Tagging (CBT) in 2021 by the Ministry of Environment and Physical Planning (Upadhya and Naumoski, 2021). Budgeting for climate change is a fairly new concept worldwide aiming at integrating, tracking, and monitoring public climate expenditures into government budgets. It is also known as climate budgeting, green budgeting, climate budget tagging, climate change budgeting, climate budget tagging. The development of this concept experienced expansion in 2021 (OECD, 2021b; UNDP, 2021; Pizarro et al., 2021), when also it was developed Macedonian national methodology that is fully consistent with world-renowned methodologies.

The definition of the key variables according to this methodology is as follows. *Climate expenditure is* any expenditure incurred in addressing climate change related activity. *Climate change mitigation* activities contributes to the objective of the stabilization of greenhouse gas (GHGs) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by reducing or limiting GHGs emissions or to enhance GHGs sequestration (OECD, 2011). *Climate change adaptation activities* intends to reduce the vulnerability of human or natural systems to the current and expected impacts of climate change, including climate variability, by maintaining or increasing resilience, through increased ability to adapt to or absorb climate change stresses, shocks, and variability and/or by helping reduce exposure to them (OECD, 2011).

Climate Budget Tagging (CBT) is a tool for identifying, classifying, weighting, and marking climate-relevant expenditures in a government's budget system, enabling the estimation, monitoring, and tracking of those expenditures. It includes the process of attaching a climate budget marker, such as a tag or account code, to budget lines or groups of budget lines (Bain et al., 2019).

Not all CC activities identified as such have the same budgetary components that are relevant to CC actions. For some CC activities, most of the budget is related to CC, while for others it may only be a portion of its budget that is related to CC. Since the aim of CBT is to capture the CC related budget, it is important to identify the actual CC related budget as far as possible. This will be sorted out by providing *weight factor* to the activities and grouping them based on the level of climate relevance.

Each budget activity should be investigated and if it is identified to be climate related, it should receive two marks:

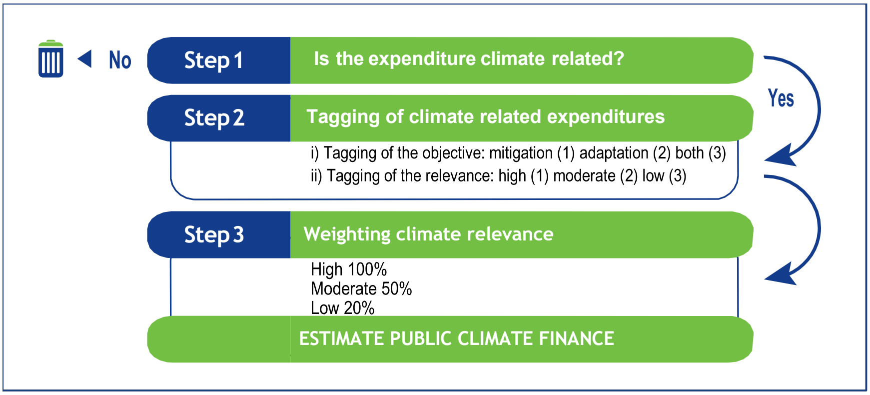
- First mark is for the *type of climate activity***.** Climate-related programs / activities will first be marked with 1, 2 and / or 3 to indicate the species to which it belongs: mark 1 means "mitigation", mark 2 means "adaptation", mark 3 means "both".
- Second mark denotes the *climate relevance* of the activity**.** Climate-related activities will then be marked with 1, 2 or 3, indicating different levels of climate change relevance. Mark 1 indicates "high relevance"; mark 2 indicates "moderate relevance"; mark 3 indicates "low or marginal relevance". **High relevant** activities are those with a clear focus on climate change; **medium relevant** activities are those that have links to climate change objectives; **low relevant** activities are those that are related to the medium relevant expenditures but not directly linked to climate change.

Following classification of the activities on mitigation and adaptation, to quantify climate relevant expenditures, the next step in the CBT would be to see the extent to which the program is relevant to climate change. This means to identify and apply the weighting of relevance to climate change of these activities. The relevance to climate change of policies and program depends on the responsiveness to the estimated current and potential impacts of climate change on different population groups, different geographic areas and different institutional capabilities to deliver services. When the entire budget of the program is climate related, it is then rather easy to provide the weight since the entire budget can be considered climate relevant. Whereas there are many programs which by nature are climate related but only a fraction of the budget of those programs addresses climate issues. Capturing those portions of the budget is crucial while tracking climate expenditure. Therefore, identifying the level of relevance by climate expenditure is important:

- If an activity is marked as "**highly relevant**" for mitigation or adaptation, **100%** of the expenditure is considered and reported as climate finance.
- If an activity is marked as "**medium relevant**" for mitigation or adaptation, **50%** of the expenditure is considered and reported as climate finance.
- If an activity is marked as "**low relevant**" for mitigation or adaptation, **20%** of the expenditure is considered and reported as climate finance.

When an activity is marked for both mitigation and adaptation, then the amount of the expenditure should be split in half between adaptation and mitigation.

Figure 2. The process of CBO and estimation of public climate finance in the government budget



Source: authors' own presentation

2. ESTIMATING CLIMATE FINANCE OF THE CITY OF SKOPJE

2.1 Public Climate Finance of the City of Skopje over the 2018 – 2020 period

The capital of the Republic of North Macedonia, the City of Skopje, has in recent years placed more emphasis on investing in environmental protection, with special emphasis on investments in tackling and adapting to the adverse effects of climate change. The City of Skopje has developed a "Resilient Skopje - Climate Change Strategy" (UNDP, 2017). In each subsequent year the City allocates an increasing amount of funds in its own budget for the implementation of climate activities. The implementation of the measures foreseen in the Strategy is phased, by years.

The assessment of climate finance was performed using the methodology shown above on activity-based approach. Using the publicly available financial statements of the City where the implemented budget expenditures are presented by activities, first we made identification and selection of activities that meet the criteria for mitigation activities and adaptation activities. Consequently, each activity was marked by its type (mitigation, adaptation, or both) and by its climate relevance (highly, low, or medium relevant). The actual expenditure of each activity was weighted according to the climate relevance of the activity, and thus translated into the amount of climate finance related to that activity.

The commitment of the City of Skopje in the fight against climate change is evident through the volume of conducted climate activities and the amount of public climate expenditures. In the analyzed three-year period of 2018 - 2020, 55 climate activities were undertaken within various budget programs for which USD 16.7 million was spent. By applying the methodology described above, and the weights of the climate relevance of each identified activity, it is estimated that for the three-year analyzed period the public climate finances of the City of Skopje amount to USD 12.1 million, which is 6.7% of the total expenditures of the basic budget of USD 180.7 million. Table 1 provides a more detailed overview of the amounts of individual items by year. It is evident that the climate finance of the City of Skopje has a large absolute growth, as well as growth of its relative share in the total expenditures, especially in 2020.

Table 1. Climate finance and total public expenditures of the City of Skopje (*in USA$)*

	2018	*2019*	*2020*	*Total*
Number of climate related projects / activities	*17*	*20*	*18*	*55*
Total realized expenditures of the Own Budget of the City of Skopje	*49.541.187*	*63.958.697*	*67.174.380*	*180.674.264*
Total expenditures on climate activities	*3.775.443*	*5.152.666*	*7.785.644*	*16.713.753*
Total climate finance	*2.526.754*	*3.487.774*	*6.094.855*	*12.109.384*
Climate finance as % of total public expenditures	*5,10%*	*5,45%*	*9,07%*	*6,70%*

Source: author's own calculations

Although the economic activity in 2020 was reduced due to the impact of the global pandemic of Covid-19 virus, the public climate finances of the City of Skopje experienced the largest growth of as much as 75% compared to pre-pandemic 2019, while the total basic budget expenditures in 2020 grew only by 5% compared to 2019. The growth of climate finance is because of the pandemic. Namely, although with the initial budget of the City for 2020 the allocation of expenditures was planned differently, precisely because of the insufficient implementation of some of the planned activities, before the end of 2020 the budget was revised, and so a large part of the budget was relocated to climate activities. This relocation was mostly aimed at providing subsidies to citizens to replace heating stoves used by households based on fossil fuel, coal, wood, and other fuels that emit carbon dioxide and other GHGs emissions, with alternative modern forms of heating that are not GHGs emitters. Therefore, the amount of public climate finances of the City of Skopje in 2020 reached USD 6.09 million, which represents as much as 9.07% of the total budget expenditures for the year.

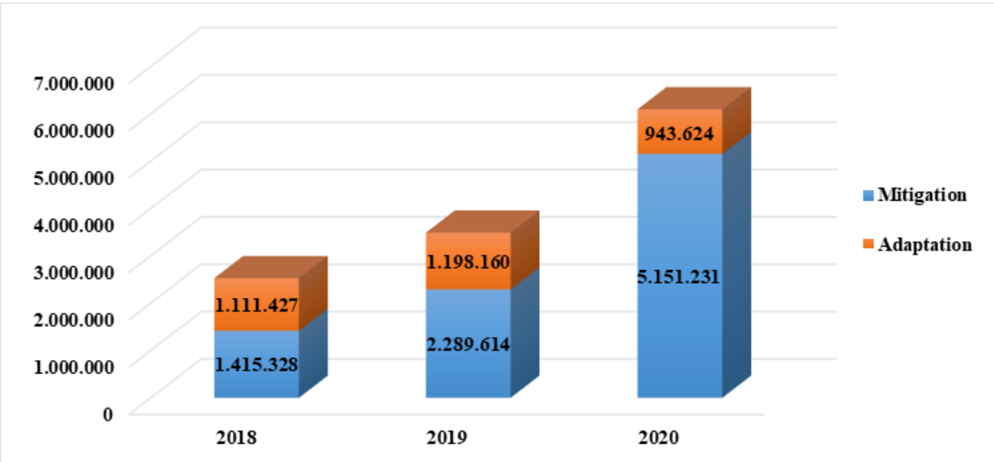
The climate finances of the City of Skopje in 2020 reached the highest level. Table 2 and Figure 3 show their distribution between climate finance related to climate mitigation activities and climate change adaptation activities. All years are marked by the relative share of finances related to mitigation activities, while in 2020 there is an absolute decrease in finances related to adaptation activities. This ratio correlates with global trends in climate finance (CPI, 2021).

Table 2. Climate finance for mitigation and adaptation of the City of Skopje over the period 2018 – 2020 (in USA $)

	2018		*2019*		*2020*		*Total*	
	amount	***%***	***amount***	***%***	***amount***	***%***	***amount***	***%***
Mitigation	*1,415,328*	*56.0%*	*2,289,614*	*65.6%*	*5,151,231*	*84.5%*	*8,856,173*	*73.1%*
Adaptation	*1,111,427*	*44.0%*	*1,198,160*	*34.4%*	*943,624*	*15.5%*	*3,253,211*	*26.9%*
Total	*2,526,754*		*3,487,774*		*6,094,855*		*12,109,384*	

Source: authors' own calculations

Figure 3. Climate Finance of the City of Skopje between 2018 – 2020 *(in USA$)*



Source: authors' own calculations

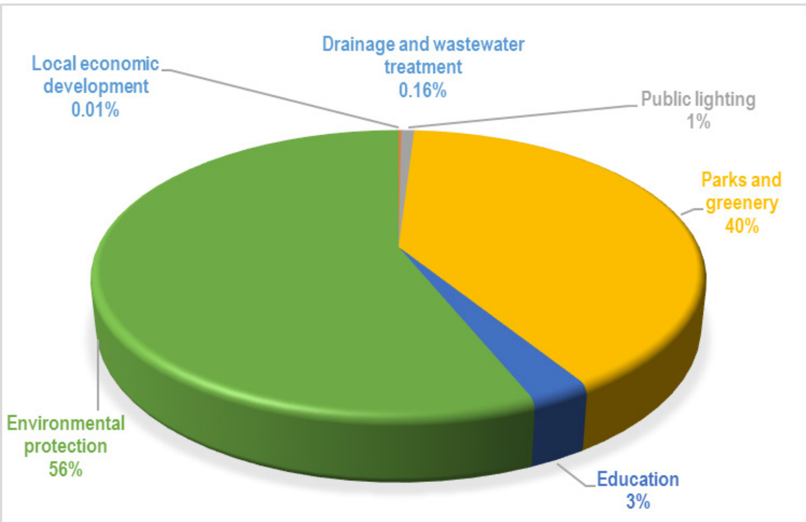
Climate change is a crosscutting issue and public sector activities relevant to climate change adaptation and mitigation are often scattered across several city's departments and budgetary programs. Most of the climate finances of the City of Skopje are implemented through the budget program for environmental protection of 56%, and then through Parks and greenery of 40%.

Table 3. Structure of the climate finance of the City of Skopje between 2018 – 2020 by budget programs (in USA$)

Name of the program	*Climate finance*		*Total in 2018 - 2020*
	mitigation	*adaptation*	
Local economic development	*1.208*	*0*	*1.208*
Drainage and wastewater treatment	*0*	*19.421*	*19.421*
Public lighting	*99.103*	*0*	*99.103*
Parks and greenery	*2.853.274*	*2.004.956*	*4.858.230*
Education	*331.502*	*0*	*331.502*
Environmental protection	*5.571.086*	*1.228.834*	*6.799.919*
Total	**8.856.173**	**3.253.211**	**12.109.384**

Source: authors' own calculations

Figure 3. Structure of the Climate finance of the City of Skopje 2018 – 2020 by budget program (in %)



Source: authors' own calculations

Conclusion

Public climate finance today accounts for 51% of total climate finance globally, while the public sector is expected to play an even more dominant role in taking decisive climate mitigation and adaptation actions on the path to creating carbon-neutral sustainable development. Climate action is only one of the goals of sustainable development, although it seems to be the highest priority. Climate finance reached USD 632 billion at a global level in 2020 where public sector provides 51% of finances for climate actions with dominant role of the development finance institutions providing 68% of the public finance and the government budgets provide 6% from the total climate finance. The amount of climate finance is not even close to the required level of USD 4.35 billion per year to achieve carbon neutrality and reduce global warming to 1.5 C by 2030. High-emissions investment in the meantime continues to flow in key sectors, which are curbing the impact of new finance in climate mitigation and adaptation. Climate investment should count in the trillions, whereas fossil fuel investments should virtually stop in this decade (CPI, 2021). Moreover, no sector is on track to meet the required investment levels (annual renewable energy investments need to at least triple, while adaptation finance needs to increase at least fourfold).

Developed countries should play a leading role in combating climate change, but also in providing climate finance for the needs of developing countries.

The global pandemic of the Covid-19 virus has had an adverse effect on climate activity, leading to a slowdown in climate finance growth. Countries faced lockdowns, but on the other hand, to cope with rising unemployment, social and economic effects, budget reallocations were implemented, which were to the detriment of declining climate activity. This has had a particularly adverse effect on the funds that developed countries have allocated to developing countries.

The Republic of North Macedonia is strictly focused on combating climate change. In 2021, it submitted the revised Nationally Determined Contributions, which outlined 63 highly ambitious carbon reduction programs. Their implementation requires the mobilization of as much as EUR 25.03 billion, which will be financed together by the public and private sector, but also through the available financial mechanism of the UNFCCC and other sources of international finance.

With the support of UNDP and the use of GEF funds through a project approach in 2021, a national Climate Budget Tagging methodology was created to monitor and direct public climate finance. By applying this methodology, the public climate finances of the capital City of Skopje were evaluated, which has the second largest budget after the one of the central government. The City of Skopje is strictly committed to combating climate change, having the appropriate strategy for this. The global pandemic of Covid-19 has led to a significant reduction in international financial support for climate activities in North Macedonia. But for the City of Skopje in 2020, it has led to a large increase in public spending on climate activities because of the relocation of budget expenditures.

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ORGANIZATIONAL BEHAVIOR IN TIME OF CHANGES

Abstract

The science of the organization has always been focused on economic efficiency, and rightly so. Now the managerial phenomena and the learning for the organization are returning with greater intensity. That is why this review and concept paper focuses on organizational behavior and new factors affecting employees in the business organization that have arisen as a result of changes in the management economy and the organization. The aim of a organizational behavior is that managers provide knowledge about why people behave the way they behave and how this behavior can change. That is why when we talk about organizational behavior in the context of change we must make a theoretical analysis and synthesis of all variables that affect changes in the organizational environment.

Keywords: organizational structure, organizational knowledge, leadership, conflicts.
JEL classification: D23, O15

Introduction

The organization as a basic undertaking represents an organizational system, which consist several elements: people, objectives, means of production and business functions, and relationships between people. Changes which occur in the organization are very frequent. The behavior of people in organization has become an increasingly important factor of successful realization of the objectives of the organization, since the man is her center factor. Human

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represents not only a function of a function of execution, but also control the activities of the organization. That is why human behavior in organization in contemporary theory and practice of management is dedicated more attention, which is contributing a better business performance as well as the humanization of work.

Today, organizational behavior is widely accepted concept in the area of management. In theory, organizational behavior indicates an area, which studies human behavior in organizational environment, the basic factors which are affecting to the organization and behavior as well as methods which can influence the behavior and organization. In practical terms, organizational behavior is new managerial activities which consist of shaping the behavior of people. Two primary components of the organizational behavior are the individual, who is in the organization and it behaves in a certain way, and the organization as an environment which causes a particular behavior of the employee. Organizational behavior allows understanding human nature, gives the ability to predict the behavior of the employees in certain situations, but it also points to how the organizational environment affects the behavior of the employees. A man reacts to the environment by manifesting a certain behavior, and the task of manager is to direct that behavior. The study of organizational behavior should allow the understanding of human behavior in the organization. The importance of the study of organizational behavior is the fact that we live in an organized society. Each of us is a member of at least one organization. Therefore, organizational behavior is the understanding, predicting and controlling human behavior in the organization.

The subject of organizational behavior is studying human behavior, attitudes, values and performances in organizations. It is an interdisciplinary concept, which coverage knowledge from other sciences, such as psychology, sociology, social anthropology, social psychology. People's behavior is analyzed at the level of individuals, groups of individuals and organizations as a whole. In this way, watching the overall behavior of people in business process organization enables appropriate measured of management in achieving planned objectives. The process of cultivating human resources is increasingly coming to the fore in economically developed countries. Thanks to that process, organizational culture and organizational climate as improved ways of behavior of people in the organization develop.

1. ORGANIZATIONAL BEHAVIOR AS A CONTEMPORARY SCIENCITIFIC DISCIPLINE

Organizational behavior is the study of human behavior in the organizational environment. That includes understanding, predicting and controlling human behavior. Common to all definitions of organizational behavior is studying and understanding individual and group behavior, and behavior patterns in order to improve organizational performance and efficiency. [2] Organizational behavior is an area of organization which studies the behavior of people in organizations, the level of the individual, working groups and teams to the widest level of the organization as a whole. The behavior of people in organizations is studied at three levels: individual, group and organizational. At the individual level, people's behavior is significantly determined by differences in personal characteristics, abilities and perceptions of employees. A very important factor in individual behavior in organizations is individual learning, because almost all behaviors of people actually learned that behaviors are the results of a particular learning process.

Larry Cummings gave the following definition of organizational behavior: ''Organizational behavior is a way of thinking, a way of understanding the problems, conducting research and finding the right solutions".[3] Thus, organizational behavior is understanding, predicting and control of human behavior in the organization. Organizational behavior involves the study of a range of organizational concepts and activites based on them which enable the understanding of human behavior in organization and changing the behavior by managers. Organizational behavior allows understanding human nature, hence the ability to predict the behavior of employees in certain situations, but it also points how the organizational environment affects the behavior of employees.

1.1 Scientific basis of contemporary organizational behavior

Organizational behavior is interdisciplinary concept, which relies on related behaviorist sciences, but also to other unrelated fields of science, such as political sciences, for example.

Knowledge from psychology helps to understand behavior at the individual level, first of all, the processes of individual learning, motivation,

[2] Mullins, L.J: *Management and organizational Behaviour*, Prentice Hall, London 2005, p. 26

[3] Jovanović, M: *Introduction to Business*, Megatrend University, Belgrade 2009, p. 158

perception, the nature of personality, aspiration levels, elements of employee satisfaction, attitudes, stress, etc.

Knowledge from sociology, focuses to the study of the social system in which individuals are organized into groups, they help to better understand the behavior of employees at the group and organizational levels: in situations when they work together with others in groups and teams; as well as the concomitant of the joint work of people such as conflicts, coalition, leadership, communication, power, etc., and then the effects of achieving technological, organizational and political processes in the behavior of employees.

Knowledge from social psychology as a field of psychology which intergrate the concepts of psychology and sociology, help in the field of measuring, understanding and changing attitudes of employees, communication models, the influence of groups and teams on the performance of the organization and satisfaction of employees, decision making processes, etc.

Anthropology as a science which studies the culture and traditions (customs, folklore and other national symbols) whose knowledge helps to understand behavior at the organizational level, which are created cultural values, identity and business philosophy of the organization. At the organizational level, it is necessary to understand the different cultures and an understanding of cultural differences, differences in attitudes and behavior of employees in different countries and different organizations.

Political sciences with their knowledge offer useful concepts of organizational behavior, such as the behavior of individuals and groups in different political environments. In the contemporary organization are increasable using political terms: leadership, conflict, power, authority, etc., which support the claim of the author organizational behavior – modern organization kind of political elements. The contributions of political science help to better understand the sources of conflict, the need for the distribution of power, ways to use the power and the necessary diplomatic skills to solve problems which arise in relationships.

From a managerial point of view, according to Shuklev[4], organizational behavior describes how people interact with one another inside of an organization, such as a business. These interactions subsequently influence how the organization itself behaves and how well it performs.

[4] Šuklev, B: *Organizational behavior: internal material*, Faculty of Economics, Skopje, 2012

1.2. Factors which influence on people's behavior in business organizations in time of changes

Organizational behavior is scientific discipline which studies how individual, groups and organizational factors influence people's behavior in order to improve the efficiency of the organization and satisfaction of the people. The aim of organizational behavior is that managers provide knowledge about why people behave the they behave and how this behavior can be changed. In the individual level is studied: personality, personal characteristics and skills, perception and individual learning, values and attitudes and motivation. In the group level is studied: Leadership, groups and teams, power, conflict and political processes in the organization. In the organizational level is studied: communication and decision making, organizational culture and organizational learning.

2. THE MOST SIGNIFISIANT VARIABLES OF CONTEMPORARY ORGANIZATIONAL BEHAVIOR IN TIME OF CHANGES

2.1. Personality, ability, perception and individual learning

People are very different and these differences influence on the degree of job satisfaction, the results of the job, the tendency to stress, etc. For managers, it is important to recognize the differences among the employees, because they have instruments which can influence their feeling, thoughts and behavior.

Personality is relatively stable set of psychological characteristics which distinguish one person from another.[5] Personality is a set of relatively permanent and stable patterns of feelings, thinking or behavior. Personality and personal characteristics may significantly influence on the choice of profession, career, stress levels, job satisfaction and other aspects of the workplace.

Thinks which determine personality:[6]

1) Nature of biological heritage (genetics);
2) Experience – influence of different situations on the emotions and behavior of individuals.

[5] Mooorhead G., Griffin R. W: *Organizational behavior*, South Western, Cengage Learning 2007, p. 61

[6] Petković M., Janićijević N., Bogićević Milikić B: *Organization*, Faculty of Economics in Belgrade, Belgrade 2010, p. 242

Personal characteristics can be somewhat changed, but over a longer period of time, while are they in the short term, they are unchangeable. Therefore, managers should consider each employee in different situations on work and to recognize some regularity in behavior

Skills can be defined as a mental of physical capacity to do something. Abilities of people are very importance for understanding behavior in organizations, because they contribute to organizational performance. They may be biological origin or acquired through experience and education.

Perception is based on stimulant from man's environment. It is very important for understanding human behavior in organizations, because we cannot understand procedures and reactions of employees if we do not known how they understand and perceives events which these actions and reactions provoked. Perception is the way in which individual understand message.[7] Understanding the perception of the outside world largely depends on the man himself, from his previous experience, motives, interests and moods. Individual learning can be defined as a relatively stable change in the behavior of the individual as a result of his experiences. Each learning is a change, but any change is learning. Changes in attitudes and perceptions are not considered to be learning if you did not lead changes in behavior.

2.2. Values and attitudes

Values represent the ideal condition or behavior in which we want to bring our self, our organization or society as a whole. If someone has the value of development and learning, it means that he believes that for him personally is very good and very important to constantly learn and develop. The values indicate what people consider good and what is bad.[8] Values are developing since childhood and families. Parents have the greatest influence on the development of values in every man. The values are very stable and difficult to change. Values appear not only on the individual, but also at the organizational and national level. They are fundamental component content of organizational national culture.

Attitudes are statements of people who show their relationship to particular object and predispose their behavior towards that object.[9]

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[7] Certo S.C: *Modern Management*, Pearson Education, Prentice Hall, 2007, p. 333

[8] Petković M., Janićijević N., Bogićević Milikić B: *Organization*, Faculty of Economics in Belgrade, Belgrade 2010, p. 242

[9] Ibid, 265

That attitude can be positive or negative. Attitudes and behavior of people deserves special attention. A person can publicly state and represent certain values and attitudes which are known to be socially desirable or expected from him and actually has very different beliefs. People do not behave in accordance with their own attitudes and values. First, it is possible that some external factors inhibit behavior in accordance with their own views and values. Secondly, it is possible that a person simply does not have the ability or qualities which are required to act in accordance with its values.

2.3. Motivation in time of changes

One of the important fields in the study of organizational behavior refers to the problem of motivation. Each manager is faced with dilemma why individuals behave in a certain way during the performance of their duties, or why some maximally engage themselves at work and others not and how it can affect on their behavior. The more managers are more familiar with the behavior of the members of the organization the more it will be able to influence that their behavior is consistent with the objectives of the organization.

Motivation is a set of forces which drives people to behave in a certain way rather than another alternative mode of behavior.[10]
In the study of motivation basically there are three key areas of concern:[11]

- What drives people's behavior?
- What regulate that behavior?
- How can a particular behavior can be sustained over a time?

Motivation can be defined as a set of forces which cause directing and maintaining behavior, whereby a driving force can be internal and external. If you operate from internal individual motives and internal forces, and if operating from an environment in which there is an individual, then these are external forces.

2.4. Leadership in time of changes

Organizations are successful or unsuccessful due to leadership. Leaders influence on shaping the environment in which people operate. Leadership is aimed at influencing people in order to effectively achieve the objectives, which means that leadership is directed towards people. The primary function

[10] Mooorhead G., Griffin R. W: *Organizational behavior*, South Western, Cengage Learning 2007, p. 83
[11] Babić, V: *Introduction to Management*, Faculty of Economics, Kragujevac, 2008, p. 356

of leadership is providing change and movement, creating visions, strategies, communicating, motivating and inspiring. Leadership is a reciprocal process of mobilizing people with the same values and motives, different economic, political and other resources in the context of competition and conflict in order to realize the circum independent or interdependent between the leader the follower.

It can be said that leadership is the interaction of the group, where the leader of the initiator of change, one that affects other to a greater extent than they affect him. The basic element of leadership is vision, and it gives meaning to the process of leadership, it is the image of the future which can easily be transferred to followers as inspiring, the desired direction towards which should be directed efforts. Activities leadership is aimed at creating an organizational environment and employee behavior which will support innovation and change.

2.5. Groups and teams in time of changes

Groups are based on man's need for contacts and cooperation with other people, they are the basic features of organizational life, the means for achieving the goals, but that is also the source of many pleasures and frustrations in the social interactions of employees. Organizations are composed of different groups. Groups indicate larger or smaller set of people associated common concerns, ideas, interests and goals. One of the simplest definitions of a group is a group consisting of two or more people that are aware of the community and are interacting to achieve a common goal.[12]

It is necessary to distinguish between the group and the team. All teams are groups, but do not take all these groups. Groups become teams which develop a high degree of identity, coherence, harmony and cooperation. Team represents one type of group which has additional features - a high degree of mutual dependence, coordinated interaction and a high degree of personal responsibility of members to achieve specific results in the group. Teamwork is a process where the individual team member's work together to achieve the goals set. The requirements of modern organizations just go to the effort to create the conditions in which several working groups behave as teams.

[12] Ibid, 356

2.6. Power of conflicts in time of changes

The power is deep root in all aspects of life and work of human. Every person as an individual with her actions and decisions affect others with their power, or under its influence. Power is the basic component of any human organization, and beyond. All life and business of modern companies is a game of power, influence and authority. The power implies a certain status and behavior in the organization. It's not matter whether it is an individual, group or organization as a social actor, always one of them has more or less power in comparison to others. The power is usually defined as the ability of social actors to overcome the resistance of the other, to achieve the desired goal. [13]

Power includes the impact on the behavior and changing the behavior of individuals or work groups in which it manifests power or influence. Authority is the right to apply power, actually authority arises legalization power. Conflicts can occur when there is no match in the goals, perceptions or emotions inside or between individuals and groups and is manifested through antagonisms in their relations.[14]

Conflicts are an integral part of organizational life. There is an optimal level of conflict in which organizational performances have a maximum value. When the level of conflict is too low, the organization falls into stagnation and does not accept the changes, while a high level of conflict seems destructive and leads to mess. Sometimes it is necessary to stimulate conflicts. Therefore, managers must manage conflicts in the organization, in certain situations, using techniques to stimulate conflicts such as the introduction of new members to the organization, the use of new communication channels, the imposition of authoritarian management and the like. The techniques for conflict resolution can be used: avoidance, competition, accommodating, compromise and collaboration.

2.7. Organizational culture and organizational learning

Organizational culture can be defined as: a system of assumptions, beliefs, values and norms of behavior which members of an organization have developed and adopted through the shared experience that are manifested through symbols and that direct their thinking and behavior.

The importance of organizational culture derives from an impact on business and business results of the company. There is a strong belief that the

[13] Ibid, 384
[14] Ibid, 340

successful operation of the company is necessary and a strong organizational culture. This belief is spread thanks to the fact that all successful and world famous companies have distinctive and strong culture. Organizational learning is the process through which managers seek to encourage the desire and abilities of members of the organization to understand and manage the organization and its environment in ways that make decisions that continue to increase organizational effectiveness. A learning organization can most easily be defined as an organization which has a significant capacity to learn, adapt and change. In order to ensure effective learning and the possibility that employees apply their knowledge to work and that managers support learning and motivate employees to learn, many companies are trying to create a working environment conducive to learning and develop into a learning organization.

A learning organization has the ability to easily and quickly improve and change their routines, thus establishing the new competencies that will allow it to survive in a changing environment. Therefore, organizations must learn how to become a learning organization.

2.8. Stress on work in time of changes

Stress is a word which is often encountered in everyday life. The results of numerous studies shown that a large number of employees faced with a high level of stress in the work place, which is negatively affecting their ability to work and health. According to this, it can understand why the theory and practice of organizational behavior pays more attention to this phenomenon. There are several reasons for the study of stress.[15]

- ✓ Stress can have devastating psychological and physiological effects on the health of employees as well as their contribution to organizational efficiency (it can cause heart disease, affect the ability to concentrate and make decisions).
- ✓ Stress is a major cause of absenteeism and high turnover of workers.
- ✓ Employees who are stressed may endanger the safety of other employees, or even public safety.
- ✓ Stress is a significant cost organization (for example, the cost of treatment of employees due to the problems caused by stress).

When we talk about some business, we can say that it is a source of stress if you do not meet the needs and goals of workers, actually if the employee is not able to meet the job requirements.

[15] Certo S.C: *Modern Management*, Pearson Education, Prentice Hall , 2007, p. 313

Any stress can not be avoided; it is an inevitable part of life. Short and slight stresses which can be controlled may encourage emotional and intellectual growth and development. Therefore, stress should not be avoided at all costs, but to master it by changing their philosophy of life, ways of thinking and behavior. There are personal stress management strategies such as managing lifestyle, physiological techniques (meditation and relaxation), cognitive techniques which are essentially in a positive way of thinking and behavior change that. Techniques related to the behavior which we learn to react differently when faced with a stressful situation. Strategies which organizations can use as an effective prevention against stress are changes in the organizational structure, changes in the nature of work and programs for stress management. A serious approach and use of different techniques to combat stress indicate how such problems can be useful for a successful business organization.

Conclusion

Modern managers are faced with the new facts, which are significant extent determine the successful management of the company, such as the high average age of employees and the problem which arises due to the conflict of generations, increasing the participation of women in the workforce, globalization and computerization of business, increasingly frequent restructuring of the organization, the pressure to reduce operating costs and others. These trends affect on the change in behavior of employees, their individual effects, and company performance. Bearing in mind the above-mentioned current trends and challenges, managers in human resources management, pay more attention to the behavior of employees in the organization and the determinants of that behavior and seek to direct the behavior of employees towards achieving the formulated objectives for which the organization was founded. Thus, organizational behavior and the factors determine a new approach to the human factor in the organization. The man in the organization is seen as an active factor in the organization comes with its own personal traits and experience. The organizational environment in which it includes is its environment. Management forms desired behavior of employees by affecting the development and modification of personal characteristics, or the change in the organizational environment that influence people's behavior.

Organizational behavior is an interdisciplinary field focused on understanding the behavior of individuals and group behavior, interpersonal processes and organizational dynamics. It involves many different levels of analysis and their understanding requires knowledge from various fields. Different levels of analysis are necessary to understand individual behavior within the organization, because people always act in the context of their environment, which includes objects and other people. Employees are affected by their environment, but also are influenced by their environment.

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FROSINA KIPROVSKA LUKIKJ

FINANCIAL ASPECTS OF THE MEDIATION'S ADVANTAGE

Abstract:

This article presents the financial aspects of the mediation procedure, more precisely through the prism of financial motives and comparative review of costs in court proceedings and the mediation procedure, it provides a concrete picture of the financial aspects of mediation, concrete savings that simultaneously causes a number of positive implications in the business community.

Different authors define mediation in several different ways, but the most common way of defining it is descriptive, having in mind the structure of mediation, the function it performs and the content of the activity undertaken in the mediation procedure. Mediation is one of the alternative methods for peaceful settlement of the dispute. It's application enables the parties to resolve their dispute by mutual consent in a constructive and friendly manner and to reach a solution acceptable to both parties with the participation of a neutral third party – mediator. This helps the parties reach an acceptable solution.[16]

Key words: mediation, disputes, settlement, judiciary
JEL Classification: K1

Introduction

Mediation is a special method of dispute resolution, which belongs to the group of alternative mechanisms for peaceful, out-of-court dispute resolution (belongs to the techniques of ARS - alternative dispute resolution). Alternative Dispute Resolution (ARD) methods initially appeared outside the

[16] H. Petrusic, European standards and principles of dispute resolution through mediation; G. Vukadinovic and A. Kartagina-Audrey (ed.), European Community of Nations and Universal Values, Novi Sad, 2010Relis, Tamara, Perception in litigation and mediation: lawyers, defendants, plaintiffs, and gendered parties, Cambridge University Press, New York, 2009.

judicial system, but have recently become increasingly used within the judicial system, such as the so-called alternative methods attached to the court. The term ARS/ARD[1] refers to various methods of resolving disputes outside the state court system, such as arbitration, direct negotiation, mediation, settlement, conciliation, mini-trial, Med-Arb technique that combines mediation and arbitration, various investigative and procedures for establishing facts, settlement, settlement hearing, early neutral assessment, appellate ADR, etc.[2]

1. ADVANTAGES OF MEDIATION

The benefits that mediation can provide to the parties are numerous. A clear advantage of mediation is that the procedure is much faster and simpler than the court procedure, which saves time and funds for the parties. Disputes are often resolved after one or more meetings, but even if it is a matter of several months of mediation in a complex dispute, its resolution is far shorter than a possible lawsuit. In many jurisdictions the parties either do not pay for the mediator’s services or share them with each other, but the time savings outweigh the additional costs. Unless otherwise agreed, each party bears its own legal costs, which are again relatively low due to the short duration of the proceedings and are insignificant in relation to the uncertainty of the outcome of the trial, which does not exist in mediation. With mediation, both sides win, or rather, a mutually acceptable solution is reached, unlike a court case, where there is always a certain loss.

Mediation transfers power and responsibility to the parties themselves. The autonomy of the parties in mediation is significantly greater than in court procedures, where the decision-making power is vested in the judge. The parties at no time lose control over the procedure itself and the possible result, which in science is called the principle of self-determination. The parties are usually able to decide in the selection of a mediator, the place where the procedure will take place, the issues to be discussed, how long the process will last, as well as whether the desired result will be achieved. The mediator is not in a position to impose his position before the parties on any of these issues. Even in countries where the judge has the power to order the mediation procedure, the principle of self-determination is not significantly jeopardized because the parties do not lose the basic component of the principle, which is the power to

1 ARS-Alternative dispute resolution - is the world’s finest cloud-based Alternative Dispute Resolution (ADR) provider where the entire process can be completed online.

2 Goran Mihajlovic, Commentary on the Law on Mediation, Belgrade, 2007, p. 65 - 66

decide the outcome of the procedure. Unlike the verdict, in the case of a court settlement, an appeal is not possible. With this, the parties are eliminating the expensive and lengthy appellate procedure. The chances that the settlement will be done voluntarily are much higher, because it was reached with a voluntary agreement by the parties. In countries where there is no effective enforcement procedure, a mediation settlement is rightly said to be worth much more than the judgment itself, which rarely leads to voluntary enforcement. However, in countries where voluntary enforcement is not the rule, the agreement reached through mediation is transferred to the court and takes the form of a court settlement, which has the effect of an enforcement document.

The litigation procedure is open to the public, which is in the interest of public order but is often contrary to the interests of the parties. With the exception of the Asian model of judicial mediation which is public[3], only persons who will be allowed or indicated by the parties (principle of privacy) can participate in the mediation procedure. Also, the information that is disclosed during the procedure, as a rule, remains confidential and cannot be used in litigation or any other procedure. The parties and the mediator are expected to fulfill the obligation to keep the information confidential. Confidentiality is also ensured through physical means, for example in the Court of Appeal of Quebec, the privacy of the data is further ensured by the law, by destroying the mediator's notes from all documents produced during the full mediation procedure.[4]

Mediation allows the whole relationship between the parties to be resolved, all in order to accept a solution that will suit both parties equally, and with mutual condescension to realize that neither of them has fully won the dispute, to preserve personal and professional relations, thus providing a likelihood of a lasting solution to their overall relationship. Litigation has the power to resolve a dispute in accordance with the law, but it is rarely able to maintain a compromised relationship between the parties. Mediation gives the parties the opportunity to reach a joint permanent solution, which will meet the goals of both parties.

Unlike commercial arbitration, the parties, by entering the mediation procedure, retain the right to judicial protection, which means that they do not lose the right to resolve their disputed relationship later in court. As a rule, if

[3] Kwang-Taek Woo, A Comparison from Court-Connected Mediation in Florida and Korea, Brooklyn Journal of International Law, 1997

[4] Louise Otis, Judicial Mediation in the Quebec Court of Appeals, translated by the Supreme Court of Serbia, January 21, 2003

the mediation does not settle, the parties move or return their dispute to the court arena or continue with the lawsuit.

2. FINANCIAL ADVANTAGES OF MEDIATION THAT IMPROVE THE WORK OF THE JUDICIARY

Mediation facilitates and relieves the judiciary, which is funded by the state. This is a public financial aspect, because we should not only come to the answer that saving court costs would be a saving for the state, but also the speed of resolution, handling the result - resolved dispute, leads to faster overall economic flows in one state. We are aware that so far in our country countless reforms have been carried out in order to reduce the duration of the execution of finances, such as the Law on Financial Discipline, on example companies to work fast, to collect their receivables with increased dynamics and thus benefit the overall macro and micro economic system. Therefore, mediation is imposed in financial and legal aspect as an opportunity and advantage.

Modern science affirms them as dominant advantages that mediation offers[5] to the parties in relation to litigation, but before approaching them, we should remember that the primary motive for accepting mediation by the court is the need for more effective judiciary. The main reason why the legal system has accepted mediation with such enthusiasm is not the interest of the parties, but the fact that it significantly reduces the work of the court and saves in the court budget. The public of most countries, regardless of their level of development, forms of social order, or the form of the legal system, equally criticize the courts as inefficient, that it is unacceptable to wait for years for a case to be decided, and that the costs of trials are too high. The reasons that have contributed to citizens' dissatisfaction with the judiciary are numerous, no matter which side of the world we are on: in the United States it is the inexplicable propensity of citizens to stand trial where courts can no longer achieve, regardless of budget increases; in other countries the reasons cannot be found in the limitation of human and material resources in the courts, the lack of adequate legal infrastructure; corruption; poor professionalism and educational standards; mentality, etc. Solving problems with the inefficiency of the judiciary requires a two-pronged approach. The first angle is external intervention, which implies the necessary assistance by the legislature and the executive

[5] The Future Belongs To Mediation - And Its Clients, Eileen Carroll, Solicitor, Mediator and CEDR, Deputy Chief Executive, http://www.tottelpublishing.com/Mediation_cedr.html

in the form of providing adequate budgetary resources, which would lead the judiciary to have a harmonious infrastructure to perform its functions. The court is not able to fight on the inefficiency alone, if it does not have or cannot maintain the required number of staff with high professional quality, sufficient number of premises, accompanying staff, equipment, etc. External factors also include the need for good laws and an efficient enforcement system. The other angle implies internal changes, the duty of the judicial authorities to improve the quality of their work on their own and to make it efficient, and from the same angle arises the initiative for mediation. Courts around the world, often without any intervention from other branches of government, accept the mediation method because its main advantage is to make the work of the court as efficient as possible.

Mediation really produces far better results if there is an adequate legal framework and some financial assistance, but the basic responsibility and initiative comes from the court, which uses the internal forces of mediation as a means to increase its efficiency. The reason is simple, mediation is a method that moves cases from the court, and they are resolved faster, simpler and far cheaper. Equality of the parties enables the achievement of justice, efficiency, speed and timeliness of the mediation process.[6] Disputes that would take years to resolve in litigation are often resolved in practice with one or more meetings with the mediator. Usually, the fact that the adjustment in mediation is achieved much faster and with significantly lower costs is especially emphasized as a success.[7] Also, most courts provide mediation services at no extra cost to the parties. Not only are disputes resolved more quickly, but most often the mediation procedure takes place outside the court and without any involvement of a judge. This frees up the resources of the court and remains in function to deal exclusively with cases that require court resolution, and the dismissed judges have the time and energy to pay more attention to those cases and to be resolved better and in a shorter time. As a result, there is a saving of the budget and its optimal use in most cases that require the right to court intervention, while the parties that will leave the mediation procedure, satisfied with justice, because they were allowed to resolve their dispute in an alternative way.

Another advantage that arises from mediation is that the legal system becomes more accessible to the public, because it directly increases the ca-

6 Đuričin Biljana, Basic principles of mediation procedure, Proceedings of the Faculty of Law in Podgorica, vol. 30, no. 37, p.2;

7 Bilic Vanja, Alternative Dispute Resolution and Litigation, Zagreb, 2008, Faculty of Law Zagreb

pacity of the court to accept their dispute and to process it in a more efficient and adequate way.[8] The qualitative component in the work of the judiciary becomes more pronounced, because it provides the parties with additional services in resolving the dispute. It should also be borne in mind that in a number of jurisdictions the settlement, obtained through mediation, has authority and as a rule is carried out quickly and voluntarily, thus directly relieving the work of the appellate court, which can be devoted to complex cases, and in at the same time, the enforcement system, because it is free, makes it more efficient. Shortly, if it successfully accepts mediation as an alternative dispute resolution procedure, the legal system is able to function better and be more accessible to citizens.

3. KEY FINANCIAL MOTIVES IN MEDIATION

The road to justice in court proceedings is slow and costly, incurring huge costs in the proceedings themselves, compensation for lawyers, and financial blockades of large sums. From the point of view of small and medium enterprises, the court procedure causes unfavorable consequences for the short-term liquidity, solvency and future existence of the company on the market. The difference between the consequences of litigation and the financial benefits of mediation through the establishment and maintenance of an effective and efficient system for resolving business, personal and political conflicts is becoming increasingly significant. Ensuring a good conflict resolution process is necessary and crucial. An efficient, effective and reliable system of resolving business disputes through mediation is vital in supporting economic growth. In addition, through a comparative analysis of the costs that are needed for court proceedings and those for mediation, the financial motives and benefits of mediation are evident.

The difference in costs required to resolve a dispute is enormous as can be seen in the example below.

[8] Bryant Garth, From Civil Litigation to Private Justice: Legal Practice at War With the Profession and Its Values, 59 Brook. L. Rev. 1993

Table No. 1 Comparative overview of costs in court proceedings and mediation

Court proceeding	Mediation	Mediation with min. costs
41.610 denars	5.222 denars	1.026 denars

Source: Hypothetical own calculation by a mediator

In court proceedings, represented by a proxy lawyer (necessary costs under the Law on Court Fees and Lawyers Costs):

1. For the composition of the lawsuit - 9,100.00 denars (7,000.00 + 30% lump sum) + 18% VAT or a total of 10,738.00 denars
2. For two representations min. (preparatory hearing and one hearing for main hearing) - 25,772.00 denars. One hearing is 10,920.00 (7,000 + 30% lump sum + 20% hourly) + 18% VAT or a total of 12,886.00 denars
3. For court fee for lawsuit amount of 800.00 denars
4. For court fee for decision amount of 800.00 denars
5. For expert finding and opinion min. 3,500.00 per employee

Total costs for resolving the dispute in court - 41,610.00 denars

(The costs refer to the procedure in the first instance, before the basic court, and if an appeal is filed, the costs for representation increase by 50%).

In Mediation (individual case):

1. The request for initiating the procedure - is not taxed
2. Reward for one hour of mediation - 2,000.00 denars + PDD of 11.11% - 222.00 denars, or 2,222.00 denars.
3. Case administration - 600.00 denars + PDD 11.11% or 667.00 denars.
4. For implemented actions - MKD 2,100.00 + PDD of 11.11% or MKD 2,333.00.

Total costs for resolving the dispute in mediation - 5,222.00 denars.

The mediator prepares working versions of the draft documents for both parties.

In Mediation (preferential, with min. costs according to tariff):

- Mediator's award - 15 euros in denar counter value according to the middle exchange rate of the NBRM or 923.00 denars, plus PDD 11.11% or 1,026.00 denars.

From the previous example it is evident that the financial motives for mediation are more than obvious and sufficient to justify our thesis that in any case mediation is cost-effective and necessary in the practices of all modern systems.

The financial benefits of mediation in saving money and time are expressed through several types of costs incurred in court proceedings.

- Opportunity cost, which refers to the value of the alternative solution to solve a problem/activity. In other words, it refers to what a person cannot do because he is doing something else, not following guides, or managing others. Because mediation resolves conflict significantly faster than litigation, the opportunity cost of using mediation is significantly lower. In other words, mediation offers the parties to the conflict a huge "opportunity cost savings".
- Costs for establishing relations/connections. In court proceedings, relations are disturbed, and business entities in particular incur costs in the form of lost business opportunities with their opponent. In mediation, these relations are not interrupted, they are even nurtured in the attempt to resolve disputes.
- Emotional costs. While some people enjoy battles and seem to thrive in conflict, most find it stressful and even traumatic, and in any case, it is a waste of unnecessary energy. Living and concentrating on an unpleasant event in the past causes more anxiety in everyone, with a higher emotional cost, than focusing on the future. In adversarial proceedings, each party works diligently to prove the other party guilty, which is achieved through a series of attacks and counter-attacks, as each party works to discredit the other party before a judge or arbitrator. In mediation, instead of making accusations and accusations, the parties communicate ways to move forward and work together to resolve their issue. Mediation resolves disputes quickly and there is no anxiety about waiting a year or longer for the outcome.

Conclusion

Mediation in the world is a widely accepted procedure for resolving commercial disputes due to the flexibility of the procedure that can be adapted to the specific needs of the parties, and the parties actively participate in resolving the dispute and control the outcome of the procedure. Mediation is aimed at equally satisfying the interests of business partners, and not on legal issues, as in court proceedings. The financial and legal aspects of mediation have a public legal element, because mediation achieves judicial efficiency, financial benefit by reducing costs in court proceedings and legal fees, increasing financial confidence through financial discipline and generally increasing the legal certainty of the general public, for all entities participating in the legal trade. Successful implementation of mediation is important in a macro-world perspective and it is important on a daily micro-level. Establishing successful legal solutions that would implement mandatory mediation as well as other motivational solutions, such as subsidies or tax incentives for successful use of mediation are relatively simple ideas that can have a major impact on increased application of mediation. Finally, the benefits of applying the mediation procedure apply to both individuals and corporations, as well as to the overall economy and the entire legal system of a country. It is important that the Macedonian judiciary in the process of reforming the legislation with the EU legislation follows the European trends and directions which, in addition to other harmonizations, implements significant measures and activities that lead to increased application of mediation.

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OPPORTUNITIES FOR FINANCING ENTERPRISES IN THE REPUBLIC OF NORTH MACEDONIA

ABSTRACT

Financing is an important factor that determines the survival and development of the enterprises. The selection of appropriate sources for financing a business entity is determined by the stage of business development, the risk management aversion, the growth potential of the sector in which it operates, etc. When creating its capital structure, the company should take into account the cost of each of the potential sources of financing.

Business entities at the beginning of their development have a limited selection of sources through which they can finance their operations. This is due to limited information about the financial and other characteristics of the enterprises. With the business entity's growth and development, the internal financial opportunities are exhausted, and the possibilities for using foreign capital, increase.

Thus, financing is one of the basic conditions for increasing the efficiency of the business entities-enterprises. This means that the choice of the appropriate sources of funding depends on the degree of their financial and business efficiency. If the enterprise is fully or largely to meet its own financing needs from its own resources, then it receives a significant competitive advantage and opportunity for growth by reducing funding costs and minimizing the risk.

Keywords: Financial Institution, Financial Market, Financial Service, Financing, Enterprises.

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1. INTRODUCTION

One of the basic conditions for the operation and increase of efficiency of the enterprises is their financing. Therefore, the degree of realized financial and business efficiency of the enterprises depends on the manner of financing of the enterprises, especially the sources of financing, which are appropriate for the business entities-enterprises.

The cheapest form of financing of the companies in the process of reproduction is self-financing, because in that way, the business entity does not burden itself with interest, nor with the obligation to return the principal, which is not the case with other sources of financing. This type of financing provides a high degree of financial independence in making financial decisions, as well as flexibility in conducting financial policy and profit distribution.

However, the companies - business entities cannot always finance their growth and development exclusively from their own sources. Specifically, they often rely on 1) borrowed sources, especially loans from banks and other financial institutions, issuance of securities, 2) specific forms of financing such as: factoring financing, forfeiting financing, leasing and franchise financing, and 3) access to use international sources of financing, particularly portfolio investments, foreign loans, foreign direct investments and issuance of shares and bonds abroad. When choosing their financing sources, companies should take into account several factors that affect the price of the sources of financing and their business efficiency, especially the amount of interest, the opportunity costs of alternative sources of financing, the mentality and expertise of management structures, the conditions in which the financial market operates and the range of financial products it offers, the existing legislation and instruments for regulating the financial market, as well as the stage of development of the business entity.

Opportunities for providing adequate sources of financing for companies is a problem that is present in the Macedonian economy. The most commonly used sources of financing the operations of companies in the Republic of North Macedonia are bank loans, which is a result, above all, of the insufficient development of the financial market and the capital market and, in general, the low level of development of the Macedonian economy. Enterprises-business entities operate with a minimal capacity utilization and overstaffing, which leads to high production costs and problems in placing products / services on the markets, which are the most common causes of losses, i.e. unprofitability in operation.

The purpose of this scientific paper is to process the various opportunities for financing companies, to identify the problems in choosing sources of funding, opportunities for access to individual sources of funding, in order to optimize the financial structure of business entities- companies. Special emphasis is placed on the need to select appropriate sources of financing for business entities in the Republic of North Macedonia, where bank loans are the most commonly used sources of financing, as an opportunity for financing companies.

Today, in a context of economic globalization and opening of growing markets, the need to provide adequate sources of financing for the operation of enterprises is becoming more pronounced.

Money-financing is one of the basic conditions for increasing the efficiency of enterprises. This means that the degree of their achieved financial and business efficiency depends on the choice of appropriate sources of financing.

The subject of research in this scientific paper are: the functions and importance of enterprise financing, the characteristics of the traditional sources of financing of enterprises, advantages and disadvantages of using specific sources for operational financing, the current situation related to the financing of enterprises in the Republic of North Macedonia, proposals and measures for optimization of funding sources for enterprises in the Republic of North Macedonia.

A special focus is placed on the need to select appropriate sources of financing for business entities in the Republic of North Macedonia, where bank loans are the most commonly used sources of financing.

2. FUNCTIONS OF FINANCING THE ENTERPRISE

Financing is an important factor that determines the operation, survival and development of business entities-enterprises. This is primarily because the optimal combination of funding sources needs to be found, but the way in which the funds will be used is also very important[2].

Depending on how the business entity provides the funds for financing the current and development operations, the financing appears as: self-financing, lending, financing through issuance of securities, financing through leasing arrangements, factoring and forging financing. The choice of appropriate

[2] Eakins S., Finance, Investments, Institutions & Management, East Carolina University, Addisson- Westley Inc., 1998, p. 4

sources of financing for a business entity is a very sensitive issue. The decision on how and from what sources to finance the operation is of strategic importance for the survival, growth and development of each business entity.

The financing of every business entity-enterprise is a complex process that plans, provides and uses the necessary funds for current and development operations. All the work and procedures carried out by the management in connection with the provision of financial resources necessary for the operations, are an integral part of the financing[3].

Each of the individual sources of financing has its own price which is a specific type of cost for the business entity. The costs of long-term sources are especially significant, because they directly affect the overall stability of the business entity. These costs are called capital costs. They are determined by the amount of individual resources that make up the capital structure.

Businesses often use a combination of several different sources of financing, and it is very important to take into account the relationship between equity and borrowed capital. However, the possibility of making combinations from different sources of financing for the business entity is limited by their availability. The availability of different sources of financing varies depending on the life cycle of the business entity, its growth phase, the purpose and growth potential of the sector in which the particular business operates, as well as the attitude of its management towards risk.

Providing the necessary financial resources is difficult especially for small enterprises-business entities. These business entities frequently face limited access to favorable sources of financing for their operations in both the capital market and the money market, especially in terms of terms and prices of their use. Small enterprises initially use their internal sources of financing, i.e. their own funds, funds from retained earnings or from the sale of property, but in later stages of their life cycle, the capital-needs become greater and exceed the internal capabilities of the owner. At that point, in order to provide the funds necessary for the realization of investments and development, the business entity must consider the possibilities of using external sources of financing. Financing from external sources is quite problematic for these business entities, because they do not have a history of operation or means of security. In doing so, they can choose between informal sources that include funds raised from family, friends or wealthy individuals - the so-called busi-

[3] Mr Vujovič Slavoljub, Fundamentals of Financial Management, Megatrend universitet primenjenih nauka, Belgrade, 2005, p. 112

ness-angels and formal sources covering various types of traditional borrowing (loans from commercial banks and other financial institutions, microcredit), as well as venture capital funds, factoring, trade loans.

Loans are a particularly used source of financing for small businesses. It is important to mention that the loaning conditions are different in different countries, however, these conditions are always less favorable for small than for large businesses. The reasons for this should be sought in the fact that the borrowing needs of small and large business entities are very different, i.e. the smaller amount of loans granted to small and medium-sized businesses requires higher interest rates in order for banks to ensure the desired profitability.

While, the biggest problems of small business entities, when using this source of financing the operation (e.g. banks), are the high interest rates, the limited amount of loans, the long and expensive procedures for processing the loan application and approval, insufficient information, and also as a problem may appear the lack of funds that would be subject to securing the loan.

Unlike small businesses, large companies have easier access to finance and a greater choice of sources of financing, both for their day-to-day working capital needs and for financing their investment projects. Namely, in addition to their own sources of financing (accumulated profit, as well as the possibility of raising additional capital through a new issue of shares on the primary securities market), these businesses have the opportunity to use external sources of financing in the following forms: loans from banks, financial institutions or business partners, leasing, factoring, forfeiting and other financial products, issuance of debt securities: bonds and commercial bills.

In addition to lending by business partners, the most common form of financing of these business entities are bank loans. Thereby, this support from the banks, as a source of financing for the large enterprises-business entities, covers the following forms: short-term loans and long-term loans.

In addition to the previously mentioned forms of lending, other financial products that belong to the group of non-classical banking products are available to large business entities, such as: factoring, forfeiting and leasing.

3. SOURCES OF FINANCING THE ENTERPRISE

The finances are a key link in the functioning of enterprises, so choosing a source of finance that meets the requirements and needs of enterprises can be a real challenge. Companies have a variety of sources and forms of financing available for their businesses. For example, there are the investors who make their finances available, and in return expect an appropriate compensation, and the amount of that compensation depends on the amount of risk present. On the other hand, the business entities strive to acquire funds on more favorable terms, and at the same time not to lose control over their own business.

The necessary funds for financing an existing or a new business can be provided from various sources such as: own savings, from relatives and friends, private investors, commercial banks, investment funds, government institutions, large companies**.**

The sources of financing for enterprises can be classified in different ways. According to one classification, sources can be divided into formal and informal sources. According to the maturity of the obligation, the sources can be divided into short-term, long-term and permanent sources of financing.

One of the most widespread and accepted classifications of funding sources found in the literature is their division into: Sources of equity financing (Equity capital) and Debt capital sources.

Informal sources of financing (personal finance and business angels) are very important for enterprises, particularly for small enterprises, especially at the beginning of their operation. They have always been the most important source of funds for small businesses. Recent research shows that on average about 70% of start-up financing is provided by founders' savings, 20% comes from loans from relatives and friends, and only 8-10% is provided by bank loans[4].

4. TRADITIONAL SOURCES OF ENTERPRISE FINANCING

4.1 Types and characteristics of bank loans

The loan is a transfer of a certain amount of funds to the user (client) by the bank with an obligation for the client to repay the approved funds within the agreed period, by paying interest in the manner and terms provided in the loan agreement. The right to credit can be exercised by the loan applicant who submits with the application all the necessary documents prescribed by the internal acts of the bank.

Accordingly, bank loans are divided into short-term and long-term loans. Banks usually approve short-term loans to meet the working capital needs of customers. There are several types of short term loans, as follows:

[4] Vladimir Filipovski, "Financing Small Businesses", in: How to make your own business, Center for New Business Development, 2007, p. 205.

discount credit, credit on current account, Lombard loan, acceptance credit, rambursan loan, avalanche credit.

Long-term loans, as a rule, are approved to finance the needs of expanded reproduction (business development). These loans are approved for a period of several years, during which the maturity should be commensurate with the life of the asset being financed. Long-term loans belong to the group of secured loans and their approval by the clients requires a certain share in the total value of the asset that is financed, i.e. the loan amount is less than the value of the collateral. This protects the banks from credit risk.

The most important types of long-term loans are: investment loans and mortgage loans. According to the currency of the loan, banks in North Macedonia can approve: Denar loan, Denar loan containing a currency clause and foreign currency loan.

Credit securing instruments are one of the most important factors in mitigating credit risk. In practice, the banks usually require the following instruments for securing credit: blank bill of exchange with clause "without protest", pledge of movable property, real estate mortgage, insurance policy, earmarked time deposit and other security instruments.

4.2 Theoretical review of funding sources available to companies in Republic of North Macedonia

The financing of the business entities in North Macedonia is most directly determined by the level of economic development of the Republic of North Macedonia which is still at a very low level. The macedonian industry has been stagnant more than two decades. According to the data of the State Statistical Office, the number of active business entities in 2013 in Macedonia is 71 290. The rate of utilization of the capacities of business entities in North Macedonia is quite low, ranging between 52 and 62%, and the main reasons for such a situation can be listed: financial problems, insufficient domestic demand, competitive imports and unstable economic environment. Businesses also face a relatively modest level of liquidity and operate with low turnover, which means relatively long periods of tying the assets in the operating process. According to the data of the State Statistical Office, the number of active business entities in the Republic of North Macedonia in 2020 is 73,061 and compared to 2013 there is an increase, however, compared to 2019 it recorded a decrease of 3.8%. The number of active business entities decreased the most in the sector Other service activities (15.2%, i.e. for 911 entities) and in the sector Electricity, gas, steam and air conditioning supply (11.6%, i.e. for 26 entities). In 2020, compared to the previous one, the Health and Social Care Activities sector increased by 1.9%, while the Information and Communications sector increased by 1.4%. The data on the structure of the active business entities by sectors of activity show that in 2020 the sectors with the largest share are: Wholesale trade and retail trade; repair of motor vehicles and motorcycles by 30.4% and Manufacturing by 11.0%. The sectors with the lowest representation are: Electricity, gas, steam and air conditioning supply (0.3%), Water supply; wastewater disposal, waste management and remediation activities (0.3%), Mining and quarrying (0.3%) and Public administration and defense; compulsory social insurance (0.4%)[5].

According to the data from the Central Bank of North Macedonia, the total indebtedness of business entities in 2013 was about two thirds of GDP. Namely, the total debt of business entities in 2013 increased by 5.5% on annual basis, which is the lowest annual growth rate in the past five years. Reasons for this slowdown in debt growth are the existing level of indebtedness of business entities, the modest turnover of funds and the caution of banks in granting loans to business entities. However, despite this slowdown, the relative importance of the debt of business entities to the economy as a whole was at an all-time high, i.e. its share in GDP at the end of 2013 was 66.1% and increased by 1.3% on an annual basis.

During 2019, the number of companies using loans from the banking sector increased (by 5.4%), so the number of entities to which banks have credit exposure is 35.8% of the total number of active entities. Large entities, although being the smallest group by their number of 102, have the highest coverage with financing from domestic banks (banks have credit exposure to 80.4% of the total number of active large entities). Small and medium enterprises are the largest group of borrowers (58.7%).

5. RECOMMENDATIONS FOR IMPROVING THE OPPORTUNITIES FOR FINANCING THE ENTERPRISES IN THE REPUBLIC OF MACEDONIA

As we have seen before, the sources of financing for enterprises may not always respond to the need and desire of business entities to obtain the desired financial resources for the operation of the business entity. Thus, this is

[5] https://www.stat.gov.mk (06.03.2022)

a problem that companies in the Republic of Macedonia are facing, and that is the problem with the financing of their operations.

The creationof the basic institutional conditions for the development of the enterprises in the Republic of North Macedonia is, above all, the task of the state. The necessary preconditions for successful implementation of the development performance for the operation of the enterprises, on the one hand, depend on the creation of basic rules for the functioning of the economy and, on the other hand, on the legislation for support and development of entrepreneurship, as a framework of institutional support measures of enterprise development. The latter should be a platform for creating the basic directions of enterprise development in the Republic of North Macedonia and a basis for opening opportunities for cooperation with various international institutions, such as: financial institutions, institutions for promotion and encouragement of entrepreneurship, opening new and more flexible opportunities for funding for innovation and more. Creativity, innovation and development of enterprises should be induced on the basis of specific preconditions defined at the macro and micro level, in order for them to be able to successfully respond to the complex and changing needs of users.

Starting from the essential importance of enterprises, especially small and medium enterprises, for the economy and social in a country, it clearly follows that a business climate should be developed to support that relationship. That is why the financing of these entities is very important in their start-up and growth-development. They can be imposed as the main transformer of the national economy, in any country. They are one of the important segments for creating new jobs, increasing exports, creating innovative products and services, greater promotion of domestic products in foreign markets, etc. In almost all countries in the world, the number of small and medium enterprises is between 95% and 99% of the total number of private companies. For the small and medium business sector, it is of priority importance to establish a consistent national policy to support their smooth development and gain a greater role in the importance of the country's economic development. In the Republic of North Macedonia, the sector of small and medium enterprises represents 99% of the total number of existing business entities. The number of registered business entities in Macedonia is constantly growing. Most of these business entities fall into the category of small businesses. Small businesses represent an important segment in the overall national economic activity.

The introduction of new instruments for financing high-risk investments leads to the growth and development of existing and new businesses, the creation of new jobs, the increase of exports with high added value, etc. In the context of the prospects for improving the situation with the financing of these businesses, according to the latest research, it can be concluded that they are most committed to improving the following areas:

- Tax cuts,
- Availability of finances,
- Participation in public tenders,
- direct financial assistance,
- business incubators in each municipality,
- the first three years from the start of operation of a certain business to allow tax exemption,
- exemption of part of the tax citation of those business entities that will hire full-time interns,
- more efficient administration,
- more flexible, more productive and educated state administration,
- providing legislation for mandatory internal training for employees,
- increasing the quality of education and introducing more practical curriculums,
- increased control over the commissions for granting loans for self-employment,
- reduction of the deadline for realization of court proceedings related to collection, i.e. the existing average of over 365 days to be reduced to a decent 30-60 days,
- de-birocratization of the public administration,
- encouraging women entrepreneurs,
- ensuring a stable and legal state,
- greater availability of company statistics.

Macedonian policy in the field of enterprise development and entrepreneurship aims to create enterprises (small and medium), which will be able to successfully operate and make profit, to expand their activity and create new jobs as well as be competitive and capable of entering the international market. Small and medium enterprises employed 54% of the total number of employees, realized 51% of the total income of the economy and 53% net profit, but also 42% loss of the total economy. Namely, small and medium enterprises are carriers of economic growth and employment growth, and are an important factor in balancing the economic structure and improving efficiency. The analysis confirms that small and medium enterprises in Macedonia are the most vital and economically most efficient part of the Macedonian economy. But despite the positive trends, the development of small and medium enterprises is followed by insufficient efficiency, which can be seen from the unprofitable operation. Specifically, small and medium enterprises expressed a loss greater than 20% of the realized net profit, while (as a whole) only small businesses operated profitably. Those have a chronic shortage of long-term sources of funds, resulting in insufficient investment in equipment and technology modernization, and an unsatisfactory degree of competitiveness in the international market. Small and medium enterprises have problems not only with securing long-term assets, but also with securing short-term resources, so the level of liquidity of small and medium enterprises is unsatisfactory.

CONCLUSION

Starting your own business means turning an idea into a reality. It can be a lucrative experience that offers many satisfactions, such as the ability to be the first person in the company and have a job that gives you pleasure. Starting your own business requires the inclusion and taking of certain risks as well as some form of financial investment. For a successful start-up, a small business needs to be nurtured and managed in order to increase profitability, but at the same time respect the regulations and laws that govern the industry. The success of any business is directly related to the availability of finances, whether it is a start-up -app finance or finance needed to invest in business growth. If these finances are easily accessible and the entrepreneur has a good business plan based on a unique business idea, success is guaranteed.

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ORGANIC AGRICULTURE PRODUCTION IN GREEN ECONOMY DEVELOPMENT IN REPUBLIC OF NORTH MACEDONIA

Abstract

The main goal of the paper is to analyses the role and contribution of organic agricultural production on the development of concept of green economy in the Republic of North Macedonia. Both concepts, the organic agriculture and green economy are founded on the interaction of humans with the biophysical environment and offer numerous opportunities for improving the standard of living, developing underdeveloped countries and achieving sustainable development. Organic agriculture represents system of production which is based on the natural cycles and biodiversity, has well-defined principles and standards, as well as a certification system, and direct and indirect effects on people and the environment, and thus has direct linkages to the principles of a green economy. Organic agricultural sector in Republic of North Macedonia has significant place in the country, the interest for dealing with this production is continuously increased and the State support is continuously present. However, it is necessary to identify the main possibilities in organic agriculture, specifically organics agriculture production that contribute most to the economic growth and sustainable development in terms of green development opportunities in the country.

Key words: organic agriculture, organic production, green economy, Republic of North Macedonia
JEL classification: Q50, Q56, Q57

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Introduction

Green economy is a complex concept with many segments, with emphasis on the relationship between the economy and the environment that are in function of sustainable development. The term green economy still does not have a precise definition and opinion prevails that this economy strives to emit less CO_2 in its processes, to use natural resources efficiently i.e. to greater use of renewable energy and to be socially inclusive. The concept of green economy is very attractive for countries and businesses because it aims to provide a simultaneous solution to unemployment, economic growth and environmental issues by introducing new green industries and tools to mitigate the damage caused to the environment.

Current ways of agricultural production lead to the emergence of many environmental problems, social tension and reduction of the natural capital. Overcoming those issues are possible upon the transition of the agrarian sector to the model of green economy. The principles of green economy for the agrarian sector are implemented within organic agriculture. Organic agriculture represents system of production which is based on the natural cycles and biodiversity, combines the traditions and scientific achievements, which improve the situation in the environment. Also, organic agriculture is characterized with contemporary elements such as legislation, certification and standardization. Thus, it acts as one of the methods of the solution of environmental problems in the agrarian sector and as the most important component of sustainable development. Therefore organic agriculture plays a key role in achieving the principals of green economy and green growth goals.

Republic of North Macedonia has excellent condition for organic production considering the favorable geographical position and significant natural resources. The practice shows that the interest for dealing with organic production is continuously increase, the State support is very significant, and additionally many regulation, laws and programs in the field of organic production have been adopted in the line with growing interest for this production. However, possibilities organic agricultural sector to realize the principles of green economy are limited, there is small output and insufficient quantity of organic products accompanied by poor farmer's organization that result sale of organic products as conventional.

Considering that organic production is one of the key elements of green economy, main goal of the paper is to analyses the role and contribution of organic agricultural production in Republic of North Macedonia on the development of concept of green economy in the country. For that purpose are analyzed the current state end trends of the development, features of state policy in the field of regulation of this sector, state support for organic agriculture and organic production share in the Macedonia agriculture such area under organic production and the number of operators.

1. THE CONCEPT OF GREEN ECONOMY

The green economy is a new concept in modern surroundings, with exceptional importance for both developed and developing countries in all sectors of society. Namely, modern economic theory and practice have shown that the economy that does not value natural resources in an appropriate way, i.e. is based on the principle of maximizing economic benefits by depleting natural resources, destroying the environment and which uses mechanisms to stimulate unlimited economic growth is a long-term unsustainable economy. This uncoordinated growth and development of the so-called brown economy destroys the environment that is the basis for all activities. The concept of a green economy offers a way out of this situation.

The concept of green economy is very attractive for countries and businesses because it aims to provide a simultaneous solution to unemployment, economic growth and environmental issues by introducing new green industries and tools to mitigate the damage caused to the environment. The potential of green economy is considered as very significant. Namely, The World Bank estimates that investing in clean technologies in developed countries could reach $ 64 billion in a decade. Similarly, improving resource productivity could generate $ 6 billion / year in profit for the European economy by 2030.[2] Of course, significant investments are needed in various concepts, approaches and tools to implement a green economy. The UNEP Green Economy Report estimates that 1-2.5% of total GDP is needed to facilitate the transformation towards a greener economy.[3] The main investment should come from the private sector (i.e. financial services and the investment sector, banking and in-

[2] Circular economy would increase European competitiveness and deliver better societal outcomes, new study reveals, The Ellen MacArthur, june, 2015, https://www.ellenmacarthurfoundation.org/news/circular-economy-would-increase-european-competitiveness-and-deliver-better-societal-outcomes-new-study-reveals, 15.8.2020

[3] Zelena ekonomija – nova paradigm I svetski trend odrzivog razvoja, (Skripta) Univerzitet u Nisu, 2019, p.18

surance), but the Government should also have a significant role in managing those investments.

The term green economy still does not have a precise definition and the prevailing opinion is that each country should independently adjust and define it to its own reality. In the literature, the green economy is defined as an economy that aims to achieve human well-being and social equality while reducing environmental risk to the environment; an economy that mutually fosters economic development and environmental responsibility while supporting social development; finding a new and alternative strategy for socio-economic development; long-term investment in raw material and energy efficiency, reduction of harmful emissions, replacement of fossil fuels with renewable energy sources such as reduction of production costs, greater competitiveness in increasingly demanding markets and sustainable economic growth and establishment of social balance and higher living standards.[4]

The United Nations Environment Program, UNEP, defines the green economy as an economy that bases its results on the well-being of humanity and social equality, reducing environmental disparities. The Organization for economic co-operation and development – OECD, believes that in the green economy, natural capital is a factor of productivity with the most important role in enhancing welfare. For the World Bank, an inclusive green economy is the path to sustainable development and needs to be incorporated into accounting. The Global Green Growth Institute (GGGI) has several definitions of the green economy and they all define the green economy in their own way. They believe that the green economy should be implemented in different national contexts, i.e. according to the state of the country.[5]

It can be concluded that in defining the green economy, regardless of the set goals, everyone uses one line that everyone follows, and that is that this economy supports a model of economic growth based on the idea of achieving sustainable long-term development. More specifically, an economy that strives to achieve the so-called green development as a precondition for achieving the development of all pillars of sustainability - environment, economy, society.
The lack of a single and basic definition of a green economy leaves many open questions, such as determining the characteristics and perceiving the obstacles

4 Ibid, p.20

5 Georgeson L., Maslin M., Poessimouw M., The global green economy: a review of concepts, definition, measurement methodologies and their interaction, Royal Geographical Society (with the Institute of British Geographers), John Wiley & Sons Ltd, vol.4, Issue 1, London, 2017, p.6

in its realization. Burkat lists seven sectors in which the green economy operates:[6]

1. Renewable energy (solar, geothermal, wind energy, sea and wave energy, fuel cell energy and biomass energy)
2. Green buildings (residential - business assessments, energy efficient technological upgrade, green products and materials)
3. Clean transport (alternative fuels, public transport, hybrid and electric vehicles, programs of sharing and use of the same transport)
4. Water management (distilled water, rainwater and wastewater treatment systems, alternative irrigation methods)
5. Waste management (recycling, green packaging, remediation of abandoned industrial complexes)
6. Land management (organic agricultural production, conservation and restoration of habitats, city parks and greenery, renewal and afforestation)
7. Green market (green banking and finance)

At the UN conference, Rio +20, one of the main issues was the terminological and conceptual meaning of the green economy. It has been concluded that the green economy is important for achieving sustainable development and can offer policy-making options but should not be a strict set of rules.[7] As this Conference is presented as a critical moment when "humanity must choose its future", one of the types of preparation made for the gathering of the most important policy makers of the modern world, was a set of principles according to which the framework for application of the concept of green economy could be defined. Those principles are:[8]

- Principle of equitable distribution of wealth;
- Principle of economic equality and justice;
- Principle of conservation of natural resources;
- Principle of careful approach to the environment;
- Principle of the right to development
- Principle of cost recovery
- Principle of international cooperation

[6] Brundland G., Jargon H., , Getting in the way of sustainable development, ECOCRED, 2012, http://ecocred.me/tag/green-economy/, 10.8.2020

[7] UNCSD 2011, Green economy in the context of sustainable development and poverty eradication, UN, http://www.uncsd2012.org/, 15.8.2020

[8] Stoddart H., Riddlestone S., Vilela M., Principles for the Green economy, Earth Charter Initiative, Earthsummit 2012, London, 2012, p.3

- Principle of international responsibility
- Principle of informing and participating
- Principle of sustainable consumption and production
- Principle of strategic cooperation and integrated management
- Principle of fair transition
- Principle of redefining wealth
- Principle of gender equality
- Principle of biodiversity and prevention of environmental pollution.

By respecting the stated principles, the real effect of the idea of sustainable development should be achieved and the problems that have arisen in its implementation should be solved to some extent such involvement of the values of nature and natural capital in the creation of fiscal policy, integration of three components of sustainable development, harmonization of economic activities with the natural capacities of the planet, bridging the gap between science and the decision-making process, creating conditions for public-private partnership and access to appropriate new technologies.

2. CONDITION OF ORGANIC AGRICULTURE PRODUCTION IN REPUBLIC OF NORTH MACEDONIA

There is no other sector that touches so many important aspects of the green economy as agriculture. It provides a number of key goods and services needed for society. Also it provides some ecosystem services while destroying even more. Agriculture is second only to the energy sector as a source of greenhouse gas emission and is the driver of a nine-fold increase of active nitrogen in the biosphere and it is a main source of water pollution. Therefore, agriculture plays a pivotal role in the transformation of societies to green economies. Organic agriculture is an approach to food production that seeks to develop environmental and economically sustainable production systems with a strong emphasis on the use of local, renewable resources and minimum use of external inputs.

It is doubtless that the Republic of North Macedonia follows the world trends in organic production which is a significant part of Macedonian agriculture. Organic production is recognized as one of the ways that lead to sustainable development, meeting social expectations when it comes to environmental and sustainable management of natural conditions and development of rural areas.

In 2007, the Government of the Republic of Macedonia adopted the National Strategy for organic agricultural production (2008 - 2011) laying the foundations for the introduction of and development of organic agricultural production. Law on Organic Agriculture came into force in 2010 and since, it regulates the production, preparation, processing, finishing, storage, transportation, distribution, marketing, sale, labeling and control of organic products that are used in the methods of organic production. Since then, several regulations have been developed regarding the rules and procedures in organic production, activities have been implemented as a National Campaign for promotion of organic agricultural production.

The main holder in organic sector in Republic of Macedonia are the individual producers of organic production usually in form of family farm i.e. farm in which family members are the main labor force. Family farms are mainly manufacturers of primary production and the main objective is the production destined for the market, and a small part of their own household. The size of family farms is different, but it is small integrated farms or farms which also has vegetable and organic livestock production because organic farming is characterized by a circular system of cultivation.

The highest form of joining individual producers of organic products is Federation of Organic Producers (FPOP) aimed at ensuring the coordination and leadership of the organic movement in the country. FPOP aims to protect economic, social and cultural interests of manufacturers of organic products and working to improve the conditions of market production.

The Macedonian organic production comprises 0.3% of the total cultivated land in the country and compared to other regions in the world, organic agriculture is at early stage of development. Namely, average world organic share is 1.5%, European organic share is 3.3% and average organic share in European Union is 8.1%.[9] The graph 1 shows the interest for the conversion of organic production has intensive growth in 2010 and 2011 which is in the period of establishing of Law of organic production. In the period 2013-2015 the area decreases and the reason for that can be found in the inadequate internal organization of producers of organic products and insufficient quantity ranking. In last three years, there has been an increasing trend in organic production.

[9] The world of organic agriculture, Statistic and emerging trends 2021, FiBL and IFOAM, 2021 https://www.fibl.org/fileadmin/documents/shop/1150-organic-world-2021.pdf, 12.1.2022

Graph 1 Certificated area under organic production during the period 2006-2020

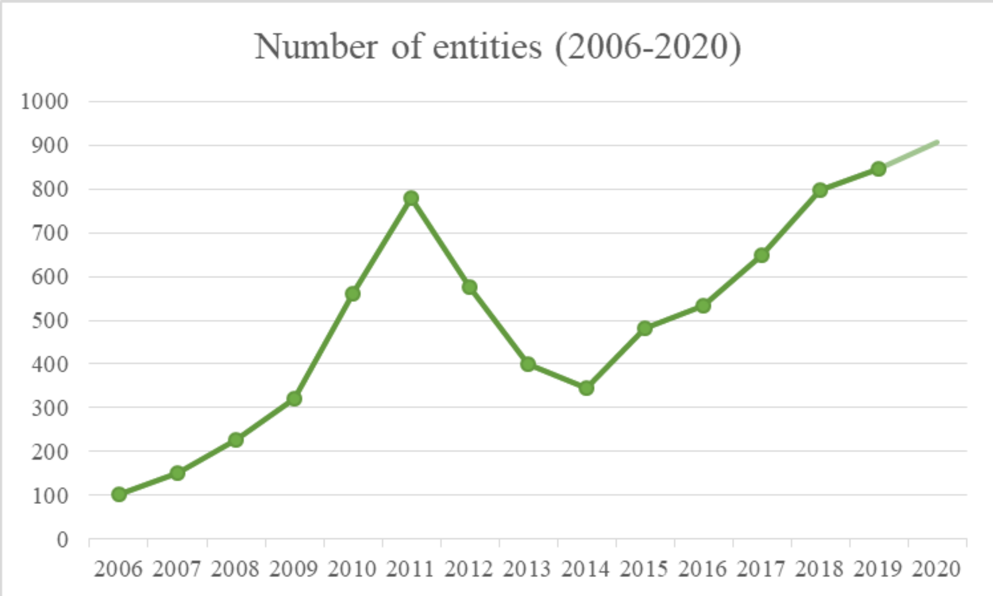
Source: Ministry of Agriculture, Forestry and Water Management of Republic of North Macedonia, http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2019.pdf, 12.1.2022

In terms of number of entities in organic production, it can be noted that it follows the trend in certificated area under organic production. The state subsidy has a partial contribution to the increase in the number of operations. Namely, from 2017, support measures are envisaged with an additional higher amount compared to the conventional one, as follows:[10]

- 50% for agricultural crops, livestock and beekeeping,
- 70% for orchards and vineyards and
- 100% for horticultural production.

[10] Annual agricultural report year 2018, MAFWE, http://www.mzsv.gov.mk/cms/Upload/docs/%D0%93%D0%97%D0%982018.pdf, 12.1.2022

Graph 2 Number of entities in organic production during the period 2006-2020



Source: Ministry of Agriculture, Forestry and Water Management of Republic of North Macedonia, http://www.mzsv.gov.mk/organsko_zemjodelsko_proizvodstvo2019.pdf, 12.1.2022

Under the organic farming control and the certification of an organic production, there is an authorized domestic or foreign legal entity - control / certification body. In Republic of North Macedonia there are two certification bodies accredited by the Accreditation Institute and authorized by the Ministry of Agriculture, Forestry and Water Management: Balkans Biocert and Pro-CERT. These certification bodies provide expert control in organic production in accordance with standard EN 45011 and ISO / IEC Guide 65.

Although it is part of agriculture, organic sector in Republic of North Macedonia is characterized by a complex and heterogeneous structure in which, besides agriculture are included environmental, social, certification, health and economic structures. This complexity and heterogeneity, of course, is reflected in the way in which the entities are organized in organic farming, and even makes them different from other ways of ecological production. The organic sector in the country is composed by producers, cooperatives, associations, counseling stakeholders, control and certification bodies and government institutions involved in the implementation of organic farming policy.

However, recent research and reports[11] shows that organic agricultural sector is facing with low organization, cooperation and communication between all entities in the sector: organic market is limited by uncertain sale of the production, export disorganized followed by inadequate organization of producers of organic products or associations (fragmentation among the associations i.e. the existence of several associations of producers of organic products for the same products in the same region); insufficient promotion and recognition of organic production in the country. Thus, the discontinuous and insufficient promotion of the benefits of organic agriculture for environment and human health, contributes to low consumer awareness of these products.

3. OPPORTUNITIES OF MACEDONIAN ORGANIC AGRICULTURE PRODUCTION IN DEVELOPMENT OF GREEN ECONOMY CONCEPT

The benefits of organic agriculture in the context of the green economy fall into a number of categories, of which a few are listed below:[12]

- Direct economic benefits for the farmer, trader and processors from the production itself, e.g. the higher price and/or lower costs;
- Economic benefits for society in the form of employment (in the whole value chain);
- Economic benefits for society in the form of increased exports, e.g. organic products, and/or decreased imports, e.g. energy and agro-chemical;
- Direct economic benefits for the producer from selling public benefits or services, e.g. carbon sequestration, biodiversity conservation and landscape management;
- Long term benefits in the building up of natural capital, in particular in soils;
- Associated business opportunities, e.g. eco-tourism, educational farms and inputs such as biological pest control or waste composts;

[11] IPA Rural Development Program “2014-2020”, 2015, p.40, https://ipard.gov.mk/wp-content/uploads/2019/08/IPARD-Programme-2014-2020_08.08.2019_EN.pdf , 12.1.2021

[12] Organic Agriculture A step towards the Green Economy in the Eastern Europe, Caucasus and Central Asia region Case studies from Armenia, Moldova and Ukraine, UNEP, 2011, file:///C:/Users/USER/Downloads/unep_organic_eecca_country_study.pdf, 10.11.2020

- Reduced costs for society, e.g. for water purification and health care;
- Increased social capital, e.g. cooperation between farmers, pride of doing something that is appreciated, increased trust in the value chain, and better understanding between consumers and producers.

The agricultural sector is undoubtedly one of the most important in the Macedonian economy and together with organic agriculture should be a priority for resource efficiency and green economy development. The potential for greening of this sector is found in the fiscal measures i.e. the introduction of the so-called green subsidies. They should refer to the farmers who beside organic production carry out the following activities:

- Soil diversification,
- Maintenance of existing pastures,
- Optimal use of water resources,
- Waste reduction and energy generation.

Considering that main start point of green economy and organic production is quality health-save life with consciential use of natural resource it is necessary to develop areas in the country that meet stringent environmental standards. This way, it will map regions with greatest green development opportunities and thus development of rural areas, poverty reduction and access to clean water and energy.

It is extremely important to encourage application of biotechnological processes and quality control and food safety in accordance to environmental management system ISO 14001. It will raise the level of processing and finalization as well as new ways of storing and transporting health food. In this regard, it will enhanced the marketing concept and organizational structuring of organic sector in Republic of North Macedonia.

CONCLUSION

Organic agricultural production makes a significant contribution to achieving the principles of green economy and green growth. Considering that organic agriculture is based on well - defined principles and standards, it has positive impact on health and life on all live organisms and natural resources advancement. Available data on organic agriculture in Republic of North Macedonia shows that organic agricultural production is present as important sector in Macedonian agriculture and notes continuously growth due the State support. Also, many regulation, laws and programs in the field of organic production have been adopted in the line with growing interest for this production.

Considering that the concepts of green economy and organic production are based on quality health-save life with consciential use of natural resource, further priority should be upgrading of subside with green marks such optimal use of water resources and waste reduction and energy generation due the agricultural activities and soil diversification and maintenance of existing pastures. Regarding that organic agriculture is based on standards, application of biotechnological processes and quality control and food safety in accordance to environmental management system ISO 14001 is very important to be implemented.

The contribution of this sector for Republic of North Macedonia is found in direct economic benefits for the farmer, trader and processors from the production itself, reduced costs for society, e.g. for water purification, health care, carbon sequestration, biodiversity conservation and landscape management.

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6. IPA Rural Development Program "2014-2020", 2015, p.40, https://ipard.gov.mk/wp-content/uploads/2019/08/IPARD-Programme-2014-2020_08.08.2019_EN.pdf , 12.1.2021
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12. UNCSD 2011, Green economy in the context of sustainable development and poverty eradication, UN, http://www.uncsd2012.org/, 15.8.2020

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334.72:[005.42:658.89(497.7)
(Original scientific paper)

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THE ROLE OF THE ENTERPRISE (ERP) RESOURCES PLANNING SYSTEM IN IMPROVING BUSINESS PROCESSES

Abstract

The Customer Relationship Management System (CRM) and the Enterprise Resource Planning System (ERP) are usually established and implemented separately and at different times. They are often procured from different suppliers and manufacturers, and are implemented and managed by separate teams.

CRM and ERP systems have, as a rule, separate databases, even when they originate from the same manufacturer. Therefore, as a consequence, special basic records appear (encrypted books), primarily partners, products and services. This creates problems in updating and maintaining data consistency within the firm's information system.CRM and ERP systems overlap into parts of business processes (eg ordering, order confirmation, etc.), creating the potential for creating unnecessary information and documents.

A key element in integrating ERP and CRM systems is maintaining the full integration of core records, which include partners, products and services.

Keywords: ERP system, CRM system, business processes, customers.
JEL Classification: O14, O31, O33.

INTRODUCTION

ERP is a business solution or system that allows the company to manage business processes and coordinate individual business units. ERP is an

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integrated system that monitors the company's operations in real time and has a database of all activities.

ERP solutions work in a way that unite all functions and processes in the company into one whole and thus allows the flow of information between all parts of the company. This increases the productivity of the process and facilitates communication between employees. It can be noticed that the ERP system covers all activities and departments in the company such as: procurement, warehousing - sales, sales, finance, human resource management, CRM (customer relationship management).

The subject of this research are essential features of ERP systems, which will indicate its importance in improving business processes to achieve the ultimate goal of enterprises - improved customer service and achieving a competitive advantage in the market.

DEFINITION AND MEANING OF THE ERP SYSTEM

In modern business conditions, only changes are permanent. The success of the company's operation depends on its flexibility and ability to adapt to the changes in the market.[2]

The achieved integration and systematization of business functions, processes and relevant data enables harmonious operation of all sectors of the company, from production, through marketing and sales to procurement, delivery and financing. Each sector, within its functions and processes, generates and uses a set of specific data to its operation in current business data.

Initially, ERP solutions covered only aspects of production management. Later, support was added to other business processes (functions), such as procurement, sales, finance, accounting, human resources, and thus the management of all relevant business resources.[3]

ERP systems can be described as:[4]

- Enterprise management toolkit that balances supply and demand;
- Contains the ability to connect consumers and suppliers in an integrated supply chain;
- Establishing proven business decision-making processes;

[2] Shields M. G, E-business and ERP rapid implementation and project planning, John Wiley & Sons, Inc, USA 2001, p. 35

[3] https://www.investopedia.com/terms/e/erp.aspc

[4] Wallace T. F, Kremzar H. M, ERP: Making it happen, John Wiley & Sons, Inc, Canada, 2001, p5

- Provide high degrees of functional integration between sales, marketing, manufacturing, operations, logistics, finance, new product development and human resources, thus enabling people to work with high levels of consumer services;
- Providing service and productivity,
- Providing a basis for effective e-commerce.

1. REASONS FOR ERP SYSTEM IMPLEMENTATION

The ERP system enables technological integration that has evolved from a basic MRS (Material Requirement Systems) system to sophisticated, high-budget systems in which databases and applications are connected in the best possible way. The implementation of the ERP system is complex and requires significant investments in consulting services and licenses that only larger companies can afford. On the other hand, only capable companies can create value and economic viability by returning the investment to the ERP system.

Some of the main ***reasons*** why companies strive to implement the ERP system are:[5]

- Upgrading the system to get new features: Often, companies need these new features and modules to stay competitive in the marketplace, or the old module version may no longer meet the changing business requirements.
- Adjusting Company Growth: The purpose of implementing ERP may be to provide support for the expected growth of the company, however, expansion and growth can not always be predicted.
- Information support for multiple payment currencies and languages: Companies operating internationally face a multitude of details such as country-specific financial issues and tax requirements, as well as multiple language aspects of doing business.
- Cost reduction: By implementing ERP systems, companies aim to automate processes and eliminate unnecessary processes. This may lead to a reduction in manual tasks to be performed in different departments, therefore less staff is needed, and payroll costs can be reduced.
- Achieving price leadership: By reducing costs and streamlining processes, price leadership can be achieved.

[5] Majorique L. P, Pellerin R, Babin G, Beal J, Mireault P, Readings on enterprise resource planning, Laboratoire ERPsim, Montreal 2011, p.18-21

1.1 Impact of ERP on business processes

Through ERP implementation, employees as members of the implementation team are forced to think intensively about business processes, and how to improve them.[6]

ERP improves productivity in two ways:

- by introducing best practices in its modules, which increases the efficiency of existing processes and
- assists in timely retrieval of information for effective decision making.

ERP enables automation and with automation, these activities, which were performed manually before, can be generated automatically. This saves time and time savings can be used productively with automation through technology, which can allow more people to access as well as share information with each other. ERP automation also helps to perform different activities in parallel. This helps in making effective decisions faster, and provides opportunities to address changing market conditions and the environment. For example, Amazon.com and Dell.com have introduced new business modules for ordering products online; books, music and all other available products can be ordered from Amazon.com without even having to travel to physical stores.[7]

ERP automates the tasks involved in performing a business process - such as order execution. With ERP, when a customer service manager receives an order from a customer, he has all the information he needs to complete the order. Everyone else in the company has the same system and through it have access to the only database that enters the new customer order with all the details. When one department completes the order, it is automatically transferred through the ERP system to the next department. To see the status of the order at any point, those responsible only need to log in to the ERP system and see the progress of the process. The ordering process is extremely fast in the organization and customers receive their orders faster and with fewer errors. ERP can apply the same procedure to other large business processes, such as human resource management or financial management.[8]

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6 Langer A.M, “Guide to Software Development: Designing and Managing the Life Cycle”, Columbia University, NY, USA, 2012, p.16

7 Ganesh K, Mohapatra S, Anbuudayasankar S.P, Sivakumar P., Enterprise Resource Planning: Fundamentals of Design and Implementation, Springer International Publishing, Switzerland, p.12

8 Nawaz N, Channakeshavalu K, The Impact of Enterprise Resource Planning (ERP) Systems Implementation on Business Performance Vl.02, Asia Pacific journal of research, India, 2013, p. 37

2. IMPROVING BUSINESS PROCESSES THROUGH INTEGRATION OF THE ERP SYSTEM AND THE CRM SYSTEM

Today, the most famous business entities in the world in this part of information technology are engaged in software development in customer relationship management. At one time, CRM software solutions were one-way and aimed at making direct contact with customers. But such a solution was not able to provide support for achieving high sales results. Over time, the prevailing view is that software solutions need to be equally focused on customer requirements and service providers. CRM software solutions need to meet a number of requirements:[9]

- focus on customer needs,
- support in cooperation with business entities,
- opportunity to adapt to the specific needs of different branches of activities
- possibility for integration with other applications of the business entity.

Table 1: Reasons for CRM implementation

Reason	Benefit
• Need for a central database, available to all employees to view and update customer data.	• Improved customer service, loyalty and retention.
• Analysis of customer data, including customers, and segmentation of potential customers.	•Customized marketing or sales campaigns. • Better campaign directions.
• Customer service where customers can order and help themselves using password access websites	• Reduced ordering costs and customer service costs.
• Identify and track potential customers.	• Wider customer base. • More focused monitoring of potential opportunities
• Reports generated with updated information, including revenue forecasting and trend analysis.	• Better and more timely decision making.

Source: https://www.ontario.ca/page/customer-relationship-management

[9] Buck-Emden R., Zencke P, mySAP CRM - The Official Guidebook to SAP CRM 4.0. Bonn / Boston: SAP PRESS, 2004, p. 34

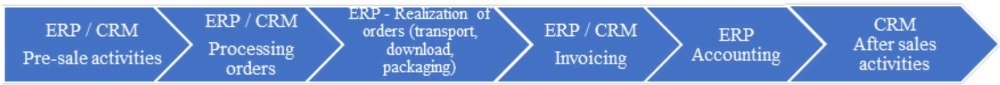
2.1 Need for ERP and CRM integration

Both systems, CRM and ERP, are aimed at achieving the same goal: increasing the profitability of companies. However, these two systems approach this goal in different ways. ERP is primarily aimed at reducing costs and optimizing business processes. CRM, on the other hand, approaches increasing profitability by increasing sales volume and nurturing customer relationships.

By integrating these two systems, the company has: ability to monitor customer interactions

- single point of customer information
- centralized data warehouse
- ability to effectively target customers
- control over sales forecasts and reports.

Scheme 1: Sales process supported by ERP and CRM



Source: Author`s own creation

CRM-ERP integration improves productivity, provides employees with relevant information in a timely manner, streamlines business processes through automated workflows, and improves organizational task management.

2.2 Benefits of ERP and CRM integration over enterprise business processes

The advantages from the integration of ERP and CRM systems are the following:[10]

- Full Customer Overview;
- Better access to critical information;
- Business Process Orientation;
- Reduce IT support and training costs.

3. ERP AND CRM ANALYSIS

For analysis in this paper I took the companies “Vitaminka” and “Synergy Medical”. ERP and CRM systems were analyzed at both companies . The

[10] Ibid, p. 9347

research was conducted through a telephone conversation and a survey, which was conducted on-line, due to the situation caused by the virus COVID 19. The survey included questions in the field of implementation of ERP and CRM systems, strengths and weaknesses, mutual integration of systems companies that successfully manage them.

The results and answers received from "Vitaminka" from their commercial director will be explained first. "Vitaminka" like any other modern company, which follows the world trends and the development of technology, which in turn contribute to more efficient and effective operation has implemented an ERP system. They have implemented the ERP system for more than five years. During the operation, this system was centralized at the level of the entire company. This centralization of the system stems from its importance for the overall operation of the company. The centralization of the system avoids double entry of data in different systems, in different departments, reduces the time for data entry and their further processing, which achieves more efficient and effective management at the level of the entire company.

The reasons for the implementation of the ERP system are the following:

1. More efficient operation;
2. Achieving cost-effectiveness in operations;
3. Bigger savings in organizing and implementing the processes;
4. Making quick, timely and real decisions.

Currently, of all the offered modules within the ERP system "Vitaminka" implement the modules - sales and distribution, logistics, production and finance.

When we look at the sales of "Vitaminka" for 2020, we can conclude that according to their reports, the company generated total revenue of 800.000 euros, which is an increase of 2% compared to 2019.[11]From the above we can conclude that the company is constantly growing, both in the domestic market and in foreign markets. From such data it can be concluded that the growth of sales and revenues improves the financial operations of the company. Thus these two modules are interconnected.

In the evaluation part of the ERP system in general, and the module they have implemented, confirmed the following claims:

- ERP allows data from any department to be shared and synchronized instantly across all departments.

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[11] https://vitaminka.com.mk/wp-content/uploads/2021/04/Informator_23.pdf p.8

- ERP can integrate the core processes of all departments. (Eg planning, production, sales, marketing, inventory control, order tracking, customer service, finance and human resources)
- Different modules of the ERP system can be integrated
- ERP allows people involved in projects to be integrated and also to be connected to each other
- Integration leads to improved productivity.
- The company uses integrated data for analysis and decision making
- Integrated information can meet the needs of different departments
- ERP integrates both internal and external information flows used by different departments in the organization into a single, comprehensive solution
- ERP databases and files are designed to maximize the performance of data entry in applications and therefore meet the need for multidimensional analysis
- ERP is able to manage multiple applications in a single database
- ERP is able to reduce the risk of duplicate / redundant information
- ERP can automatically update the data between related business functions and components
- ERP provides a mechanism for collecting, analyzing and presenting high quality information to its employees
- ERP system helps to achieve better return on investment (ROI)
- ERP system is stable, scalable and reliable to increase the growth of the company
- Downloading information is easy
- Transactions are completed in less time
- ERP is able to customize workflow processes
- ERP integrates / connects all departments and functions of the organization through a single computer and a single database.

The effects of the implementation are positive, they result in improved operation of the whole company, so "Vitaminka" states that business processes have been significantly improved in: logistics, sales and distribution monitoring, finance and production management. All these processes are crucial for the functioning of a company and are of existential importance for it. At the same time, the partners (suppliers, distributors, consumers) that cooperate with "Vitaminka" have implemented this system, which facilitates the cooperation itself, simplifies the operation as well as the planning and management of the processes: procurement, production planning, sales, distribution, logistics and of course financing in all companies that are part of this cooperation.

The only difficulty and problem that was noticed during the implementation of this system is the resistance of employees. Such resistance among employees can occur for many reasons, such as: insufficient knowledge of information technology, uncertain future, the possibility of reassignment to another job, fear of losing influence over other employees, lack of skills to cope with change, insufficient information and communication, rigidity, habit of the traditional way of working, lack of trust, etc. Over time and with the help of responsible persons through appropriate training and development, development of strategies for better communication with employees, explaining the benefits of implementing the ERP system for employees and the company, "Vitaminka" has successfully dealt with this problem. .

The second part of the survey questionnaire covered the CRM system implementation part. Unfortunately, "Vitaminka" has not yet implemented such a system. However, from their answers it can be concluded that customer relationship management is extremely important for the company, on a scale of 1-5 (insignificant - very significant) they rank such management with a score of 5. They think that such a system would be of great benefit to the company and they also highly value it. It would help to achieve greater transparency of the wishes and needs of consumers, increased transparency in orders, the ability to respond quickly to the needs of consumers. They consider the use of the Internet in the management of consumer relations to be significant and make a serious impact on this trend. In the future, CRM would be crucial to the company's reputation."Vitaminka" comments on the domestic market that the competition in the western part, Skopje, Tetovo and Gostivar is much stronger, unlike the eastern part. In addition to most competitors in the west, they also face different consumer habits. Also one of the problems in the domestic market, and it refers to sales is the very behavior of consumers. Namely, some of them favor foreign brands and think that they offer higher quality. The company says that they are constantly investing in personnel and other capital investments, in order to improve their market position and gain the trust of consumers. The advantage of selling on the domestic market vs exports is that the company has its own reputation, unlike exports where they compete with price, quality, appearance, and the results can be seen over a period of several years.[12]

[12] http://vitaminka.com.mk/wp-content/uploads/2019/11/Informator_19_2019.pdf , p 6

This department and the ERP system are not yet integrated with them. The management of "Vitaminka" sincerely hopes that in some of the next phases these two systems would be integrated with each other.

The second company that was the subject of research is "Synergy Medical" DOO. Through the answers to the survey questionnaire by those returned to the logistics department, we see that this company has implemented an ERP system. They have implemented the system for more than 5 years. The main reason for implementing this system is the need for better data flow for material stock and monitoring the entry and exit of materials from the company.

ERP system is centralized at the company level. This system was originally purchased from Microsoft Dynamics. Unlike "Vitaminka", this company has implemented only the module for sales and distribution. Given that it is a medium-sized company with a small number of employees that works exclusively in tender procedures, this choice of module implementation is economically justified.

Synergy Medical states that:

- ERP allows data from any department to be shared and synchronized instantly across all departments.
- ERP can integrate the core processes of all departments. (Eg planning, production, sales, marketing, inventory control, order tracking, customer service, finance and human resources)
- Different modules of the ERP system can be integrated
- ERP allows people involved in projects to be integrated and also to be connected to each other
- Integration leads to improved productivity.
- The company uses integrated data for analysis and decision making
- Integrated information can meet the needs of different departments
- ERP integrates both internal and external information flows used by different departments in the organization into a single, comprehensive solution
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- ERP provides a mechanism for collecting, analyzing and presenting high quality information to its employees
- ERP system helps to achieve better return on investment (ROI)
- ERP system is stable, scalable and reliable to increase the growth of the company
- Downloading information is easy
- Transactions are completed in less time
- ERP is able to customize workflow processes
- ERP integrates / connects all departments and functions of the organization through a single computer and a single database.

The employees claim that the process of entry and exit of the materials from the warehouse in the logistics department has been improved the most, and there is faster and accurate obtaining of stock information.

This company did not face any difficulties and obstacles in the implementation of the ERP system because the employees are generally young people, with great knowledge of information technology and understand all the advantages and benefits that this system provides for the whole company, but also for employees individually.

When asked if their partners and associates have implemented such a system, they answered that they do not practice this system.

Regarding the second part of the questionnaire, which refers to customer relationship management, they say that they have not yet implemented a software solution that would regulate this sector. Despite this fact, for the company CRM is of great importance. The way of communication with the consumers is by phone, or electronically. Most of the clients work through tender procedures and receive them by e-mail or telephone. The CRM system and the Internet in the future would be essential for the growth, development and operation of the company , which would result in the establishment of good customer relationships . The company believes that the CRM system has a medium impact on a company's reputation. This again arises from the fact that the company operates through tender procedures and has no direct contact with end users and users of the products.

Finally, employees emphasize that the ERP system provides quick access to information on the stock of materials that consumers (in this case clinics) request, thus providing a quick response as to whether they can meet consumer requirements.

Conclusion

Changes and adaptations to new market and IT technologies condition corrections of existing business models and software, ie increased use of electronic business models to effectively meet business needs and meet the increasingly complex demands of customers and consumers, which is in principle the main generator of business success of the company.

Consumers often say they want consistency, a proactive attitude and a quick response and response to their requests from their suppliers. The key to such a response and activity management is based on managing customer relationships, then creating a business system that meets their needs, creating optimal customer relationships, conditionally generated by certain priorities and information resources as the basis for estimates, forecasts and statistics. data relevant to decision-making processes.

From the practical part and the conducted research we see that companies are up to date with modern world trends, they follow the dynamic changes in the environment and adapt to them, in order to meet the needs and requirements of consumers. It is important to note that although the companies have already implemented these systems, or part of them, the process does not stop there, they are also interested in their upgrades, expansion of modules they have already implemented, introduction of new systems in its operation and integration of new systems with old systems. The functioning of business entities is significantly facilitated, fast and uninterrupted flow of information is enabled, both inside the company and with external partners, agility in work is increased, maximum effectiveness, efficiency and productivity is achieved, all this leads to work without errors, or keeping them to a minimum.

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SUSTAINABLE FOREST MANAGEMENT IN REPUBLIC OF NORTH MACEDONIA – CONDITIONS AND POSSIBILITIES

Abstract

Sustainable forest management offers a holistic approach to ensure that forest activities provide social, environmental and economic benefits, balance competitive needs and maintain and develop forest functions now and in the future. In Republic of North Macedonia the planning, management, cultivation, protection and use of forests and forest land as well as other issues of importance on the principle of biological, economic, social and ecological acceptability are regulated by the Law on Forests. Main hypothesis of the paper is that sustainable forest management in the Republic of North Macedonia provides the basic functions of the forest: economic, environmental and protective. Therefore, the purpose of the paper is based on the analysis of the forest management situation in the Republic of North Macedonia to point out the importance and opportunities of sustainable forest management in the country, i.e. that it has a great impact not only on productivity and profits, but also the overall development of the country.

Key words: forest management, sustainable development, Republic of North Macedonia
JEL Classification: Q23

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Introduction

Forest are one of the largest renewable natural resources that give us more benefits that may be classified according to ecological values (climate stabilization, soil enrichment and protection, regulation of water cycles, improved biodiversity, purification of air, CO_2 sinks, potential source of new products for the pharmaceutical industry, etc.), social values (recreational and leisure area, tradition uses, landscape, employment) and economic values (timber, non-wood forest products, employment). Forest exploitation has accompanied the human community from its earliest beginnings to the present day. We are aware that the area of forests in the world and in our country is decreasing and destroying and in order to solve this problem to some extent, forest management is developing as a process of planning and implementing practices for the stewardship and use of forests and other wooded land aimed at achieving specific environmental, economic, social and/or cultural objectives.

The concept of sustainability began to increase in importance at the end of the 1980s and at the beginning of the 1990s with the Brundtland report (1987) and the Conference on Environment and Development held in Rio de Janeiro, Brazil, in 1992 (the so-called Earth Summit), respectively. Sustainable forest management is a dynamic and evolving concept that aims to maintain and enhance the economic, social and environmental value of all types of forests, for the benefit of present and future generations.

In Republic of North Macedonia, the forest area is defined as an economic forest. Sustainable forest management in the country mean preservation and use of forests in a way to preserve biodiversity, but productivity, renewal, vitality and potential of forest to be at a level to meet the appropriate environmental, economic and social needs of present and future generations without endangering or damaging other ecosystems. In the country, only as many trees are cut down as they can later grow with reforestation. Also, there's a problem of illegal logging and increased logging as a result of weak economic power of citizens. Inefficient forest resource management and lack of accurate data are key challenges in the Macedonian forestry sector.

The initial working hypothesis of the paper is that sustainable forest management in the Republic of North Macedonia provides the basic functions of the forest: economic, environmental and protective. Therefore, main purpose of the paper is based on the analysis of the forest management situation in the Republic of North Macedonia to point out the importance and opportunities of sustainable forest management in the country, i.e. that it has a great impact not only on productivity and profits, but also the overall development of the country.

The methodology of research in the paper is based on historical and analytical method. The existing data and sources are synthesized and then analyzed, taking into account the chronology of the development of the forest management in Republic of North Macedonia.

1. THEORETICAL ASPECTS OF FOREST MANAGEMENT

Forests, given their ability to regenerate themselves, natural structure, mixed composition and natural rejuvenation, are one of the basic natural resources. They are perfect "environmental factories" that using only carbon dioxide, water and mineral materials from soil and solar energy, produce oxygen and thus purify the air from dust and are an ideal habitat for numerous living organisms. Beside their contribution to the existence of people through a network of production for satisfying the needs, the forests also represent a source of financial income, capital, employment and an alternative health care system through forest plants. Therefore, it's important their study, but also the way of managing forests and other natural resources related to them.

Forest management is defined in the Glossary of Technical Terms as the practical application of the scientific, technical and economic principles of forestry. The term is variously defined by different authors, embodying, in essence, the same essential ingredients. Some of these are listed below:[3]

- "Forest Management is that branch of forestry whose function is the organization of a forest property of management and maintenance, by ordering in time and places the various operations necessary for the conservation, protection and improvement of the forest on the one hand, and the controlled harvesting of the forest on the other."
- "Forest Management is the application of business methods and technical forestry principles to the operation of a forest property" (SAF).

It follows from the definition that forest management aims to achieve three main functions

1) Control of composition and structure of growing stock;
2) Harvesting and marketing of forest produce;

[3] Forest Management in India, http://www.jnkvv.org/PDF/12042020171215Forest%20Management%20B.Sc.%20Forestry%20IInd%20year.pdf, 14.2.2022

3) Administration of forest property and personnel.

Forest management as that of any other enterprise, involves a process of making and implementing policy decisions to achieve the objectives of the owner. These decisions involve, in turn, a plan of action. Planning is the responsibility of the States and the Centre in case of State-owned forests, broad principles for which are embodied in the National and the State Forest Policies. Detailed plans are prepared by Forest Managers at the professional level, and executed by the technician level staff. Forest Manager has to constantly manage the growing stock to achieve given objects of management; in this process he has to decide: "how much, when where and how to cut". Scope of Forest Management is very extensive; it encompasses broadly, the following main activities:[4]

A) Control of Growing Stock, its Structure and Composition:

- Site adaptation
- Choice of species
- Manipulation of stands
- Harvesting the produce
- Regeneration
- Protection.

B) Distribution and Marketing of produce:

- Transportation and communication
- Logging Plan
- Marketing data
- Sale of produce
- Revenue

C) Administration of Forest Property:

- Forest organization
- Management of Personnel
- Monitoring and control or works
- Labor management and welfare
- Financial control and economy efficiency
- Fulfillment of social obligations
- Record for present and future reference

According to the Law on Forests of the Republic of North Macedonia, forest management is cultivation, protection and use of forests through renew-

[4] Forest management working plan, http://tsfa.telangana.gov.in/Documents/Training%20Materials/Forest%20Management-Working%20Plan.pdf, 14.2.2022

al, care, raising new forests and forest land as well as other maintenance activities and advancement of forest functions.[5]Additionally, this includes strategic planning, organization and overview of administrative matters, professional and advisory works for support of entities that manage forests, monitoring and supervision. The forests are managed in a way that will permanently preserve and increase their surface and value; it will be ensured increase according natural conditions and it will be improved their common and production functions. The management of forests and forest land in the Republic of North Macedonia is realized through special plans, program and annual forest management plan. The benefits of forest management are obtaining a quality wood mass, maximum satisfaction of wood mass and forest needs, successful natural renewal of the forest and prevention and degradation of the destruction of the forest.

2. SUSTAINABLE DEVELOPMENT AND FOREST MANAGEMENT

The concept of sustainable development places at first the quality of the environment and all policies at local, regional and global level in the domain of industry, transport, agriculture, tourism and other activities affecting the quality of environment. As a term, it comes from forestry and refers to the measure for afforestation and destruction of forests that are interconnected and should not disturb the biological renewal of natural resources.

The concept of sustainable management is developed as an appropriate response to the destruction of forests, the growing demand for wood products and pressure by the public for better management and responsibility by the wood industry sustainable forestry. It is trying to integrate the economic and environmental values of the forest, its value as a tree and its value as a habitat. As a certain culmination of the current concepts of forest management, the notion of their sustainable management appears, which is explained as management forests in accordance with the principles of sustainable development and sets fairly broad social, economic and environmental purposes.

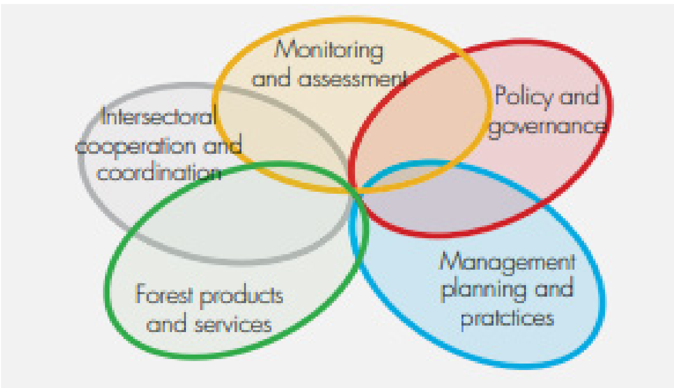
Although there is no universally accepted definition of sustainable forest management, there're two widely accepted definitions proposed by International Tropical Timber Organization i.e. that it's a process of managing permanent forest land to achieve one or more clearly specified objectives of

[5] Law on Forests of the Republic of Macedonia, Official Gazette No. 64/09 from 22.5.2009, http://www.mkdsumi.com.mk/pdf/Zakon_za_sumite_64_22052009.pdf, 19.2.2022

management with regard to the production of a continuous flow of desired forest products and services without undue reduction of its inherent values and future productivity and without undue undesirable effects on the physical and social environment;[6] and definition proposed by the MCPFE that sustainable forest management is the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems.[7]

Forests, when sustainably managed, can have a central role in climate change mitigation and adaptation and contributes to food security, poverty alleviation, economic development, and sustainable land use, in the wider context of sustainable development. FAO define sustainable forest management as a dynamic and evolving concept that aims to maintain and enhance the economic, social and environmental value of all types of forests, for the benefit of present and future generations. It integrates Forest products and services, Intersectoral cooperation and coordination, Monitoring and assessment, Management planning and practices and Policy and governance. (Figure 1)

Figure 1 FAO's integrated approach to sustainable forest management



Source: Managing forests for climate change, FAO, working with countries to tackle climate change through sustainable forest management, FAO 2011, https://www.eldis.org/document/A60472, *15.3.2021*

[6] Garsia J., Diez J., Sustainab;le forest management: An Introduction and Overview, https://www.researchgate.net/publication/230710275_Sustainable_Forest_Management_An_Introduction_and_Overview, 15.2.2022

[7] Criteria and indicators for sustainable forest management, MCPFE, 2001 https://www.ci-sfm.org/uploads/Documents/2012/Virtual%20Library/Policy%20Documents/MCPFE%2C2001a.pdf, 15.3.2021

According to United Nations Forum on Forests, sustainable forest management primarily:[8]

- Provides optimum forest products and services as per the production capacity of a forest;
- Continuously provides forest products and services in the present and in the future;
- Improves forest condition and productivity and ensures the presence of forests for future generations;
- Maintains and enhances environmental, social and economic values of forests • Increases employment and revenue.

In summary, sustainable forest management is the management of forests to achieve optimum yield and continuous flow of desired forest products and services, enhancing forest productivity and maintaining economic, social and environmental values of forests.

3. ANALYZES OF FOREST MANAGEMENT IN REPUBLIC OF NORTH MACEDONIA

The Republic of North Macedonia is one of the countries with rich biodiversity. The first census of forests was conducted after World War II. The first forest management studies date back to 1961. Since then, forests have been managed on the basis of 10-year management plans.

The forests in the Republic of North Macedonia cover 1.007.095 ha and cover about 39% of the territory of the country.[9] 88,88% of total area under forests are state-owned, and 11,12% belongs to private forest. Public and private forests are equally required to have management plans. The plans are prepared by an authorized organization — Sector for Forest Management and Design, which operates within the PE “National Forests”.

According to their functions, forests in the Republic of North Macedonia can be categorized as:[10]

1) Commercial forests - represent the largest percentage -92% and are used for permanent production of wood assortments and other forest

[8] Bhandari A., Lamichhane S. „Sustainable Forest Management Resource Book, WWF Nepal https://wwfasia.awsassets.panda.org/downloads/sustainable_forest_management_resource_book_english.pdf, 19.2.2022

[9] State Statistical Office, Area under the forest, https://www.stat.gov.mk/IndikatoriTS.aspx?id=18, 7.2.2022

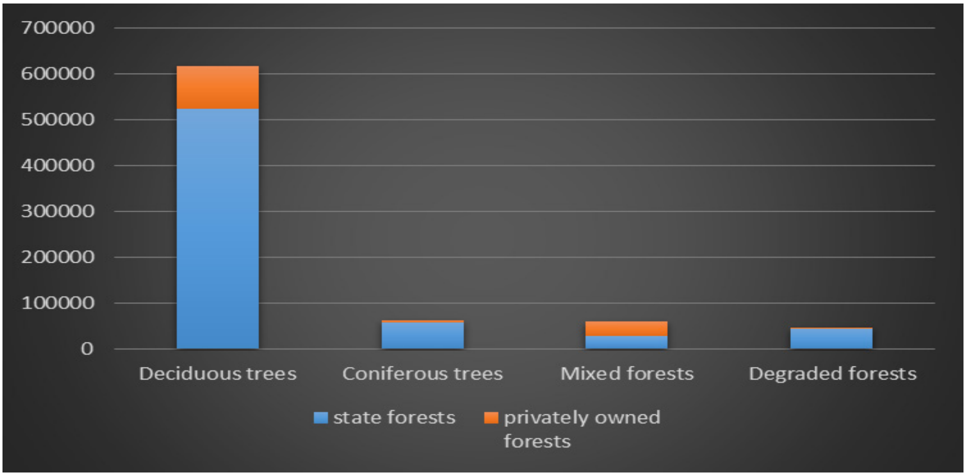
[10] Prenkova K., Mitrikeska V., Podiganje I ureduvanje na sumite, MON, Skopje, 2012, p.21

products.

2) Protective forests - are used to protect land, water, settlements, infrastructure and property.
3) Special purpose forests - designated as forest and hunting reserves, park forests and picnics, memorial forests, forests for production of forest seed and forests for the needs of science and teaching.
4) Forests in protected areas - declared in accordance with the Law on Nature Protection.

Significant types of forests in the country are deciduous trees, coniferous trees, mixed and degraded forests. Graph 1 shows forest area in Republic of North Macedonia by ownership and type of forest. State forest are present in a much higher percentage, which means that for the most part responsible for forest management are PE "National Forests".

Graph 1 Forest areas by type and ownership in Republic of North Macedonia, 2020



Source: State Statistical Office, https://www.stat.gov.mk/Publikacii/SG2021/SG2021pdf/10-Zemjodelstvo-Agriculture.pdf, *20.2.2022*

Regarding the general development of forestry in the period 2016-2020, there is a constant movement, i.e. there are no major deviations in investments and export income. (Table 1)

Table 1 General overview of forestry development in Republic of North Macedonia

	Employees in forestry	Investments, in '000 denars	Exports, in '000 denars
2016	2414	87121	37030
2017	2238	176578	62419
2018	2162	228897	66644
2019	2220	199127	73008
2020	2235	-	76313

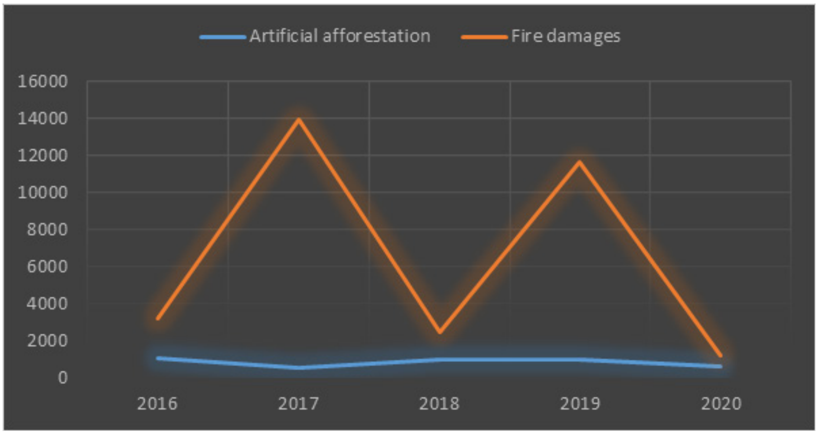
State Statistical Office, https://www.stat.gov.mk/Publikacii/SG2021/SG2021pdf/10-Zemjodelstvo-Agriculture.pdf*, 20.2.2022*

Sustainable forest management is generally achieved using criteria and indicators (C&I). Criteria are categories of conditions or processes whereby sustainable forest management can be assessed, whereas quantitative indicators are chosen to provide measurable features of the criteria and can be monitored periodically to detect trends and qualitative indicators are developed to describe the overall policies, institutions and instruments regarding SFM.[11] In this paper, we're analyzing the quantitative indicators such as afforestation, damage, timber harvest and health condition of forest.

On Graph 2 is presented artificial afforestation and fire damage in ha, in the country in the period 2016-2020. It can be concluded that despite the fact that the Republic of North Macedonia is facing serious damage from forest fires, afforestation is moving within the planning, i.e. the current situation is not taken into account at all.

[11] Garsia J., Diez J., Sustainab;le forest management: An Introduction and Overview, https://www.researchgate.net/publication/230710275_Sustainable_Forest_Management_An_Introduction_and_Overview, 15.2.2022

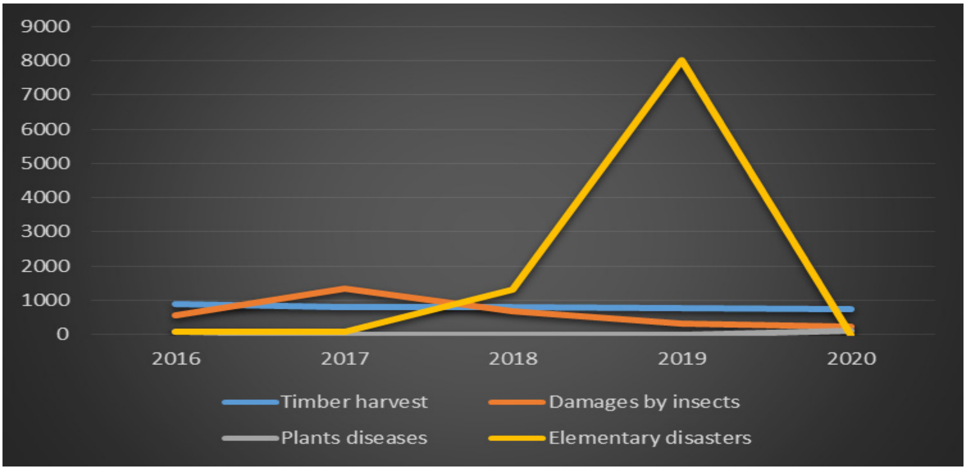
Graph 2 Artificial afforestation and fire damage in Republic of North Macedonia in ha



Source: State Statistical Office, https://www.stat.gov.mk/Publikacii/SG2021/SG2021pdf/10-Zemjodelstvo-Agriculture.pdf*, 20.2.2022*

Additionally, the situation is complicated by timber harvest, insect damage, plants disease and elementary disasters. (Graph 3)

Graph 3 Timber harvest, insect damage, plants disease and elementary disasters in Republic of North Macedonia in .000m^3



Source: State Statistical Office, https://www.stat.gov.mk/Publikacii/SG2021/SG2021pdf/10-Zemjodelstvo-Agriculture.pdf*, 20.2.2022*

According to the State Statistical Office data, the total commercial timber production in state-owned forests in the fourth quarter of 2021, compared to the fourth quarter of 2020, decreased by 17.4%.[12] In the same period, sales of forest products amounted to 114 871 m3 and decreased by 17.5%.

The coefficient of use of the allowable cut is around 0.70 in relation to the possible provided by the special plans for forest management.[13] This problem is closely related to the planning of the volume of the cuttings, the openness of the forests, the seasonal character of the road infrastructure, inadequate and outdated mechanization, unfair competition in the firewood market, etc. Illegal logging takes place in various ways and through various channels and is a major problem for forestry and the functioning of the PE.

In order to protect the forests in the Special Plan for forest management, a Plan for forest protection is prepared. That plan consists of a Plan for protection of the forest from plant diseases and harmful insects, as well as a Plan for protection of the forest from fires. Forest protection is a system of measures and activities implemented in order to ensure the survival of forests, preservation of health and vitality of forests from illegal appropriation and use, fires, plant diseases and pests, illegal logging, illegal collection of other forests products and other damage. The activities are aimed at preventive protection of forests and forest crops organized through the Report Diagnostic Forecast Service (IDP Service).

Table 2 shows the way of improving the forests until 2020. In the degraded forests and shrubs in the future period, reconstruction is carried out, in order to improve the quality and to make maximum use of natural production opportunities. Reconstruction is done by direct conversion in highly degraded forests and shrubs, while in the preserved low-stemmed plantations the method of indirect conversion is applied.

[12] State Statistical Office, Production and sale of forest assortments, felled timber and services in forestry, fourth quarter of 2021, https://www.stat.gov.mk/pdf/2022/5.1.22.02_mk.pdf, 22.2.2022

[13] Makedonski sumi 1998-2018, https://issuu.com/aleksandarivanovski7/docs/cela_monografija1.1, 22.2.2022

Table 2 Way of improving the forests by 2020

	Total in ha	2010 in ha	2020 in ha
1. Sustainable development	646.000	286.000	320.000
2. Improving of forest fund	260.000	130.000	130.000
direct conversion	100.000	40.000	60.000
indirect conversion	160.000	70.000	90.000

Source: Spatial Plan Of The Republic Of Macedonia, Spatial Planning Strategy, Ministry Of Environment And Spatial Planning, 2004, http://app.gov.mk/wp-content/uploads/2015/04/%D0%9030104-PP-na-RM-2002-2020.pdf*, 22.2.2022*

The proposed breeding interventions will significantly change the existing situation with the forests, with a quality positively changed structure. One of the very important measures that will contribute to the visible improvement of the forest fund is the direct conversion. It is performed by introducing profitable tree species.

In 2020, the PEFC National Standard for Sustainable Forest Management in North Macedonia was developed by the "Council for Sustainable Forest Management in the Republic of Macedonia". The requirements of this standard are binding on individual and group level. The implementation of this standard is at least at the level of economic unit or at another application level (forest management program of 10-30 ha size, cadastral parcel for privately owned forest up to 10 ha). The creation of PEFC regional system is a logical step to minimize difficulties and costs for the national governance bodies and with this to facilitate development of PEFC market on the Balkans. Knowing that in Slovenia there is fully operational PEFC system after resolving the issue of accreditation, North Macedonia and Bosnia and Herzegovina hopes to build up on Slovenian accreditation. That will also minimize the future operational costs in the countries.

4. POSSIBILITIES FOR SUSTAINABLE FOREST MANAGEMENT IN REPUBLIC OF NORTH MACEDONIA

Sustainable forestry means a healthy and useful concept through which in forestry plans and strategies are created that enable the preservation of forest ecosystems in a more natural form, without compromising the safety of overall biodiversity, preserving the natural environment and ensuring forest productivity. as well as the possibility of fulfilling socio-economic benefits for people. This way of forest management requires the establishment of a number of mechanisms from an administrative, economic, legal and social point of view. In order to establish sustainable forestry, it is necessary to carefully plan all measures and activities in the forest and apply modern scientific and professional methods by which forests will be cultivated, protected, restored and used, without disturbing their functions.

Forest management in our country is mostly concentrated and focused on state forests, which is marked by continuity and consistency in the planning and implementation of management procedures. In contrast, private forests are significantly neglected due to historical circumstances and poor representation and fragmentation. A special problem of balanced and sustainable management planning is the existing comparative planning and management system, separated by ownership. Therefore, combining all public competencies regarding forests in a single institution with the establishment of a number of areas for forest management, will enable the fulfillment of the requirements for sustainable forest management and sustainability while achieving long-term public interests.

One of the most important activities in sustainable forest management is by providing a series of measures to ensure sustainability in the use of wood resources while maintaining stability and preserving forest biodiversity for future generations. Main factor of sustainable forestry is productivity influenced by:[14]

- Site characteristics—qualities of the land where the forest is located and all are usually related to either climate or soil. The quality of the soil is an important factor in determining the productivity of the site. Soils that are deep, moist and rich in nutrients usually support productive forests. Furthermore, in productive forests, the tree roots are able to grow through the soil. Unproductive sites sometimes have hard dense and rocky soils that discourage root growth. Protecting and enhancing site characteristics can make forests more productive.
- Stand characteristics—attributes of timber trees such as size, health and species. Management of timber resources is an essential aspect to achieve sustainable forestry. It involves a balance between the amount

[14] Shaval M., Sustainable Forestry: Strategies, Benefits and Factors, https://www.yourarticlelibrary.com/environment/forest/sustainable-forestry-strategies-benefits-and-factors/69124, 25.2.2022

of trees harvested and the amount of new trees growing. The balance between the harvested trees and the newly established ones is called the sustained yield. A continued supply of timber is possible through sustained yield management.

For the implementation of sustainability in forest management, it is necessary to define which areas will be managed by afforestation and use of their natural resources; identify the entire logistics route that timber and other raw materials must travel to safely reach the processing site in a way that ensures greater control of both taxpayers and transparency with customers and suppliers; division of the area intended for exploration of blocks which will facilitate the control of the exploited sites, optimizing the work of the company and offering a lower risk of failure in the management of the area. The introduction of National Standard for Sustainable Forest Management in Republic of North Macedonia is great benefit, and it's guarantee for any inspection body, customers and market to identify that the company performs all proper forest management procedures.

Forest management is a smart way to save not only the area used for the company's production, but the environment in general. Nature is made from small parts scattered throughout the world, and conserving them is always the best way for her and humanity's continuity.

Conclusion

Sustainable forest management benefits are multifold and embrace economic, social, and ecological aspects. The implementation of sustainable forest management practices is important as it helps protect forests from conversion to agricultural, urban, and industrial use.

Sustainable forest management in the Republic of North Macedonia provides the basic functions of the forest: economic, environmental and protective. Therefore, it's important to provide activities that will ensure sustainability in the use of wood resources while maintaining stability and preserving forest biodiversity for future generations. Considering the ownership and type of forest in the country, its necessary combining all public competencies regarding forests in a single institution with the establishment of a number of areas for forest management, will enable the fulfillment of the requirements for sustainable forest management and sustainability while achieving long-term public interests.

Successful implementation of sustainable forest management in the country provides benefits in many ways. These benefits include protecting local livelihoods, preserving biodiversity and forest-based ecosystems, reducing rural poverty, and mitigating some of the negative impacts of climate change.

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(Original scientific paper)

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SOCIAL CAPITAL AND SUBJECTIVE WELL-BEING AT YOUTH IN SOCIAL RISK

Abstract

This paper is focused on association between different types of individual social capital and subjective well-being at youth in social risk. Social capital on individual level is analyzed via two dimensions: structural social capital and cognitive social capital. The structural social capital is measured as network of people, network frequency and type of network, while cognitive social capital is measured by quality of social relationships through trust, receiving and giving social support, positive and negative experience with others. Subjective well-being is measured through self-evaluation of life satisfaction. Data is gathered through conducted survey on youth in social risk from 16 to 35 years in February 2022. These youth are participants in project “Youth empowerment enabling prospects”, which goal is to increase the employability and find employment for youth in social risk. The analysis suggests that receiving social support is the only variable that have statistical significance and is positively associated with life satisfaction. This variable is positively correlated with variable positive felling relationships, which means that the latter is associated with greater level of life satisfaction.

Keywords: social capital, subjective well-being, youth in social risk
JEL Classification: I31, C20

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Introduction

Many researches from social sciences and international organizations are focused on subjective well-being. This measure is consisted in the third SDG's of United Nations – Good health and well-being. Therefore, there is a huge interest in research focused on contributing factors for increasing subjective well-being.

There are lots of studies in different fields such as sociology, psychology and economics that are analyzing subjective well-being. In these studies, for explaining the variation of subjective well-being are used individual characteristic and demographics such as age, gender, marital status, employment, education and income. As additional factors, there are studies that explain variation in subjective well-being through social capital. The association is observed through different forms of social capital such as social support, volunteering and trust. Institutionalized trust is also associated with life satisfaction, as trust in family, friends, relatives and people in the local community.

Social capital is also very popular subject in the research field. Its influence is researched by institutions such as World Bank and OECD. Because social capital is a very complex and multidimensional concept, a lot of researchers are using proxy measures for analyzing its particular individual aspects and associations to other concepts. Multidimensionality is the reason why it is needed to analyze different aspects of social capital and their association with subjective well-being.

Contribution in the research topic of association of social capital and subjective well-being at youth in social risk is very needed, as this research topic on the specific target group is not much developed. According to the Law of Social Protection in Republic of North Macedonia, social risk is social condition that has the potential to disable and harden the living conditions of the individuals, families or specific groups who may need institutional social support. In this category enters: youth without parental care, recipients of institutional social support, people with disabilities, people living in poverty, single parent families, victims of family violence, long term unemployed people and other categories. It is essential for this people to be in a state of positive feelings and satisfaction in order to thrive and leave healthier. A huge deficiency is the lack of research on the subject for this group of people in Republic of North Macedonia. It is very important to make national analysis because of the cultural differences between the countries that can produce different conclusions about the subject.

Research subject of this paper is social capital and its association with subjective well-being at youth in social risk. The goal of this paper is to determine which of the different dimensions of social capital are associated with subjective well-being at youth in social risk. General hypothesis of the paper is: individual social capital is positively associated with subjective well-being at youth in social risk. In order to achieve the goals of the paper and to prove the hypothesis, this paper will elaborate about subjective well-being and individual social capital, it will present some research findings about the subject, and will make a linear regression analysis. The analysis will be made on the basis of data obtained from a previously conducted questionnaire on a representative sample of youth in social risk participating in the project "Youth empowerment enabling prospects", which recruits youth in social risk in order to increase their employability and employ them. The conclusion follows in the final part.

1. THEORETICAL ASPECTS OF SUBJECTIVE WELL-BEING

Subjective well-being (SWB) is defined as the evaluation of one's own life (Diener and Biswas-Diener 2002). Veenhoven (2008) further extended the concept by defining SWB as an overall judgment of life using two sources. These sources were cognitive comparisons regarding what the good life means, and affective information regarding how an individual may feel the majority of the time. This concept is recognized in Sustainable Development Goals of United Nation because of its significant meaning for the social progress that may be otherwise hard to measure. The former Secretary General of the United Nations, Ban Ki-Moon, gave a speech in 2012 regarding the use of SWB indicators as a relevant measure of sustainable growth and prosperity.

Rojas (2007), approach SWB as inherently subjective, acknowledges the authority of the person, is inferential and transdisciplinary. The SWB approach assumes that well-being is essentially subjective phenomena experienced by the actor living life. Individuals are the most appropriate evaluators of their own life satisfaction.

Veenhoven (2008) applied social constructionist theory to SWB that proposes that humans attach meanings to phenomena and construct reality. Because humans belong to different cultures, the meanings created may be relative and relevant to the specific culture, in other words, the shared notions of what it means to live well or to be happy may vary between the cultures. Another theory is social comparison theory which states that people compare their life using referential standards in order to make judgments about whether they are living well. Lucas (2007) elaborate about adaptation theory which postulates that individuals adapt to good and bad life events because individuals SWB has a biological set-point that typically remains constant.

From the theory, it can be seen that life satisfaction and feelings of happiness are two separate aspects of SWB. Feelings of happiness is defined as affective component of SWB, and life satisfaction is considered as more stable and evaluative process that is referring to individual life events, in other words it represents evaluation of the level of realization of individual potentials relative to nature and aspiration of that individual (Diener 1984). Many scientist and institutions are using these measures as proxy measures of SWB. In most of the scientific papers, life satisfaction is measured by following question, "All thing considered, how satisfied are you with your life as a whole these days", on a scale from 0 (completely dissatisfied) to 10 (completely satisfied)[3]. Other studies for measuring the feelings of happiness use different measures on different scales from 0 (very unhappy) to 10 (very happy), or on a scale form 1 (not very happy) to 3 (very happy).

Subjective well-being is analyzed in the fields of psychology, sociology and economics. Psychologist typically focus on the association between personality factors such as optimism, high self-esteem, extroversion, with SWB. Other social scientists have found that cultural and social factors are associated with SWB (Diener, Oishi and Lucas 2003). From the empirical work and research of economists, can be noted that SWB is associated with better health, job productivity, income, martial status, religiosity and social capital (Frey and Stutzer 2002; Helliwell and Putnam 2004, Sarracino 2010)[4], which is the main subject of this paper.

2. DISTINCTION OF THE SOCIAL CAPITAL

One easy way to explain the social capital is through benefits that arise from social activity of one individual. The main idea of this type of capital is that networks and relations have value. Social capital is aspect of the social

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[3] Kamarudin N., Yen S.H., See K.F.: Social capital and Subjective Well-Being in Malaysia, Malaysian Journal of Social Sciences and Humanities (MJSSH), Volume 5 (Issue 6), 2020, p.4.

[4] Dodd, V.: Social Capital and Subjective Well-being: The Case of Rural Ethiopia, All Theses, 2012, p.18.

context (the "social" part) which have productive benefit ("the capital" part). This capital includes solidarity and good will between the people.

There is no unified definition for social capital. Coleman (1988) defines social capital as a variety of different entities, with two elements in common: they all consist of some aspect of social structures and they facilitate certain action of actors within the structure. Putnam (1993) defines social capital as features of social organization such as networks, norms and social trust that can facilitate coordination and cooperation for mutual benefit. Nahapiet and Ghoshal (1998), define social capital as the sum of the actual and potential resources embedded within, available through and derived from the relationships possessed by an individual or social unit. Iyer, Kitson and Toh (2005) define social capital as institutions, relationships, attitudes and values governing interactions amongst people[5]. From these definitions, one can see the multidimensionality of the social capital concept. Hence the problem with unified definition and measure of social capital.

Researchers in this field, often make distinction based on relationships. Hence, the social relationships can be strong, weak, vertical, horizontal, bonding, bridging or linking. Most common used distinction is of bonding, bridging and linking social capital. Bonding social capital are ties between individuals within the same social group or with others who are primarily like them. Bridging social capital are ties that link people together with others across a cleavage that typically divides society (like race, or class, or religion), and linking social capital are social ties (often a bridging social ties) to those with power that provides one with the capacity to gain access to resources, ideas and information from formal institutions beyond the community.

There are other distinctions of social capital such as distinction of structural and cognitive social capital (Uphoff 1999), and structural, relational and cognitive social capital (Nahapiet and Ghoshal 1998). In this paper, we took the Uphoff distinction of structural and cognitive social capital. In this distinction, the cognitive social capital includes the relational social capital. Structural social capital is related to different forms of social organization such as roles, rules and procedures and different types of networks. This type of social capital is related to features and type of networks that one has developed, or the people that individual knows and can use them for benefits such as information, material or non-material support. Typically, this capital on individual level is measured as structure and position of social network, number of net-

5 https://www.socialcapitalresearch.com/current-definitions-of-social-capital/

work memberships, types of social networks, frequency of social relationships. Measures are presented in Table 1.

Cognitive social capital derives from mental processes and resulting ideas, reinforced by culture and ideology, specifically norms, values attitudes and beliefs. This type of social capital is related to characteristics and quality of social relationships and networks. It is associated with trust, obligations, mutual respect and empathy. On individual level, it is measured by quality of social interactions, social relationships, social networks, social support, social cohesion, mutual care, helping, trust, trustworthiness, norms, obligations, expectations, identity, vision and values. Because cognitive and relational social capital are derived from mental and not material world, researchers usually are summing these two aspects into one dimension: cognitive social capital.

Table 1: Distinction of social capital on individual level

STRUCTURAL	RELATIONAL	COGNITIVE
Social structure: - Social networks and relationships - Membership in organizations and clubs - Bonding, Bridging and Linking social networks and ties	Nature and quality of relationships: - Trust and trustworthiness - Norms and sanctions - Obligations and expectations - Identity and identification	Shared understandings: - Shared language, codes, and narratives - Shared values, attitudes and beliefs - Shared goals, purpose and vision

Source: https://www.socialcapitalresearch.com/relational-social-capital/,*Claridge Tristan, What is Relational Social Capital?, 10.02.2022.*

3. SOCIAL CAPITAL AND SUBJECTIVE WELL-BEING: EVIDNCE OF THE RELATIONSHIP

In the research world, there are numerous papers that are showing the association between social capital and subjective well-being. Because of the complexity and multidimensionality of social capital and not having unified measure, researchers usually use proxy measure for social capital that are theoretically connected with the variable of interest. Hence, one paper shows that individuals who have greater social support, who volunteer and have bigger level of trust in others, have greater level of life satisfaction and positive feelings (Calvo, Zheng, Kumar, Olgiati and Berkman 2012). Data of this paper are gained from conducted research in 142 countries. Social support is measured by asking respondents "if you were in trouble, do you have friends and relatives you can count on to help you whenever you need them, or not". Volunteering was measured by asking respondents ''Have you volunteered your time to an organization in the past month" and social trust was measured by asking ''Do you think people can be trusted or not".[6]

However, there are not many papers that focused on association of social capital and subjective well-being at people in social risk. One paper that explores the association of social capital and SWB at older adults with Non-communicable diseases, suggests that social capital was associated with increased subjective well-being of adults in all the six countries that were included in the research (Ghana, China, India, Mexico, Russia and South Africa). The positive association between social capital and subjective well-being was higher for those with a single chronic condition than those with multiple chronic conditions in India and South Africa (Christian, Adekunle Sanuade, Adu Okyere and Adjaye-Gbewonyo 2020).

One research in Malaysia concludes that trust in family, friends and institutions is associated with higher feeling of happiness. Also, this paper show that trust in institutions is positively related with individual life satisfaction (Kamarudin, Yen and See 2020). In study conducted in England on youth from 16 to 17 years old, is concluded that positive local relationships of youth are related with bigger level of subjective well-being. Also, this paper finds that negative local relationships are connected with lower level of subjective well-being (Laurence 2019).

Another study in China finds that individual social capital, measured by the perception of social cohesion which includes quality of the social relationships and trust, is related to higher level of subjective well-being (Huang and Fang 2021). Study in Ethiopia shows that membership in civic organizations (informal organizations for financial support), generalized trust and trustworthiness in public institutions and governments, is positively related to subjective well-being (Dodd 2012).

Study conducted in 2015 via web research on sample of 11,814 in Japan, shows that there is a difference in association of social capital and sub-

[6] Calvo R., Zheng Y., Kumar S., Olgiati A., Berkman L.: Well-Being and Social Capital on Planet Earth: Cross-National Evidence from 142 Countries. PLoS ONE, 2012, p.4.

jective well-being between man and woman. The results show that bridging social capital relates positively with subjective well-being only when man is poor in bonding social capital, controlling other demographic variables such as age, education, marital status and income. There is no evidence of that kind of connection at woman. In fact, trust is related with subjective well-being no matter the levels of different social capital (Kanai 2016).

4. EMPIRICAL RESEARCH ABOUT SOCIAL CAPITAL AND SUBJECTIVE WELL-BEING AT YOUTH IN SOCIAL RISK IN REPUBLIC OF NORTH MACEDONIA

Main purpose of this paper is to contribute to scientific evidence of association of different types of individual social capital to subjective well-being at youth in social risk in Republic of North Macedonia. In addition, in using different proxy measures for measurement of structural and cognitive social capital on individual level, this paper makes significant contribution to the research focused on enhancing subjective well-being of people in social risk. These kind of research topics are very rare in Republic of North Macedonia, either from social capital or social risk category research perspective.

4.1 Research methodology

Research was conducted on a sample of youth in social risk that participate in the project: "Youth empowerment enabling prospects", in order to prove the association of individual social capital with subjective well-being at youth in social risk. The aim of the project is to increase the employability of youth in social risk and employ them. The project works with youth in social risk from 16 to 35 years and is operating in the city of Skopje. The research was conducted in the period of 7th till 14th February 2022. In order to gather data, questionnaire was developed in google forms and distributed to youth in social risk via e-mail, social media, platforms for communications. The questionnaire consisted 20 questions regarding demographics, structural social capital, cognitive social capital and subjective well-being. Out of 140 youth in social risk that participate in the project, 75 youth gave valid responses of the questionnaire that were used for analysis.

This research was conducted on youth in social risk in the following categories: youth without parental care, single parent families, youth in poverty, victims of family violence, receivers of institutional support, youth that live in family that have disability person, long term unemployed youth (above 6 months).

Data will be used to perform linear regression analysis. As control variables for the linear regression analysis, are used demographic variables: age, education and income. Subjective well-being is measured by proxy measure of life satisfaction using the question” All thing considered, how satisfied are you with your life as a whole these days”, on a scale from 0 (completely dissatisfied) to 10 (completely satisfied). This measure is the dependent variable in the regression analysis.

As independent variables are used measures for structural and cognitive social capital. Structural social capital is measured by: number of similar friends, number of different friends (similarities and differences are related to socio-economic characteristics), frequency of time spent with similar friends and frequency of time spent with different friends, that are measured on a scale from 1 (very rare) to 7 (everyday). Cognitive social capital is measured by: level of trust by answering “Most people can be trusted” on a scale from 1 (completely disagree) to 7 (completely agree); level of receiving social support by answering “If you were in need, how easy can you receive support from your friends” on a scale from 1 (very difficult) to 7 (very easy); giving social support by answering “If people you know have need, how often do you help them” on a scale from 1 (very rare) to 7 (always); level of positive experience with people in local community by answering “how often do you have positive feelings experience with people from local community. For example, someone is treating you friendly and make you feel happy and pleasant” on a scale from 1 (never) to 7 (very often); level of negative experience with people from local community by answering “how often do you have negative feelings experience with people from local community. For example, someone is treating you badly and make you feel stressed or discomfort”, on a scale from 1 (never) to 7 (very often).

4.2 Analysis of the results

In order to analyze the association of different levels of individual social capital and subjective well-being at youth in social risk, linear regression analysis was developed:

(1) $Y = \beta_0 + \beta p X i p + \epsilon$

Multiple linear regression model contains one dependent variable – life satisfaction that is proxy measure of SWB. As independent variables are structural and cognitive social capital, and controlling demographics variables.

Two different regression models were developed. The first model contains all mentioned variables. From this model (Table 2) it can be seen that determination coefficient is R^2= 0,28, which mean that 28% of the variation in life satisfaction can be explained by the variation in independent variables. This model has statistically significant F-test, suggesting that at least one independent variable is associated with life satisfaction, and that this model is statistically significant. However, the results suggest that none of the independent variables have statistically significant t-test, which means that none of the variables have significant effects on dependent variable.

Because of the results in the first regression, second multiple linear regression was developed via method of eliminating independent variables which had lowest level of statistical significance. After excluding age, trust, negative experience, number of similar and different friends and frequency of time spent with similar friends, new regression model results were obtained:

(1) Life satisfaction =1,161 + 0,314*Education + 0,193*Income + 0,402*Receiving social support + 0,230*Giving social support + 0,241*Positive experience - 0,110*Frequency of time spent with different friends.

New regression model has coefficient of determination R^2= 0,257, which mean that 25.7% of the variation in life satisfaction can be explained by the variation in independent variables. This model, also has statistically significant F-test. From Table 2, can be acknowledged that independent variable from cognitive social capital – receiving social support, has statistically significant positive association with life satisfaction. For one level increasing of perceived social support, life satisfaction is increasing for 0.402 on the scale of measurement. Other variables are not statistically significant.

Table 2: Multiple linear regression analysis

LIFE SATISFACTION		
Source	Model 1	Model 2
	Value	Value
DEMOGRAPHICS		
AGE	-0,008	
EDUCATION	0,417	0,314
INCOME	0,157	0,193
COGNITIVE SOCIAL CAPITAL		
TRUST	0,074	
RECEIVING SOCIAL SUPPORT	0,285	0,402**
GIVING SOCIAL SUPPORT	0,269	0,230
POSITIVE EXPERIENCE	0,200	0,241
NEGATIVE EXPERIENCE	-0,029	
STRUCTURAL SOCIAL CAPITAL		
BONDING FRIENDS NUM	0,039	
BRIDGING FRIENDS NUM	-0,003	
BONDING FRIENDS FREQUENCY	0,045	
BRIDGING FRIENDS FREQUENCY	-0,136	-0,110
R^2	0,28	0,257
F test (p value)	0,038	0,002

*Note: ** significant at 5% level.*
Source: Author's research

Table 3 shows correlation between all variables that are included in the second regression model.

It can be seen that the variables receiving social support and positive feelings have correlation coefficient of 0.628. This data show that these two variables are supporting each other, or to be more specific, positive feelings gained by relation with people from local community contributes to receiving social support or vise versa, which in turn increase life satisfaction of youth in social risk. From the other correlations it can be seen that there is no high multicollinearity.

Table 3: Correlation matrix – regression model 2

Correlation matrix:	EDUCATION	INCOME	RECEIVING SOCIAL SUPPORT	GIVING SOCIAL SUPPORT	POSITIVE EXPERIENCE	BRIDGING FRIENDS FREQUENCY	LIFE SATISFACTION
EDUCATION	1	0,408	0,021	0,085	-0,014	0,102	0,163
INCOME	0,408	1	-0,097	0,081	-0,018	-0,148	0,147
RECEIVING SOCIAL SUPPORT	0,021	-0,097	1	0,365	0,628	0,223	0,413
GIVING SOCIAL SUPPORT	0,085	0,081	0,365	1	0,359	0,020	0,291
POSITIVE EXPERIENCE	-0,014	-0,018	0,628	0,359	1	-0,015	0,391
BRIDGING FRIENDS FREQUENCY	0,102	-0,148	0,223	0,020	-0,015	1	-0,031
LIFE SATISFACTION	0,163	0,147	0,413	0,291	0,391	-0,031	1

Source: Author's research

This analysis has limitations that need to be addressed in the next papers. First limitation is the small sample of youth in social risk. Because of this, it cannot be made conclusion about the population of youth in social risk in Republic of North Macedonia. There is a need of bigger sample. Second limitation is the cross-sectional analysis which cannot show causality of the variables. Other papers should use panel data to address this limitation.

Conclusion

Social capital is complex concept that is hard to measure and is in the category of so-called umbrella concepts. As such, this type of capital is multidimensional and each dimension have different influence on specific variable of interest.

This paper showed theoretical concepts of subjective well-being and social capital on individual level through two dimensions: structural and cognitive social capital. The association of these concepts was analyzed for youth in social risk that participate in the project "Youth empowerment enabling prospects", for employment support in city of Skopje, Republic of North Macedonia.

Two linear regression analysis were conducted in order to gain results. In the first model, although relevant, none of the independent variables had statistically significant association with life satisfaction. From the second model, it can be concluded that receiving social support from friends is positively related to life satisfaction. Because of high correlation between receiving social support from friends and positive feelings gained from relation with people from local community, these variables are supporting each other and through this relation, positive feelings variable is associated with life satisfaction. Two of the independent variables belong to cognitive social capital category.

Results of this paper show that while working with youth in social risk, it should be worked on increasing the perceived level of received social support from people and increasing the positive feelings experience gained from relation with people from local community in order to increase the level of life satisfaction, which in turn will influence other activities, progress and results in their life.

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PUBLIC AWARENESS OF SUSTAINABLE DEVELOPMENT GOALS (SDGs) IN THE REPUBLIC OF NORTH MACEDONIA - SURVEY ANALYSE

Abstract

The Sustainable Development Goals (SDGs) are a wide range of 17 integrated global sustainable development goals for the environment, society and economy, which were adopted by United Nations Member States in 2015. Fulfilment of these Goals is universal call for action on national and global level in order to end poverty, protect the planet and ensure that all people will enjoy prosperity by 2030.

Main subject of the research is the level of public awareness regarding the SDGs 17 of citizens of the Republic of North Macedonia. The survey method has been used in the sample of 1200 respondents to determine the level of awareness about (on) the SDGs in the Republic of North Macedonia. A survey questionnaire is composed of ten (10) questions, divided in two sections. First

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section contains questions about the main demographic characteristics of the respondents. In the second sections, each question is linked to SDGs.

The results show very low public awearness abot the SDG 17 in Republic of North Macedonia, that rise the need for more integrated action from the government, civil sectors, education and research centres in increasing the public awearness that contributes to the implementation of the SDGs 17 on national and global level.

Keywords: Sustainable development, sustainable development goals (SDGs), Global Goals, awareness, Republic of North Macedonia

JEL classification: Q 01, L31

Introduction

The Sustainable Development Goals or Global Goals (SDGs) are a wide range of global sustainable development targets for the environment, society and economy. Also known as the Global Goals, they were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030 (UNU-CS, October, 2018).

The 17 SDGs are integrated goals, and their implementation on the national and global level aims to influence and to balance the social, economic and environmental sustainability. It is the main aim for SDGs to be designed in manner that will bring the world in the state of well-being, especially to accomplish “zero” poverty, hunger, AIDS and discrimination against women and girls. In that sense, every person on national or global level is needed to reach these ambitious targets. The creativity, know-how, technology and financial resources from all of society are necessary to achieve the SDGs in every context (GCTISD, UNDP, 2015).

These goals are a universal call for action to permanently address the problem of poverty, peace, prosperity and planetary protection that will enable social, economic and environmental sustainability by 2030.

The global goals are based on the five so-called 5Ps: people, prosperity, planet, peace and partnership and are intended for all countries and people in the world. Basically, they are intended to initiate an integrated action that should involve every individual nationally and globally (Ethiop J Health Sci., November 27(6), 2017). To this end, in addition to technology and financial resources, there is a need for awareness, creativity and knowledge to cause a fundamental change in the way of thinking and behaving in the society and environment.

Raising awareness of the SDGs among the public, including awareness of specific SDG targets is necessary for citizens to be able to hold their government accountable for the 2030 Agenda. All individuals in society should be aware and understand the commitments of their government have made under the 2030 Agenda and how they can meaningfully engage in SDG implementation and accountability processes. It also becomes essential to foster the political and social change. There are many actions to raise awareness in order to further accountability for the 2030 Agenda, as the identification of target audience and tailor awareness-raising initiative appropriately by considering the most effective methods to raise awareness of the SDGs (TAP, 2019). Already, all the principal actors are revising their policies and preparing for the implementation of the SDGs. Each government should prepare its national strategy, and a region like the Balkans would benefit greatly from cooperation and concerted action across the region. The SDGs need to be appropriated by individuals, communities and civil society to start a bottom-up process, translating the goals into local realities (Dahl, A. L, 2015).

The Republic of North Macedonia, as a full-flagged member of the UN, has taken the obligation to implement Global Goals. It is important to know and understand them, so that they can assess how each individual can contribute to their achievement. Therefore, it is particularly important to assess the awareness of the Sustainable Development Goals (SDGs). This will enable interactions among all stakeholders in society to be initiated, improved and maintained, which will provide a platform for taking appropriate action to achieve them by 2030.

Main subject of the paper is the level of public awareness of citizens of the Republic of North Macedonia regarding the SDGs 17. The aim is to estimate the level of citizen's awareness that could be used for targeted approach and development of appropriate measures and activities, intended to raise the awareness itself and the interest towards fulfilment of the SDGs.

1. THE SDGs ON THE GLOBAL LEVEL

The Sustainable Development Goals are a collection of 17 global goals designed to be a "blueprint to achieve a better and more sustainable future for all". The SDGs, set in 2015 by the United Nations General Assembly and intended to be achieved by the year 2030, are part of UN Resolution 70/1, the 2030 Agenda, as following [Sustainable Development Goals Report 2019, UN):

- Eradicate poverty in all forms (SDG 1)
- End hunger, achieve food security and improved nutrition and promote sustainable agriculture (SDG 2)
- Ensure healthy lives and promote well-being for population of all ages (SDG 3)
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (SDG 4)
- Achieve gender equality and empower all women and girls (SDG 5)
- Ensure availability and sustainable management of water and sanitation for all (SDG 6)
- Ensure access to affordable, reliable, sustainable and modern energy for all (SDG 7)
- Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (SDG 8)
- Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (SDG 9)
- Reduce inequality within and among countries (SDG 10)
- Make cities and human settlements inclusive, safe, resilient and sustainable (SDG 11)
- Ensure sustainable consumption and production patterns (SDG 12)
- Take urgent action to combat climate change and its impacts (SDG 13)
- Conserve and sustainably use the oceans, sea and marine resources for sustainable development (SDG 14)
- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss (SDG 15)
- Promote peaceful and inclusive societies for sustainable development (SDG 16)
- Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development (SDG 17)

The higher public awareness is particularly important for successful implementation of the Global Goals at the national level. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), education is a key aspect of sustainable development. Apart from technological solutions, political regulation or financial instruments, sustainable development is achieved by a change in the way each individual thinks and acts.

The consciousness of every individual in society requires quality education and learning for sustainable development at all levels and in all social contexts (ESD, UN, 2019).

As a primary requirement for development and well-being foreseen by the realization of the UN Global Goals, engagement and participation of citizens is invaluable. The importance of citizen engagement and participation in the realization of the Global Goals is imperative in the direction of implementation and realization of the Global Agenda. Without awareness of the Global Goals, citizen participation as key actors for their fulfilment at the community level will be limited. The role of education and communication in building the awareness is to empower citizens so that they are able to face the complex and key challenges of the 21st century, including enabling change, making informed decisions and collectively building a sustainable future (UN, July, 2019).

The findings of one survey study on SDGs awareness show that only a small proportion of respondents are familiar and know their meaning. The worldwide average level of the SDGs is just under 50% (European Union: 56%; Germany: 46%), which is an opportunity and challenge for governments, businesses, educational and research institutions. Although the SDGs are of great value to these institutions in terms of aligning their policies and communication with them, this does not always seem to be recognized or implemented. If achieving the 17 goals requires a joint action by people around the world, the study shows that much work remains to be done to raise SDGs awareness, as a way to ensure that all sectors work together toward the same direction and contribute to achieving these goals (YCBE, 2018-19).

The process of implementation of the SDGs does not depend on one, or more different institutions, but it requires equal engagement of the state institutions and the contribution of each individual. However, the government should carry out the greatest weight the greatest weight.

Another research study of the World Economic Forum (WEF, 2019) was conducted on a sample of nearly 20.000 people aged between 16 and 74 from 28 countries. The findings show that 74% of the adult respondents are aware of the SDGs. Great Britain and Japan rank lowest in terms of familiarity, with 51% having never heard of the SDGs. The SDGs awareness rank is also low in the US, with 50% of the respondents declared that have never heard of the SDGs. Also, the top-ranked SDGs are those related to humanitarian human needs, including zero hunger, clean water and good health. In China, 90% of the respondents have heard of the SDGs, including 52% who were either very or somewhat familiar. The study was also had a significant demographic variance in responses, with respondents under the age of 35 as the most aware of the SDGs- 9.6% reporting that they were "very familiar" compared to 6.3% of those aged 35 to 49 and 2% of those aged 50 to 74. Only 23.1% of those aged under 35 said they have never heard of Global Goals, compared to 25% of 35 to 49 year olds and 29% of those aged between 49 and 74. The Survey also found that the global public prioritized SDGs are related to immediate human needs, such as zero hunger, clean water and good health, whereas goals such as gender equality, reduced inequality and industry, innovation and infrastructure, were among the lowest ranked.

In April 2020 when the COVID-19 pandemic started, SDSN surveyed the SDGs community on progress made and major challenges and barriers faced in implementing the SDGs. In total, 715 respondents from 104 countries participated. Respondents represented university and research organizations (32%), non-governmental organizations (22%), the private sector (14%), students (14%), governments (8%), international organizations (5%), and other (5%). They identified three major challenges that impede further implementation of the SDG transformations and progress toward the SDGs: lack of political leadership to implement the 2030 Agenda, lack of awareness of the SDGs among policymakers and the public and short-termism and a focus on responding to immediate events over the pursuit of longer-term objectives such as the SDGs. (Cambridge University Press, 2020).

2. MEASURING THE AWARENESS OF SUSTAINABLE DEVELOPMENT GOALS (SDGs) IN THE REPUBLIC OF NORTH MACEDONIA

The results of this research provides glimpse of the information necessary to determine the level of awareness of Macedonian citizens for Global Goals. Their identification and grouping is the basis for identifying and implementing specific and targeted measures and activities aimed for raising public awareness. The plan of activities in this direction is usually through education and training in the field of environment.

In order to gather relevant data and to determine the level of awareness of SDGs in the Republic of North Macedonia, the survey method is used in the sample of 1200 respondents. The sample consisted dominantly of women (69%), 84% of them with high education, 75% are employed. 58% are from Skopje, the capital of the Republic of North Macedonia. According to the age segmentation, almost half of them represent the age group of 30-39 years (43%).

The survey questionnaire is composed of ten (10) questions, divided in two sections. First section of questions is about the main demographic characteristics of the respondents. In the second section, each question is linked to the SDGs. Namely, the questionnaire contained 10 questions primarily concerning respondents' awareness, perceptions, knowledge and attitudes regarding SDGs, along with basic demographic data (gender, age), the city of residence, educational attainment and employment status. Only the question regarding the city of residence was open-ended, all others were multiple choices, close-ended questions. The multi-choice questions allowed full coverage of all SDGs and saved time for the respondents since each questionnaire was estimated to take less than 10 minutes of their time. In order to make the answering of multi-choice questions user friendly and easier, the questionnaire was designed in a form format and the official UN icon of each SDG was attached to the relevant question. To avoid missing data, respondents losing interest, and low response rate, the questions were short, clear and unambiguous. In the form of introductory text, the questionnaires also give brief explanation of the objectives of the survey. The survey was conducted electronically starting from September 2021 and ending in December 2021, by using the Google survey platform.

Being that aim of the research was to provide a snapshot of awareness of the citizens of the Republic of North Macedonia regarding the 17 SDG, the survey was administered to a sample of individuals at a single point in time (cross-sectional survey).

Since the target population in this study is unknown, the sample size was derived by computing the minimum sample size required for accuracy in estimating proportions by considering the standard normal deviation set at 95% confidence level (1.96), and the margin of error of 5% confidence interval (0.05 = ±5), with a percentage picking a choice or response (20% = 0.2).

The formula is (Kenny, David A, 1987):

n = (z) 2 p (1 – p) / d2

or when p = 1/2 (0.5)

n = (z) 2/4d2

n = sample size

z = level of confidence according to the standard normal distribution (for a level of confidence of 95%, z = 1.96)

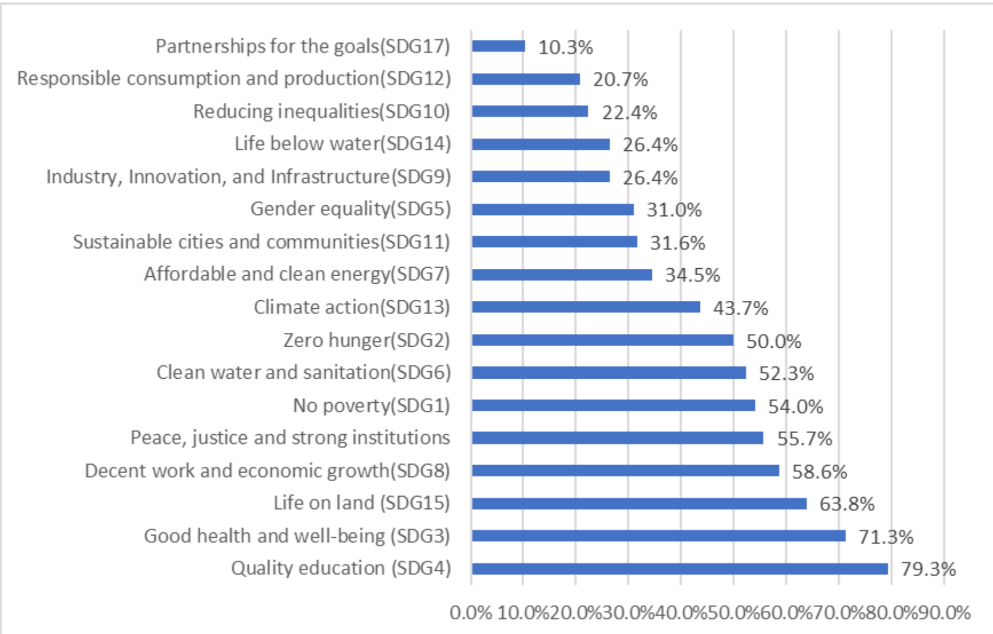
p = estimated proportion of the population that presents the characteristic (when unknown we use p = 0.5)

d = tolerated margin of error (for example we want to know the real proportion within 5%)

According to the last census (Republic of Macedonia State Statistical Office, 2002), the total population in the country is 2.022.547, so the number of respondents needed is 385. However, because the questioner was up-loaded on social media for three months and had good acceptance, we received 120.000 valid questionnaires, causing the margin of error to drop to (0.03 = ±3), or exactly 2.83%.

Gathered and analysed data shows the level of awareness and knowledge of SDGs. In the exploratory phase, the data shows that 82% of respondents in the Republic of North Macedonia have never heard the term SDGs. Compared to the Findings from the Public Opinion Survey conducted in 24 countries, where only 25% of the population have some basic knowledge of the term SDGs (OECD, June, 2017), Macedonian level of SDGs awareness is quite low. This comparison shows that there is a need to implement citizens' awareness-raising activities on the UN Global Goals in the Republic of North Macedonia, which will enable consensus and cooperation among all segments of the society, local government, government, business and citizens.

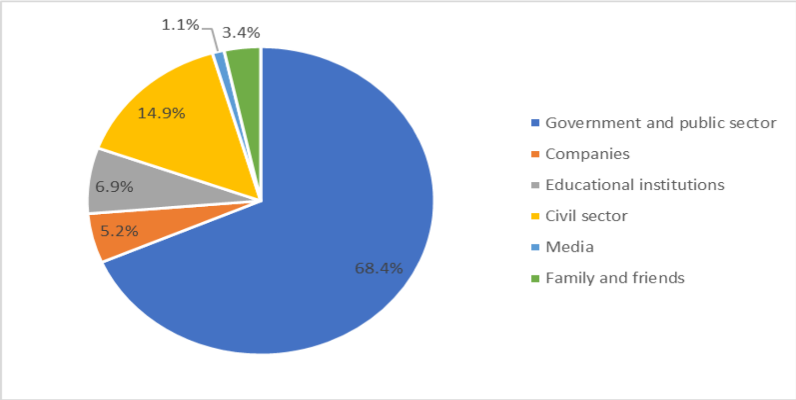
Figure 1. The significance of SDG 17 according to the respondent's opinion



Source: Author's calculations

The survey analyse, according to the opinion of respondents shows that the most significance has the SDG 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all). The second most impactful is SDG 3 (Ensure healthy lives and promote well-being for Population of all ages) and then SDG 15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss) (see Figure 1).

Figure 2. Who should take accountancies for the SDGs?



Source: Author's calculation

According to the Macedonian citizens who participated in the survey, the most upgraded SDG in the last year is achieving Gender equality and empower all women and girls (SDG 5).

Asked about which public actor should be responsible for SGDs' implementation in the country, almost 70% of the respondents think that the Government and its institutions should be primarily involved. According to the responders, other stakeholders, such as civil society, business, education and research institutions, media and friends and family, do not have a significant role for the implementation of the SDGs (see Figure 2)

This is in accordance with the findings on the global level, where many people expect governments to take action first, as was the case with the implementation of the Sustainable Development Goals. Psychologists call this an external locus of control-the sense that change can be generated only by a powerful external entity (UNDP, 2020).

Conclusion

Sustainable development goals or SDGs 17 stand for creating a better world and building sustainable future. The goals advert to different parts of most global problems nowadays, from abolishing poverty to creating a sustainable and environment friendly cities, as common goals for making a world better place for all.

Their importance makes them to become recognized as basic strategic goals for the countries worldwide. Higher public awareness is crucial for successful implementation of integrated SDGs on national level. It needs an integrated action that should involve the government, civil sectors, education and research centers and every individual to be involved in the implementation and realization of the sustainable development goals on national and global level.

The results of the research indicates that the level of awareness of SDGs 17 in the Republic of North Macedonia is low. Namely, only 82% of the respondents are not aware, or they have insignificant knowledge about the SDGs 17. So, the presented findings open the possibility for developing certain policies for raising awareness of the population, as prerequisite for implementation of the Global goals.

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(Original scientific paper)

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QUALITY OF EDUCATION – THE CORE VALUE OF HUMAN CAPITAL

Abstract

Education is the major building block of human capital. The purpose of this article is to investigate the level of quality in secondary education and analyze educational attainment trends in North Macedonia. The research focuses on Eurostat statistical data of the educational attainment level of the population in North Macedonia vis-a-vis EU average. Eurostat data on employment based on educational attainment level of the population present an overview of the importance of education for employment opportunities and economic prosperity of individuals. The paper also analyzes the quality of education in North Macedonia, using an online survey among high school students to assess their perception on the level of quality of education. Survey findings reveal significant weaknesses in the quality of education in North Macedonia, among which the most alarming is that students do not perceive causality between education and future benefits in life. Without focusing on improving quality of education, especially in terms of greater focus on applied knowledge and lifelong learning, the country cannot expect that education can be a driver of human capital, productivity and economic growth.

Keywords: human capital, educational attainment, quality of education, applied knowledge
JEL classification: I20

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Introduction

Human capital, that is knowledge, skills and competencies of workforce is considered to be one of the main pillars of economic growth. The link between education and economic growth has been well documented in scientific papers, while the interest of scholars has been rising with the increase of mass education and access to education. In this context, education of the workforce, both formal and informal, has become crucial for the economies. Education enables the workforce to perform more complex and better paying jobs, whereas the existence of such jobs encourages individuals to continue their education.[4] In this regard, the relationship is mutually reinforcing. Strong economies invest heavily in education and have higher rates of educated people, who, in turn, with their knowledge and skills increase productivity, innovation and economic growth.

The beginning of this century has been marked by an increasing focus on human capital as a key driver of economic competitiveness and growth. Developed countries have set new goals for formal and non-formal education, primarily through heavy investments in formal education and research, fostering lifelong learning and the inclusion of active population in non-formal education, aligning educational programs with the needs of the business sector and the economy and alike. At national level, countries have developed strategies for workforce upskilling and set goals to achieve the desired skills in the labor markets so as to meet current and future needs, thereby ensuring economic prosperity and global competitiveness. Two of the main goals of Europe 2020 strategy for growth and jobs relate to education - increasing the share of the population aged 30-34 with tertiary education to at least 40% and reducing the rate of early school leavers to less than 10%.[5]

The ultimate goal of education is creating human capital pool or “knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being”[6]. Today, education has a central place both for the individual and the economy. At an individual level, education, as a means to acquire knowledge, skills and exper-

4 OECD, “*Human capital: How what you know shapes your life*”, 2007, p. 30, [https://www.oecd.org/insights/humancapitalhowwhatyouknowshapesyourlife.htm]

5 European Commission/Eurostat, “*Smarter, greener, more inclusive: Indicators to support the Europe 2020 strategy*”, 2019, p.17, [https://ec.europa.eu/eurostat/documents/3217494/10155585/KS-04-19-559-EN-N.pdf/b8528d01-4f4f-9c1e-4cd4-86c2328559de?t=1570181425000]

6 OECD, “*Human Capital: How what you know shapes your life*”, 2007, p. 29, [https://www.oecd.org/insights/humancapitalhowwhatyouknowshapesyourlife.htm]

tise, is linked to employment opportunities, income levels, financial stability and overall social inclusion. At a national level, education, as a driver of technological development, innovation and productivity, is linked to economic growth.

Nevertheless, the quality of education plays an important role in the human capital formation and its potential benefits. Indeed, countries that have more or less similar levels of educated people show significant variations in their growth pace.[7] This is partly due to other factors as the business environment, technological development, foreign trade, demography and alike, but also to the quality of education.

1. THE IMPORTANCE OF EDUCATION IN A CONTEMPORARY CONTEXT

Higher levels of educational attainment provide greater employment opportunities, economic prosperity and overall inclusion in the society. In addition, it enables individuals to adapt more easily to the rapid and continuous changes in the workplace and the labor market. Research supports the link between educational attainment level and employment, in terms of better occupational prospects and higher income. Hence, individuals with tertiary education have better employment opportunities and are less likely to be at risk of unemployment.

Based on Eurostat data on unemployment rates by educational attainment level, people aged 15-74 years in the EU with a low level of education in 2020 were more than three times as likely to be unemployed (13.6 %) as those with a high level of education (4.7 %). Moreover, the employment rate of the population aged 20-34 years who have completed tertiary education in the last three years is significantly higher than that of below upper secondary or upper secondary education. In 2020, in EU countries, the employment rate of people who have completed higher education in the previous three years is more than 90% in Germany, Austria, Sweden, the Czech Republic, the Netherlands and Malta. In fact, in only five EU countries this rate is below 80%: Portugal (78.7%), Croatia (77.2%), Spain (75.9%), Italy (64.1%) and Greece (60.8%)[8]. In North Macedonia, this rate is 63.5%. The differences in the unemployment rate by educational level are also evident from the data of the Employment Agency of the Republic of North Macedonia, according to which, more than

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7 Ibid, p.30

8 https://ec.europa.eu/eurostat/databrowser/view/EDAT_LFSE_24__custom_1640901/default/table?lang=en (Accessed 23.12.2021)

half of the unemployed in the country, regardless of age, have either no education or only primary education (53.3%), compared to 26.8 % with secondary education and 9% with higher education.[9]

The level of education is closely related to job satisfaction as well as the overall life satisfaction. It is revealed that education is a significant determinant of the subjective well-being of individuals. People with higher levels of educational attainment in the EU are less likely to feel downhearted or depressed and are happier and more satisfied with different aspects of life. The above is primarily linked to the financial situation of their household, but also to the aspects related to health, social relations, living environment, as well as the feelings of security. Also, overall life satisfaction as well as the meaning of life is rated higher by more educated people in the EU.[10]

2. EDUCATIONAL ATTAINMENT TRENDS IN THE REPUBLIC OF NORTH MACEDONIA

Eurostat data show positive trends in the educational attainment of the population in the last decade, with a significant increase in the proportion of the population aged 25-64 years with tertiary education. While in 2011, 21% of the population aged 25-64 years in EU-27 had completed tertiary education, in 2020 more than a third (32.8%) of this population had tertiary education level. The analysis reveals that in terms of educational attainment, North Macedonia lags behind the EU-27 average. In 2020, 23.2% of the population aged 25-64 years had tertiary education, which is significantly below the EU-27 rate. Also, a significant percent of the population (27.4%) in this age group had incomplete or only primary education (Figure 1). Although North Macedonia in the last decade has reported improvement in the proportion of the population with a tertiary level of educational attainment, with an increase from 17.6% in 2011 to 23.2% in 2021, this growth still lags behind that of the EU-27 in the same period.

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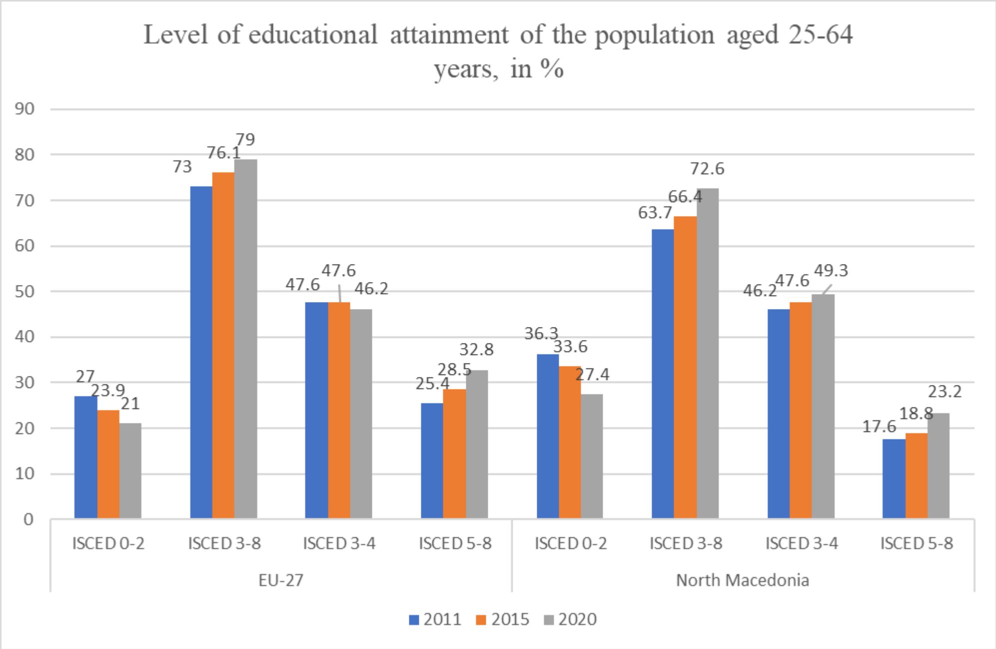
9 Employment Agency of the Republic of North Macedonia, Annual Report 2020, 2021, [https://av.gov.mk/godishni-izveshtai.nspx]

10 Eurostat, "*Quality of life: facts and views*", 2015, pp.101-106, [https://ec.europa.eu/eurostat/web/products-statistical-books/-/KS-05-14-073]

Figure 1. Proportion of the population aged 25-64 years based on educational attainment level



Source: Adapted from Eurostat[11], 2021

The data on the educational attainment level of the population aged 25-34 years are somewhat encouraging. In 2020, as many as 85.9% of this age group in North Macedonia have completed secondary or tertiary education (48.2% had OSCED 3-4 level and 37.7 % had OSCED 5-8 level or tertiary education), compared to 85.3% in EU-27 (44.8% had OSCED 3-4 level and 40.5% had OSCED 5-8 level of education).[12] This positive trend in the last years is a result of several factors, among which the introduction of compulsory secondary education, as well as the increased access to higher education, with the rise of private higher education institutions.

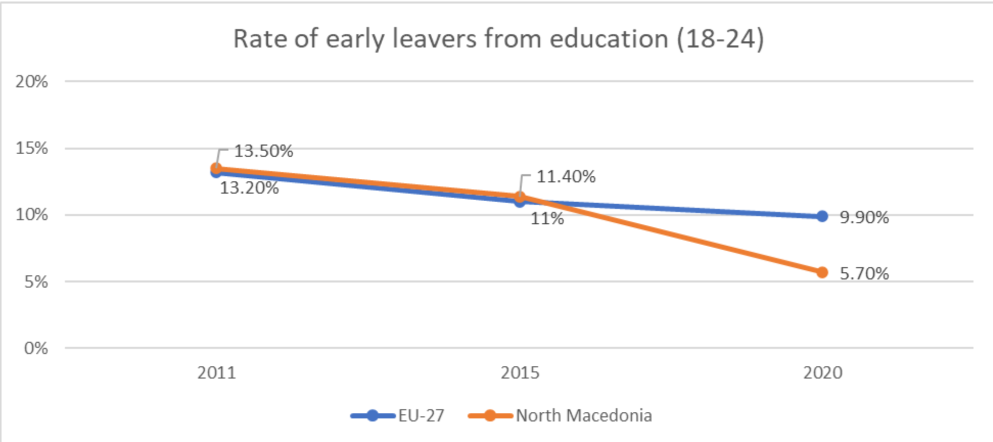
In addition, in the last decade, progress has been reported in the reduction of the rate of early leavers from education and training (population aged 18-24 years, who had completed at least a lower secondary education as com-

[11] https://ec.europa.eu/eurostat/databrowser/view/EDAT_LFS_9903__custom_1649721/default/table?lang=en (Accessed 23.12.2021)

[12] https://ec.europa.eu/eurostat/databrowser/view/EDAT_LFS_9903__custom_1653835/default/table?lang=en (Accessed 23.12.2021)

pulsory but were not involved in further formal education or training). In this context, while the EU average rate of early leavers from education and training was 9.9% in 2020, in North Macedonia the rate was 5.7% (see Figure 2), well below the Europe 2020 average target of 10%. Low rate of early leavers from education is extremely important in terms of several parameters at a national level, such as economic growth, employment and poverty reduction. Early leavers have greater likelihood of long-term unemployment, poverty and social exclusion. Data reveal that only 1.4% of the early leavers from education are employed in North Macedonia in 2020, as opposed to 4.2% in EU-27.[13]

Figure 2. Rate of early leavers from education and training, % of the population aged 18-24 years



Source: Adapted from Eurostat[14], 2021

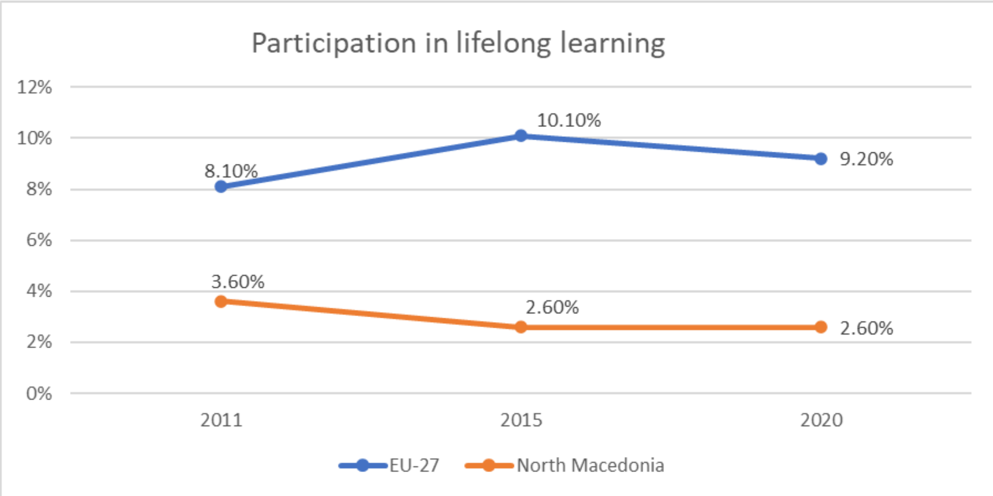
Participation in formal and non-formal education and training, as part of lifelong learning is of particular importance in today's business context. Global business trends have set higher standards for knowledge and created the need for multidisciplinary skills of the workforce in all economies. The need for continuous workforce upskilling has increased the importance of lifelong learning. At a national level, countries have encouraged lifelong learning, increased the participation of its population in formal and non-formal education, and facilitated their access to education and training, as a means to improve

[13] ibid

[14] https://ec.europa.eu/eurostat/databrowser/view/EDAT_LFSE_14__custom_1655546/default/table?lang=en (Accessed 26.12.2021)

the competitiveness of their economies. In this regard, the EU-27 average participation rate of the population aged 25-64 years in education and training in the last few years is around 10%. In comparison to the EU-27 average, the participation rate of the population aged 25-64 years in education and training in the Republic of North Macedonia is at a rather low level. Namely, in the last five years, this rate has never exceeded 3% (see Figure 3).

Figure 3. Proportion of the population aged 25-64 years having participated in lifelong learning



Source: Adapted from Eurostat[15]*, 2021*

Even more, based on Eurostat data for 2020, in several EU countries, almost one third of the population aged 25-64 years have participated in formal and non-formal education and training, (for example, Switzerland 27.6%, Finland 27.3%, Sweden 28.6%), as opposed to Romania (1%), Bulgaria (1.6%), Croatia (3.2%), Serbia (3.7%) and Slovenia (8.4%)[16].

Insufficient participation of the population in any form of lifelong learning is also reflected in the level of digital skills and foreign language knowledge, skills that have become integrated in the criteria in almost all jobs. Indeed, in 2019, less than one third of the population in North Macedonia aged

[15] https://ec.europa.eu/eurostat/databrowser/view/trng_lfse_01/default/table?lang=en (Accessed 26.12.2021)

[16] ibid

15-74 years had basic or above basic digital skills, compared to more than half of the population in EU-27.[17] Again, one third of the population aged 25-64 years in the country did not know any foreign language.[18]

It is evident that the last decade has witnessed an increase in the level of educational attainment, particularly among the population aged 25-34 years in North Macedonia. Nonetheless, this does not necessarily produce the desired effects for the individual or the economy. In fact, the level of educational attainment or mean years of schooling is probably the only quantitative measure to assess knowledge of the population in a country. In absence of other quantitative measurements, the previous has been vastly used as a starting point for developing educational policies and assessing the potential human capital of an economy. In line with this, Hanushek et al. (2010) conclude that the focus on human capital as a driver of economic growth has raised the attention on educational attainment, at the same time underscoring the importance of quality of education for economic growth. Developing countries have been much less successful in improving the quality of education, a prerequisite without which they would find it difficult to improve their long-term economic performance.[19] Although data on the level of educational attainment and the access to education are indeed important, they do not reflect the core value of the human capital – the quality of acquired knowledge, skills and competences of the workforce through education and training. In fact, the latter is essential to achieving the desired effects from the education, both on individual and national level. According to the World Bank's Human Capital Index 2020, students in North Macedonia have quality of learning that is equivalent to 7.3 years after completing pre-primary, primary and secondary school.[20] The quality of education in the country, as measured through the assessment of learning outcomes, is unfortunately far from promising.

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17 https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_sk_dskl_i&lang=en (Accessed 15.01.2022)

18 http://ec.europa.eu/eurostat/databrowser/view/edat_aes_l21/default/table?lang=en (Accessed 15.01.2022)

19 Hanushek, E.A. & Woessmann, L. in D. J. Brewer & P. J. McEwan, "Economics of Education", Amsterdam: Elsevier, 2010, pp. 60-67 [http://hanushek.stanford.edu/publications/education-and-economic-growth]

20 World Bank, Press Release, 2020, [https://www.worldbank.org/en/news/press-release/2020/09/16/north-macedonia-needs-to-continue-investing-in-education-and-health-in-order-to-improve-its-human-capital]

3. APPLIED KNOWLEDGE AS A DETERMINANT OF QUALITY OF EDUCATION: THE CASE OF NORTH MACEDONIA

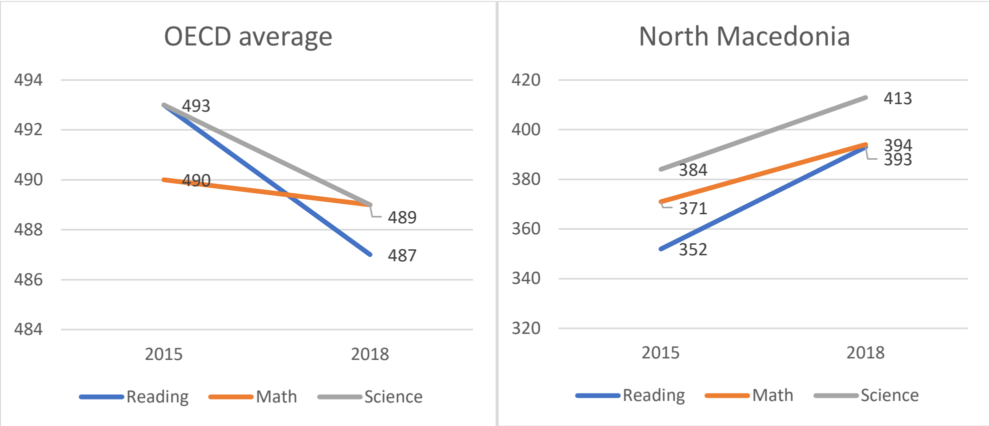
3.1. International assessment of learning outcomes in secondary education

Efforts made to measure the quality of education include international assessments of learning outcomes (e.g., TIMSS, PIRLS, OECD's PISA), which mostly evaluate student's reading and language proficiency, numeracy proficiency and science. However, these assessments are rather limited both in scope (students are assessed only in predetermined grade or age) and geographic coverage (mostly OECD countries are covered).

The only external international assessment conducted in the country is the PISA testing of 15-year-old students that assesses the extent to which they have acquired the knowledge and skills in reading, mathematics and science, essential for full participation in social and economic life. The assessment does not only evaluate whether students can reproduce what they have been taught, but rather how well they can apply the acquired knowledge in new real-life settings. PISA data allow comparison of students' applied knowledge and skills in all participating countries, as a potential indicator of the quality of education at a national level. The last assessment was conducted in 2018 in 79 countries.

Based on the data from the last PISA testing, students in our country show significant improvement in all three subjects since 2015 (see Figure 4). In comparison to other countries in the region, North Macedonia has the greatest improvement in test scores since 2015. Despite the evident positive trend, the country still lags behind most of the countries in the region, ranking in the group of countries with average test scores below 450.

Figure 4. PISA results, OECD average and North Macedonia, 2015 and 2018



Source: Adapted from OECD[21], 2021

PISA 2018 data reveal that our students scored much lower than the OECD average and an insignificant proportion of students performed at the highest levels (Level 5 & 6) in at least one of the three subjects. In particular, only 1% of students attained one of the highest levels of proficiency in math or science (OECD average was 11% and 7%, respectively) and even less in reading (compared to OECD average of 9%). Although there was an improvement in the proportion of students who achieved a minimum level of proficiency (Level 2 or higher) in at least one subject, the same was far below the OECD average. In North Macedonia, 45% of the students achieved the minimum level of proficiency in reading (as opposed to 77% in OECD), 39% in mathematics (76% in OECD and 98% in China) и 51% in science (78% in OECD).[22,23]

These findings indicate a pressing need to identify the main challenges and shortcomings of the education system in the country, especially in primary and secondary education. A more systematic approach to education reforms, greater commitment of all relevant stakeholders, as well as increased investments in education are essential to improving the education system in

[21] OECD, PISA 2018 Results, [https://www.oecd.org/pisa/publications/pisa-2018-results.htm]

[22] Schleicher, A., "PISA 2018: Insights and Interpretations", OECD, [https://www.oecd.org/pisa/PISA%202018%20Insights%20and%20Interpretations%20FINAL%20PDF.pdf]

[23] OECD, "*North Macedonia – Country Note – PISA 2018 Results*", 2019, [https://www.oecd.org/pisa/publications/PISA2018_CN_MKD.pdf]

the country. UNICEF identifies several reasons behind the poor outcomes of the education system in the country, among which, obsolete teaching programs and materials that are often poorly implemented and do not follow latest research in science, low motivation and lack of up-to-date competences and resources among teachers, poor evaluation and assessment system.[24]

3.2. Students' perception of the quality of secondary education in North Macedonia

Students, as active recipients of knowledge, are considered relevant stakeholders in the education system in every country. Thus, their perception on different aspects of the education process presents meaningful insights into the quality of education in the country. Hence, in order to assess students' perception on the quality of education, a survey was conducted among students in secondary education. An online questionnaire, covering a range of aspects in the education process was sent to about 300 high school students. With a response rate of 21%, 64 completed questionnaires were analyzed. The questionnaire included items related to teacher-student interaction, teaching methodology and materials, the evaluation and assessment issues, school environment as well as students' perceptions on education.

The findings of the survey reveal that students' perception on many aspects of the education process, covered by the questionnaire, are far from promising (see Figure 5). A significant proportion of surveyed high school students do not think that teachers motivate them enough to work harder or that they are fully committed to explaining the material studied. Also, only one third of students believe that the teachers boost their self-esteem and encourage them to openly express their opinion. Regarding teaching methodology, the findings reveal that most of the students perceive themselves as passive recipients of knowledge, i.e., point to a lack of in-class group activities and discussions and lack of homework that includes additional online research or presentation. Teaching materials seem somewhat sufficient for most students to comprehend and learn the material without additional assistance from their parents. Yet, a significant share of students (43.8%) does not think that textbooks clearly depict the topics or that the material is clearly presented and well explained.

Survey results also draw attention to certain shortcomings in the assessment process. Indeed, more than half of the surveyed students think that it

[24] UNICEF, "Quality and inclusive education", [https://www.unicef.org/northmacedonia/quality-and-inclusive-education]

is not important to teachers to see whether students have fully understood the material studied. Students' full comprehension of the material is the first step in the process of acquiring knowledge that can be applied in new situations and contexts. Regarding the assessment practices in schools in our country, OECD concludes that they "...continue to be predominantly summative and provide limited quality feedback to help students understand how to advance in their learning. They also have few opportunities to demonstrate the more applied skills".[25]

Figure 5. Students' perception on quality of education aspects in secondary education

Source: Based on authors' research

[25] OECD, "OECD Reviews of Evaluation and Assessment in Education: North Macedonia", OECD Publishing, Paris, 2019, [https://doi.org/10.1787/079fe34c-en]

Students' perception on the impact of education on their future life is rather worrisome. These findings reveal that students do not find causality between education and future benefits in life. In fact, over two quarters of high school students (either disagree or are neutral) are not convinced that knowledge acquired at school will be useful to them later in life nor that it will lead to better occupational prospects and/or financial stability. Having said that, it is important to underline that 50% of the students think that they gain average level of knowledge at school, whereas 34% of students above average.[26] Hence, based on students' opinion, although they gain the required knowledge at school, the same would not significantly improve their future prospects. Poor economic performance of the country, limited employment prospects, narrow distribution of wages, politicization of public administration employment, disrupted social values and corruption, many of which have been long-standing challenges of the country, deteriorate the potential benefits of education on an individual level.

The analysis presented above only scratches the surface of the challenges that the country faces in terms of quality of education. Indeed, it would take a comprehensive and an in-depth analysis to address all outstanding shortcomings and deliver proper reforms in order to improve the quality of education.

Conclusion

A positive trend of the educational attainment level of the population in the Republic of North Macedonia has been marked in the last decade. Significant improvements have been identified primarily in the educational attainment level of the population aged 25-34 years, i.e., the proportion of the population aged 25-34 years with higher education, as well as the relatively low rate of early leavers from education. However, much remains to be done, especially in terms of lifelong learning, as the participation of the population in education and training is relatively low, compared to the countries in the region and insignificant compared to the developed EU countries. This is an extremely important aspect, as it is essential for the competitiveness of the economy. Continuous upgrading of skills and competences of the workforce is an inevitable prerequisite for achieving the desired level of competitiveness, innovation, but also for fast and easy adaptation to continuous change.

[26] This questionnaire item was not included in Figure 5 as it includes other type of gradation (excellent, good, average, poor, very poor)

In addition, another aspect that the country needs to address is the quality of education. Unfortunately, profound weaknesses in the quality of education have been revealed in recent years. The findings of our research are in line with the conclusion drawn by several organizations, as ETF, OECD, UNICEF on the quality of education in the country. In this context, structural and policy-related challenges, such as low quality of the teaching and learning environment, obsolete study programs, lack of assessment resources as well as goals and standards to improve learning outcomes, limited professional development opportunities and incentives for teachers, pose a substantial limitation to human capital formation in the country.

Hence, much needs to be done to modernize the educational process and improve the quality of education, especially in terms of greater focus on applied knowledge and lifelong learning. Without focusing on improving quality of education, the country cannot expect that the education can be a driver of human capital or that it can contribute to improved productivity and economic growth.

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(Original scientific paper)

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THE PRINCIPLE OF EFFICIENCY IN ADMINISTRATIVE PROCEDURE – DILLEMAS AND CHALLENGES-

Abstract

This paper elaborates the issues referring to the legal regulation of the principle of efficiency, its meaning, as well as application of this principle. The aim of this paper is to analyze the legal framework that defines the principle of efficiency in the administrative procedure in the Republic of North Macedonia, present an empirical analysis of data from the work of the State Commission for Decision-making in Administrative Procedure and Labor Relations Procedure in Second Instance, identify the factors that influence the consistent application of this principle, as well as offer recommendations for an improved application of the principle. The authors believe that although measures and activities that contribute to achieving the principle of efficiency in the administrative procedure have been applied, there are more measures that need to be taken, i.e., actions that would strengthen institutional capacity and enable a consistent implementation of this principle in practice.

Keywords: *administrative procedure, efficiency, effectiveness, complaint, principles in administrative procedure*
JEL classification: K40

Introduction

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Taking into consideration the Law on General Administrative Procedure as a lex generalis regulation applied by public administration bodies, which have the authority to decide on administrative cases, take administrative actions, conclude administrative contracts and enable/provide public services[4], as well as the public administration reform goals, among which compliance with the European public administration principles, we can conclude that the efficiency in conducting administrative procedures is not only one of the primary principles in the activities of the public sector institutions, but also one of the conditions for successful public administration reforms.

Undoubtedly, the citizens as well as legal entities, when seeking the exercise of a certain right or protection of a particular interest, want to complete this in a fast, expedited, and economical procedure. Nonetheless, what directly connects to the efficiency is the creation of a formal and material legal decision, as well as the quality of the service that needs to be delivered. Hence, this results in a challenge of achieving a balance between the efficiency and legality along with the quality of work of the public institutions.

In this paper, the positive-legal method will be used to analyze the legal framework that regulates the principle of efficiency, as well as an empirical analysis that will be conducted to analyze the data from annual reports on the work of the State Commission responsible for decision-making on submitted complaints.

1. POSITIVE LEGAL DEFINITION OF THE PRINCIPLE OF EFFICIENCY

The importance of the principle of efficiency can be seen in the fact that it is contained in several laws, as an obligatory principle in the exercise of basic competencies of public bodies. At the same time, this principle is one of

[4] See more in Article 1, Article 2 and Article 4 of the Law on general administrative procedure, "Official Gazette of the Republic of Macedonia", no. 124 from 23.07.2015. Namely, this law regulates the procedure for practicing protection of the rights and legal interest of individuals, legal entities and other parties, including the protection of the public interest which is to be followed by the ministries, the bodies of the state administration, organizations regulated by law, other state bodies, legal entities and individuals which are legally entitled to perform public authorizations, and the bodies of the municipality of the city of Skopje and the municipalities in the city of Skopje, upon performing their legal obligations, they act, decide and take other actions in administrative matters.

the priorities in the public administration reforms, which is continuously listed in the Public Administration Reform Strategies, as well as in the Action Plan.[5]

The Law on Organization and Operation of the State Administration Bodies prescribes that "the state administration bodies shall perform their competencies established by law and based on the principles of legality, accountability, efficiency, cost effectiveness, transparency, equality and predictability". They are responsible to provide the citizens with efficient and legal practicing of their constitutional freedoms and rights, as well as their rights and interests in the administrative procedure.[6]

The Law on Public Sector Employees regulates the practice of the principle of efficiency by administrative servants. Therefore, in accordance with the principle of managing the employee performance, it is considered that the evaluation of employee performance is a measure for the contribution of the employee to the efficient and effective functioning of the institution, measured based on the quality, dynamics, deadline adherence, level of completion of the operational tasks and goals, service orientation, professionalism and employee behavior along with other criteria which are of interest to the institution.[7]

The principle of efficiency and cost effectiveness is regulated by the Law on General Administrative Procedure (LGAP), according to which the procedure should be implemented in the simplest way possible, without delays and with least expenses for the engaged parties, but still enable a complete adherence to the rights and legal interest of the parties, as well as a complete determination of the factual situation. The principle of efficiency means a timely, successful and quality resolution of the administrative procedures when it comes to the rights, obligations and legal interests of the citizens.[8]

The LGAP from 2015 contains other provisions which directly influence the efficient implementation of the procedure such as the mandatory electronic communication between the bodies, as well as the parties, provided that

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[5] Action plan of the Strategy for public administration reform 2018-2022 https://mioa.gov.mk/sites/default/files/pbl_files/documents/strategies/ap_srja_2018-2022_20022018_mk.pdf

[6] See Article 3 and Article 38 of the Law on organization and operation of the state administration bodies ("Official Gazette of the Republic of Macedonia" No. 58/00, 44/02, 82/8, 167/10, 51/11 and "Official Gazette of the Republic of North Macedonia" No. 96/19 and 110/19)

[7] Article 7, paragraph 2 of the Law on public sector employees, ("Official Gazette of the Republic of Macedonia", No. 27/14, 199/14, 27/16,35/18 and 198/18 and "Official Gazette of the Republic of North Macedonia" No. 143/19 and 14/20)

[8] Article 7 of the Law on general administrative procedure, Official gazette of the Republic of Macedonia No. 124 from 23.07.2015

they agree to this type of communication, the possibility to lead the procedure through one public body, practicing legal help among the bodies, presenting evidence ex officio, as well as precise definition of deadlines in the procedure both for first instance decision and other actions during the procedure.

We conclude that the principle of efficiency de lege lata is well regulated by both procedural legislation and other regulations. The purpose of this is to modernize the administration and become service-oriented toward the citizens and effective in its operations. It is up to the institutions to take appropriate mechanisms to ensure their effectiveness in practice and to increase the responsibility of employees.

2. THE SECOND INSTANCE ADMINISTRATIVE PROCEDURE

The second instance administrative procedure is regulated by the LGAP and numerous substantive laws, as an opportunity to achieve legal protection, i.e., contestation of the legality of the decision made by the first instance bodies.[9]

Pursuant to several specific laws, multiple bodies are considered second instance bodies, including ministries, the State Commission for Decision-making in Administrative Procedure and Labor Relations Procedure in Second Instance, the State Commission for Decision-Making in the Field of Inspection Supervision and Misdemeanor Procedure in the Second Instance, and other higher bodies.

Having in mind the scope of this matter, in this paper the research focuses only on the work of the State Commission for Decision-making in Administrative Procedure and Labor Relations Procedure in Second Instance (further as State Commission), since this body was established precisely for reaching decisions in second instance in administrative cases.

The State Commission was established in 2011 with the Law on establishing a State Commission for Decision-making in Administrative Procedure and Labor Relations Procedure in Second Instance. The State Commission has the status of an independent state body, led by a president and officials who

[9] This procedure, in accordance with the Law on general administrative procedure, can be led after submitting a complaint or dispute. Against the primary administrative acts, the party has the right to a complaint in the cases prescribed by law. Against the real acts, as well as the actions of the service providers of general interest, the party has the right to dispute. See article 14 of the Law on general administrative procedure, Official gazette of RM, No. 1242015

perform their work professionally and are assigned and dismissed by the Assembly of the Republic of North Macedonia. According to the law, the Commission is competent for:[10]

- decisions upon complaints against decisions adopted in an administrative procedure in first instance by the ministries, other state administrative bodies, organizations determined by law and other state bodies. as well as complaints against decisions adopted in first instance by the Securities and Exchange Commission (against this decision of the Commission, a dissatisfied party has the right to initiate an administrative dispute in front of the Administrative court) and
- decisions upon issues in the field of labor relations in second instance (not being within the competence of the Agency for Administration), issues in the field of the labor relations as regards to the civil servants from the Agency for Administration, as well as against the decisions of the Ministry of the Interior annulling the decisions for awarding acknowledgments (against this decision of the Commission, the dissatisfied party has the right to file a lawsuit to the competent court)

To date, the Law on the Establishing a State Commission has 5 amendments that mostly refer to changes of the competencies of the commission as well as its composition. Thus, with the amendments from 2013, the Commission was also responsible for resolving complaints against decisions made in the first instance in an inspection procedure until 2014, when these cases passed into the competence of the newly formed State Commission for deciding in the second instance in the area of the inspection and the misdemeanor procedure.[11] Also, in 2013, the composition of the Commission was changed, i.e. it was increased by four new officials (a total of 10 appointed officials, one of whom is the President).

The cases handled by the State Commission can be from different areas such as pension and disability insurance, social policy, education, science, culture, property law, transport and communications, agriculture, forestry, veterinary, economy, environmental protection and others, and for the effective operationalization of these competencies of the Commission, it was necessary to regulate them in several material regulations.[12]

10 Law on establishing a State Commission for Decision-making in Administrative Procedure and Labor Relations Procedure in Second Instance (“Official gazette of the Republic of Macedonia” No. 51/11, 148/13, 41/14, 130/14, 53/16 and 11/18)

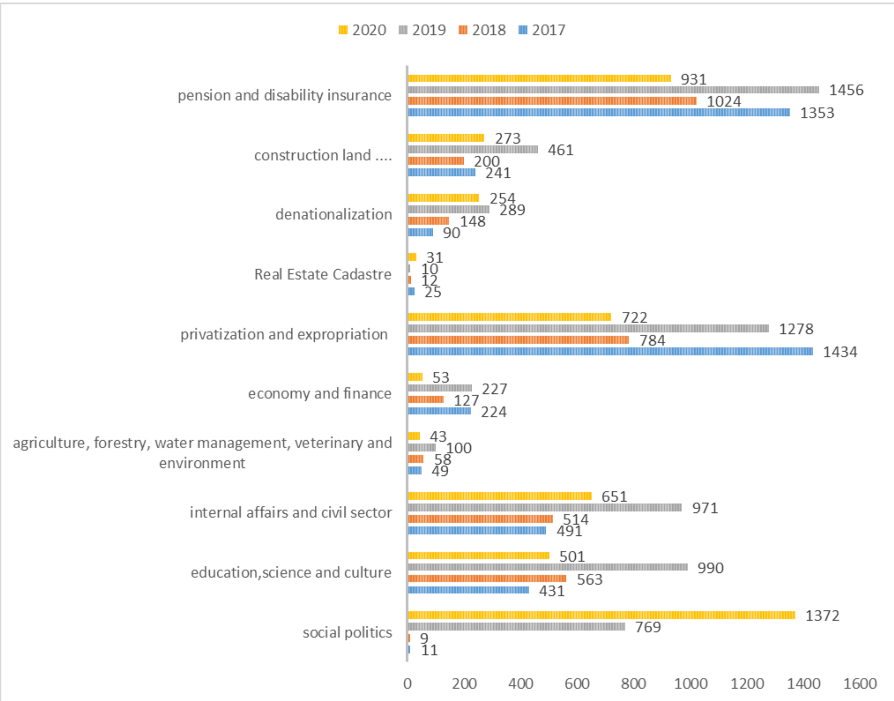
11 Law on establishment of State Commission for Decision-Making in the Field of Inspection Supervision and the Misdemeanor Procedure in Second Instance (“Official gazette of the Republic of Macedonia” No.130/14, 53/16 and 11/18)

12 For instance, the Law on culture, Law on medicine and medical aids, Law on identification

3. ANALYSIS OF THE EFFICIENCY OF THE ADMINISTRATIVE PROCEDURE THROUGH THE WORK OF THE STATE COMMISSION FOR DECISION-MAKING IN ADMINISTRATIVE PROCEDURE AND LABOR RELATIONS PROCEDURE IN SECOND INSTANCE

In this part of the research the focus is on the analysis of data from the work of the State Commission. From the analyzed data it can be seen how many complaints have been submitted to the State Commission, what kind of decisions have been made, in which areas most complaints have been submitted and how efficient the State Commission is. The figure below shows the total number of solved cases by area.

Figure 1: Number of solved cases by the Commission by areas for the period between 2017-2020



Source: Annual report of the State Commission for decision-making in administrative

card, Law on registry records, Law on mineral goods, Law on defense, Law on guns, Law on establishing an Agency for tourism promotion and support in RM, Law on primary education, Law on travel documents of the citizens of the Republic of Macedonia, Law on pension and disability insurance and others.

procedure and employment procedure from secondary instance for 2017, http://dkz.mk/sites/default/files/dokumenti/Godisen%20izvestaj%202017.pdf*, Annual report of the State Commission for decision-making in administrative procedure and employment procedure from secondary instance for 2018,* http://dkz.mk/sites/default/files/dokumenti/Godisen%20Izvestaj%202018.pdf *Annual report of the State Commission for decision-making in administrative procedure and employment procedure of secondary instance for 2019,* http://dkz.mk/sites/default/files/dokumenti/Godisen%20Izvestaj%202019.pdf*, Annual report of the State Commission for decision-making in administrative procedure and employment procedure from secondary instance for 2020 http://dkz.mk/sites/default/files/GI%202020.pdf,*

As it can be seen from the presented data in Figure 1, the Commission is active mostly in cases in the scope of pension and disability insurance, expropriation, and privatization, while in the last two years there has been a significant increase in the cases in the area of social politics.

The cases on pension and disability insurance for which the Commission is deciding are usually related to the right of old age pension; right to disability pension; right to professional rehab and right to appropriate financial aid; right to family pension; right to financial aid for body injuries and right to lowest amount of pension and similar. Although civil complaints are dominant in this area, still, taking the number of resolved cases into account, a very small percent of the civil complaints have been upheld. Thus, in 2017, the complaints was upheld in 103 cases (from a total of 1353), in 2018, upheld complaints in 78 cases (from a total of 1024), in 2019, the Commission upheld a total of 177 cases (from a total of 1456) and in 2020 the number of successful complaints was 172 (from a total of 931).

Contrary to this, the analysis of cases in the area of expropriation and privatization shows less resolved cases, however most of these are successful. Thus, the Commission, from a total number of resolved cases in this area has made a positive decision to the benefit of the citizens, as it follows:

- In 2017, the total number of resolved cases in this area is 1434 from which 848 are in favor of the citizens.
- In 2018, the total number of resolved cases from this area is 784 from which 451 are in favor of the citizens.
- In 2019, the total number of resolved cases in this area is 1278 from which 821 are in favor of the citizens.
- In 2020, the total number of resolved cases from this area is 722 out of which 426 are in favor of the citizens.

Consequently, considering the listed information, we can conclude that all positive decisions will be returned to a new procedure by first instance bodies, which will, on one hand, influence the efficiency of the first instance bodies, (to decide again on the same case), and it will prolong the deadline for exercising a certain right of the person who submitted the request i.e., the complaints.

By analyzing the presented information, we can conclude that although the number of complaints against first instance decisions from administrative procedure is not large in comparison to the number of cases that are handled by the public administration bodies, the inefficient work of the public bodies is noted in all reports of the second instance commission.

Namely, regarding the work of first instance bodies, the Commission points out two key comments which are almost identical to the remarks in the reports of the European Commission, related to the unprofessional work of first instance bodies and undertrained administrative officials. Hence, when processing cases, first instance bodies do not follow the provisions from the Law on general administrative procedure when receiving a case upon appeal. They do not follow an orderly and complete submission of the reports, as well as the response to the complaints in terms of whether the complaints was submitted on time, whether it was approved and verified by an authorized person, which would significantly reduce the administrative communication between the bodies hence shortening the time for case resolution. Additionally, significant number of bodies do not submit the documentation from the complaints in the legally prescribed time (even months), which is necessary for the State Commission to be able to make decisions for these cases. The Commission notes that the persons responsible for the procedures in the first instance bodies are not prepared to implement the administrative actions.

In order to answer the question whether the State Commission is efficient in its operations, the information from the annual reports on the work of the commission in the period of 2018, 2019 and 2020 were considered in relation to the total number of received and resolved cases.[13] The empirical analysis of the data is presented in Table 1.

[13] http://dkz.mk/sites/default/files/dokumenti/Godisen%20Izvestaj%202019.pdf, http://dkz.mk/sites/default/files/GI%202020.pdf, http://dkz.mk/sites/default/files/dokumenti/Godisen%20Izvestaj%202018.pdf

Table 1. Efficiency of the State Commission for the period 2018-2020			
	2018	**2019**	**2020**
Total received cases	4328	5701	4251
Total cases in progress	5082 (754 from previous years)	8533 (2832 from previous years)	6610 (2359 from previous years)
Total resolved cases	3359 - **77.6%** (2304 from received in 2018 and 1055 from previous years)	6570 - **115.2%** (3933 from received in 2019 and 2637 from previous years)	5159 - **121.3%** (2985 from received in 2020 and 2174 from previous years)
	66 % from total in progress	**77%** from total in progress	**78%** from total in progress
Administrative completion	710 - (21.1%)	738 - (11.2%)	520 - (9.2%)
Unresolved	1500	1213	931

Source: Annual report of the State Commission for decision-making in administrative procedure and employment procedure from secondary instance for 2018, http://dkz.mk/sites/default/files/dokumenti/Godisen%20Izvestaj%202018.pdf*, Annual report of the State Commission for decision-making in administrative procedure and employment procedure of secondary instance for 2019,* http://dkz.mk/sites/default/files/dokumenti/Godisen%20Izvestaj%202019.pdf*, Annual report of the State Commission for decision-making in administrative procedure and employment procedure from secondary instance for 2020 http://dkz.mk/sites/default/files/GI%202020.pdf*

Based on the presented information, we can conclude that the inflow of cases in the State Commission has not increased significantly year over year, and it is noticeable that the State Commission has the capacity to decide for more cases than the newly received. Accounting for the ratio of received and resolved cases, as an efficiency parameter, we can conclude that the State Commission is efficient in its operations. However, the efficiency of the Commission is influenced by the transferring of cases from one year to the next, but obviously from the reduction of the number of cases that the State Commission did not decide, we can expect this commission to be more efficient in the future. Nevertheless, the number of cases sent to administrative completion cannot be overlooked, which shows that the first instance bodies need be more accountable for their work.

In order to partially determine the efficiency of the first instance bodies as well as the quality of the decisions, an empirical analysis was performed to identify the type of decisions made by the State Commission. (See Table 2)

Table 2. Type of decisions made by the State Commission for the period 2018-2020			
	2018	**2019**	**2020**
Total resolved	3359	6570	5159
Upheld complaints	875 (26%)	1974 (30%)	1633 (31.7%)
Meritorious decision	8	23	22

Source: Annual report of the State Commission for decision-making in administrative procedure and employment procedure from secondary instance for 2018, http://dkz.mk/sites/default/files/dokumenti/Godisen%20Izvestaj%202018.pdf Annual report of the State Commission for decision-making in administrative procedure and employment procedure of secondary instance for 2019, http://dkz.mk/sites/default/files/dokumenti/Godisen%20 Izvestaj%202019.pdf, Annual report of the State Commission for decision-making in administrative procedure and employment procedure from secondary instance for 2020 http://dkz.mk/sites/default/files/GI%202020.pdf,

Consequently, in line with the data presented in Table 2, we can conclude that in a much greater percent, i.e., in 30% of the cases, the State Commission reached positive decision. This implies that when these cases are returned to a repeated process to the first instance bodies, it will influence their efficiency, i.e., it would make them less efficient and on the other hand, this shows the quality, i.e., low quality of the primary decisions. The above impacts the length of asserting a certain right by citizens and legal entities. What needs to be emphasized is that since 2018, the State Commission has included meritorious decisions, which can be expected to contribute to a faster completion of legal protection of individuals and legal entities in the future.

The efficiency of the Commission can be seen in the number of submitted complaints for an administrative dispute, more precisely by the number of upheld complaints. The overview of the empirical data is shown in Table 3.

Table 3. Open administrative disputes against decisions of the State Commission and verdicts by the Administrative court which are submitted to the SC in the period of 2017-2020				
	2017	2018	2019	2020
Total number of open administrative disputes	**472 (11.66%)**	**330 (9.82%)**	**422 (16.6%)**	**181 (6.06%)**
Submitted verdicts to the SC	83	73	813	657
Rejected complaints	71	36	506	358
Dismissed complaints	6	4	40	61
Upheld complaints	6	26	245	219
Stopped	/	7	22	19
No verdicts were submitted to the SC	389	257	282	120

Source: Annual report of the State Commission for decision-making in administrative *procedure and employment procedure from secondary instance for 2017, http://dkz.mk/sites/default/files/dokumenti/Godisen%20izvestaj%202017.pdf, Annual report of the State Commission for decision-making in administrative procedure and employment procedure from secondary instance for 2018, http://dkz.mk/sites/default/files/dokumenti/Godisen%20Izvestaj%202018.pdf Annual report of the State Commission for decision-making in administrative procedure and employment procedure of secondary instance for 2019, http://dkz.mk/sites/default/files/dokumenti/Godisen%20Izvestaj%202019.pdf, Annual report of the State Commission for decision-making in administrative procedure and employment procedure from secondary instance for 2020 http://dkz.mk/sites/default/files/GI%202020.pdf*

From the data analysis in Table 3, which are related to open administrative procedures against decisions of the Commission, we can conclude that the percentage of open administrative disputes for resolved cases by the Commission is low, however not insignificant, i.e., it varies from 6% to 16%. This information shows that the parties, i.e., citizens and legal entities are mostly satisfied with the decisions of the State Commission. The fact that the percent of upheld complaints is lower than the one of rejected complaints also demonstrates that the State Commission passes quality decisions. However, what needs to be pointed out is the number of 245 upheld complaints in 2019 and 219 from 2020 which leads us to the conclusion that the judiciary control needs to exist so as to achieve the principle of legality in administrative procedures. At the same time, these verdicts directly influence the level of efficiency of the administrative procedure since the competent bodies should repeat the procedure, which in turn reveals the inefficiency of the decision-making process in specific cases. Finally, this also has an effect on the length of the procedure, i.e., for citizens and legal entities this means prolonged process of asserting a certain right, which can sometimes last a few years, as seen from the successful verdicts for cases from 2012. In this manner, the timely decision-making is challenged, as well as the provision from the Law on general administrative procedure, based on which the citizen should receive a decision in the period of one month or for more complex cases in the period of two months.

Conclusion

It can be concluded that in the Republic of North Macedonia there have been certain measures put into place for implementing the principle of efficiency and efficiency during decision-making in the administrative procedure, however these measures are mostly with a normative character which means that we have by now consolidated the legal framework of the European principles and standards in both procedural legislation as well as clerical legislation.

In regard to the empirical analysis of the information from the work of the State Commission for Decision-making in Administrative Procedure and Labor Relations Procedure in Second Instance, we can conclude that it is largely more efficient when compared to the number of received and resolved cases. Nevertheless, in the future, more focus needs to be placed on the quality of the decisions made by this Commission with the goal to reduce the number of upheld complaints, as well as implementing repressive, i.e., sanctioning authorizations to the Commission towards first instance bodies that do not follow the recommendations of the Commission in the prescribed timelines. This will influence the silence of the administration. At the same time, the State Commission needs to emphasize the meritorious decisions.

Among the more significant factors that influence the efficiency of the decision-making bodies in the administration are the number of active cases, human resources, electronic communication, quality of the decisions and decisions made in legally prescribed timeline.

Therefore, the primary responsibilities and measures that need to be considered in the future are the following: the institutions need to provide a solid organizational structure, technical, material and human capacities and resources as well as to provide an adequate and accountable communication between the bodies and the citizens. The institutions should especially take measures towards an improved professionalization of the officials and their practical knowledge, provide an electronical system for delivering services, continuous implementation of the provisions from the Law on general administrative procedure from 2015, appropriate trainings related to electronic communication, providing evidence ex officio, adhering to the principle of delegating responsibilities (to form organizational units or authorize an official person).

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(Original scientific paper)

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SUBJECTIVE WELL-BEING OF PEOPLE IN NORTH MACEDONIA – DIMENSION OF THE QUALITY OF LIFE DURING THE COVID-19 PANDEMIC

Abstract

Over the past few decades, the problem of social segregation of the population has become quite significant for the economies of countries around the world. The great differences between countries and the quality of life of the people increased even more during the global pandemic crisis. The Republic of North Macedonia as a developing country faces a serious challenge of improving the quality of life conditions. The socio-economic living conditions and the subjective perception of them are two factors that affect the complete assessment of the quality of life. The second, significantly depends on the priorities and needs of citizens, and reflects the perceptions of individuals. This type of data can only be gained through primary research. Hence, this paper aims to measure subjective perception of the population about the quality of life in the Republic of North Macedonia, especialy during the pandemic caused by the Covid-19 virus. The obtained results indicate that in general, the perceptions of individuals of various aspects of life and overall quality of life are satisfied at an average and often below average level. With the appearance of the pandemic, there is a tendency for their further deterioration or eventual maintenance at the same level.

Key words: quality of life, socio-economic, inequality, Republic of North Macedonia, Covid-19
JEL classification: I31

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Introduction

Quality of life is a broad concept that encompasses a range of different dimensions. The concept of measuring quality of life is subject to two factors, socioeconomic living conditions (for example material resources, health, employment status, living conditions and many others) and the subjective perception of them. The second significantly depends on the priorities and needs of the citizens.

National accounts aggregates have become an important indicator of the economic performance and standard of living of the societies. This is because they facilitate direct comparisons between countries. Gross Domestic Product (GDP), one of these aggregates, is the most common measure of the economic activity of a region or country at a given time. Many decision and policy makers use it as a standard indicator, often basing their decisions or recommendations on improving the quality of life of GDP. Although it is not intended as an indicator of social progress, it is often taken into account in determining the well-being of citizens. Nevertheless, it does not provide a comprehensive picture of the quality of life of the citizens. In many cases, household incomes may develop differently from real GDP and give a different picture of citizens' well-being. GDP is an aggregate indicator and cannot inform us about the distribution of wealth among the population. In addition to economic performance, a more comprehensive, broad-based approach is needed to define and measure the quality of life of the population. While it remains very difficult to provide a complete definition with specific measurable indicators, quality of life definitely includes more than just economic output and GDP. It is necessary to reflect the perceptions of individuals, i.e. their own assessment of various aspects of life and the overall quality of life. This type of data can only be obtained through primary research.

Based on academic research and several initiatives, the following 8 + 1 dimensions are defined as the main framework for measuring the well-being and quality of life of the population.[3]

1. Material living conditions
2. Productive or main activity
3. Health
4. Education
5. Free time

[3] https://ec.europa.eu/eurostat/statistics-explained/index.php/Quality_of_life_indicators

6. Economic security and physical security
7. Governance and fundamental rights
8. Natural and environmental
9. Overall life experience

The last dimension envisages primary research for providing relevant data for comparison and analysis of the quality of life of the population, and thus providing guidance and opportunities for its improvement. Hence, this research considers the last dimension of the overall quality of life in the Republic of North Macedonia, and discusses the findings of the same with regard to the life in the years of the Covid-19 pandemic. This research aims to perceive the quality of life of the population of the Republic of North Macedonia through a survey on the subjective welfare of the population conducted in accordance with the guidelines of the European Union and the OECD methodology for measuring it (OECD Guidelines on Measuring Subjective Well-being).[4]

1. RESEARCH METHODOLOGY, LIMITATIONS AND OBJECTIVES

The purpose of the research is achieved through the use of the survey method, using a survey questionnaire as an instrument. The previously constructed questionnaire was forwarded to a randomly selected sample of 2250 respondents. In the period 1.9-31.12 2021, the survey questionnaire was forwarded mainly in digital version, electronically (email and social networks) using the google survey platform. However, it is also submitted in hardcopy in order to cover the population that for certain reasons does not have access to the Internet, and to justify the representativeness of the sample.

The survey questionnaire is structured in two parts. The first part determines the demographic characteristics of the respondents, while the second one refers to the specifics of the quality of life of the respondents, based on the previously defined dimensions of quality of life. Specifically, the second part of the survey questionnaire asks a specific question for each of the following areas:

- Living standard
- Life successes
- Personal connections

[4] https://www.oecd-ilibrary.org/economics/oecd-guidelines-on-measuring-subjective-well-being_9789264191655-en

- • Personal Security
- • Sense of community
- • Security for the future
- • Time to do things that make you happy
- • Environmental quality
- • Professional career

The questionnaire consists of 15 survey questions, closed type, with the possibility to choose one of the offered answers. The data obtained from the survey research are analyzed on a univariate, bivariant and multivariate level by applying appropriate statistical procedures in excel and they are interpreted textually and visually, usually through graphs. In order to enrich and detail the findings and knowledge, the basic data obtained from the survey are further analyzed using the method of cross-correlation. Additionally, the data and results obtained from the primary research can serve as a basis for further research and additional analysis and comparisons, in order to deepen the knowledge and propose measures to improve the quality of life of the population in the Republic of North Macedonia.

The limitations that appeared during the realization of the empirical research, as follows:

- Low availability of the population with lower levels of monthly individual income, primarily due to the inability to have access to electronic devices through which they would have access to the online survey or their reluctance to answer the survey questionnaires that were sent to them in hardcopy (offline). Namely, due to their disappointment and dissatisfaction with their personal and social life, they did not want to answer this type of questions at all.
- The more difficult aaccess of the population from the wider part of the Republic of North Macedonia, primarily due to the dominant presence of the population living in the capital and the concentration of inhabitants of the country in Skopje. This is primary due to the greater migration of the population from the interior of the country to the capital, and due to the fact that they often claim to come from Skopje, although they do not originate from there.

All these elements should be taken into account and overcome in future research. It would mean continuation and deepening of research in this segment in the future.

The paper is segmented into two interrelated units, through which are achieved the main objectives of this research:

1. To assess subjective perception of the respondents on their quality of life and their future consideration about it;
2. To determine the most sensitive issues in this domain through the analysis of the individual categories that reflect the socio-economic quality of both personal and social life, especially in COVID-19 pandemic conditions.

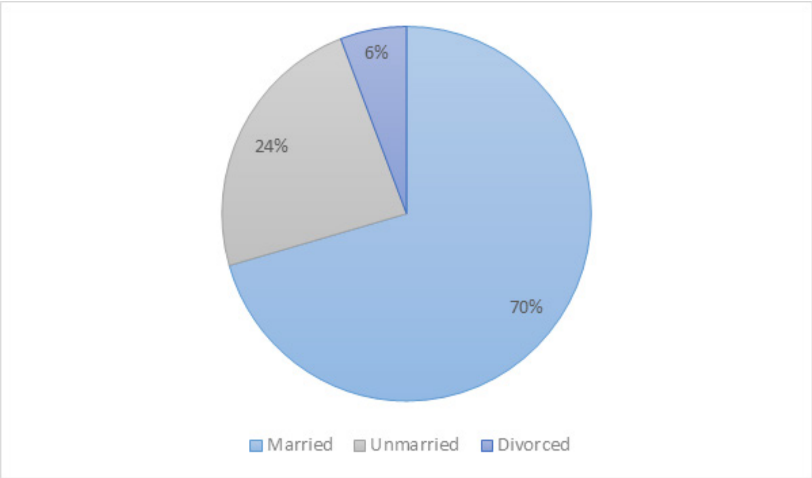
Based on the defined methodology and set goals, the focus in the following parts of the paper are aimed towards the demographic structure of the sample and analysis of the results and discussions.

2. DEMOGRAFIC STRUCTURE OF THE SAMPLE

Demographic data for the target group of respondents show that the survey was mainly conducted on the territory of the city of Skopje (91%), with a much smaller presence of the population of other cities in the Republic of North Macedonia.

From the point of view of marital status, the sample is dominated by persons who are married (70%, Chart 1) and mainly live in families with 2 to 3 members, but with relatively close structural participation are also families with 4-5 members (Chart 2). The percentages of families in which only one person lives are much lower, and the number of families with many members is even lower, i.e. with more than 6 members. This data has a great impact on the answers received, especially on those aspects that are related to the social segment.

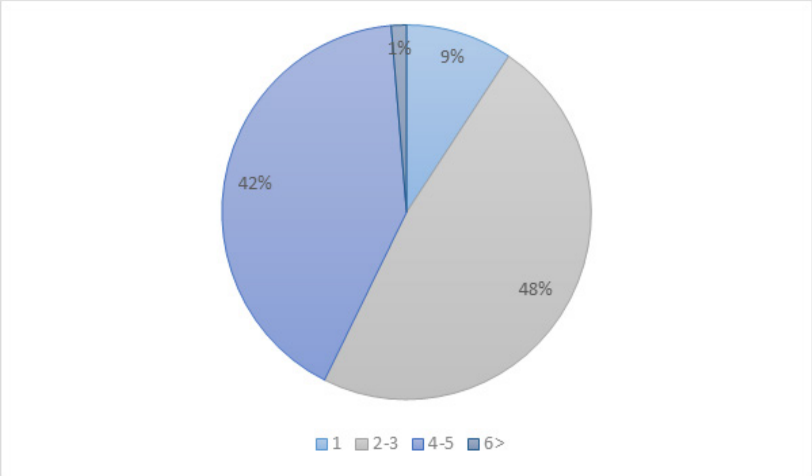
Chart 1 Marital status



Source: Author's findings

According to the data on gender and age structure, the sample is predominantly made up of female with a share of 67%, while the male population is less, represented by 33%. As an age category, predominantly in almost equal percentage there are representatives of the category from 26 to 35 years old and from 36 to 45 years old.

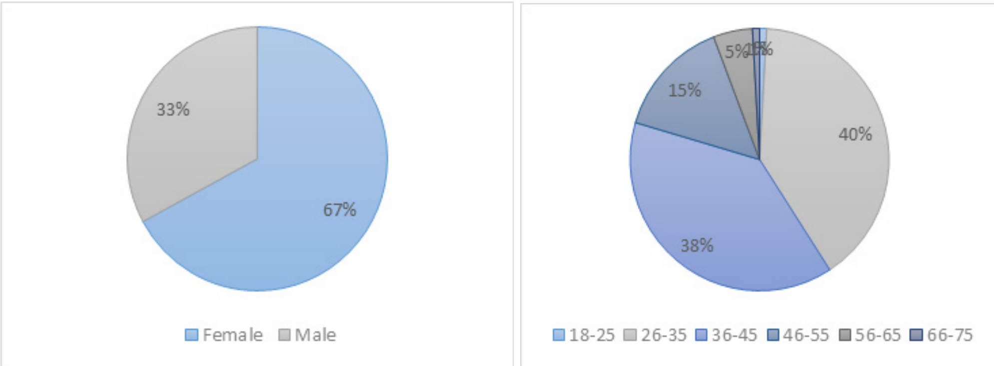
Chart 2 Family members structure



Source: Author's findings

Therefore, it can be said that the answers are mainly obtained from the population aged 25 to 45 years. As the age structure grows, the participation of respondents decreases, which can be justified by the mainly electronic conduct of the survey and the insufficient or less electronic literacy of the population in the older structure. (Chart 3) All this has an impact on the obtained result of the questions from the second part of the survey questionnaire.

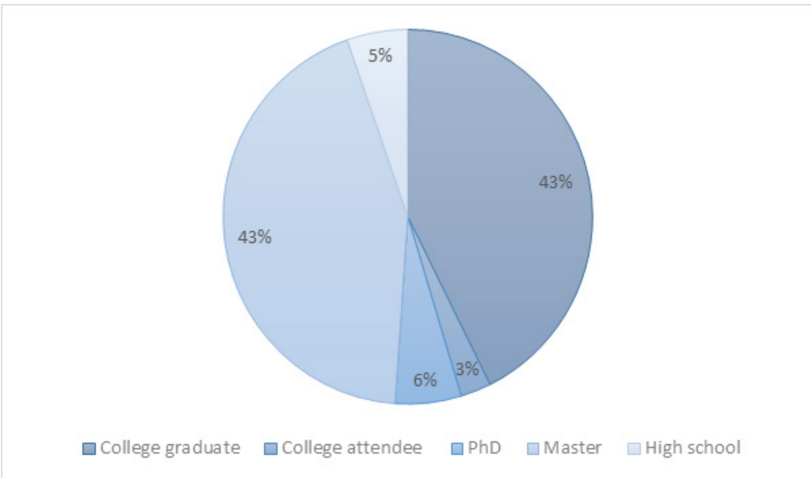
Chart 3 Age and gender structure of the sample



Source: Author's findings

Regarding educational structure, it can be concluded that there are mainly people with high level of education and masters of science with equal participation of 43% in both categories. (Chart 4) Other educational categories are less present.

Chart 4 Educational structure of the sample

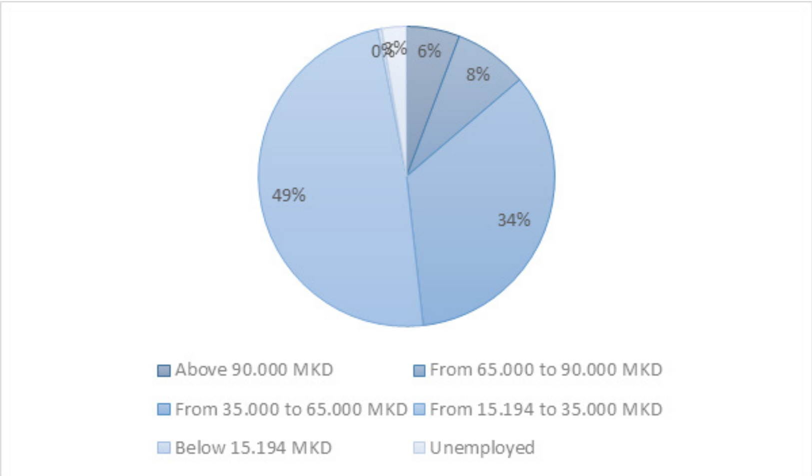


Source: Author's findings

This corresponds to the obtained values for monthly individual incomes of the respondents shown in Chart 5, which are mainly in the category from

15.194 to 35.000 Macedonian denars with 49%, and from 35.000 to 65.000 denars with a slightly lower share of 34%.

Chart 5 Monthly income structure of the sample



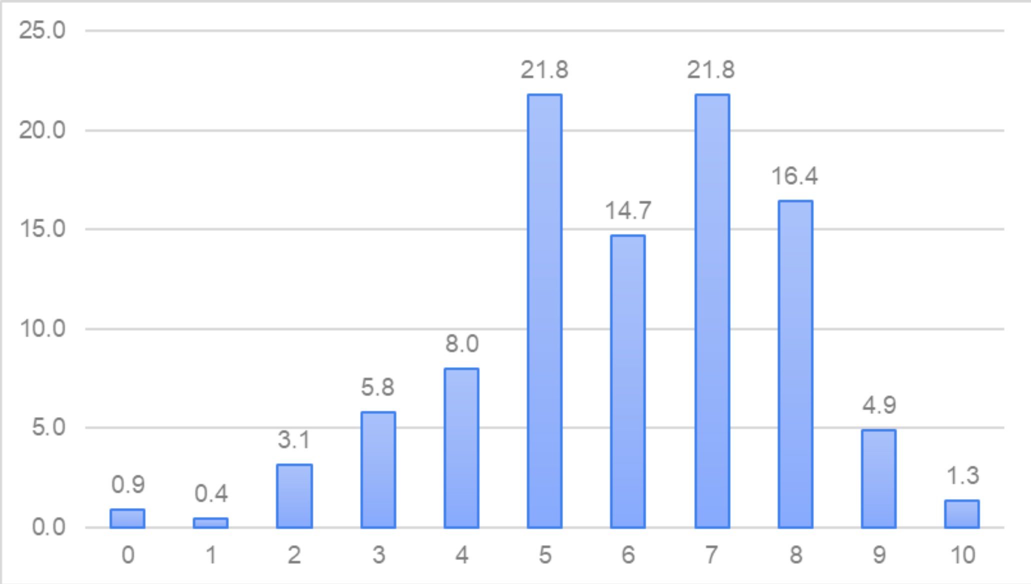
Source: Author's findings

All previous demographic characteristics of the surveyed population justify the findings obtained from the analysis of the second part of the survey questionnaire. This is especially confirmed by some of the additional analyzes conducted using the method of cross-correlation.

3. ANALISIS OF THE RESULTS AND DISCUSSIONS

Regarding the subjective perception of the respondents about the socio-economic living conditions, and fully assess the quality of life of the population in the country, the results obtained from the analysis presented in Chart 6 show average level of real life satisfaction of the population. On a scale with steps numbered from zero at the bottom to 10 at the top, where the top of the scale represents the best possible life for the respondent, and the bottom of the scale represents the worst possible life, the dominant answers are that they are on the 5th and 7th step of the scale in relation to the current, i.e. real life. They are followed by the grades for the 8th and 6th step. This indicates that the mainly surveyed population is not very satisfied with the quality of current life in the country and remains a lot of room for improvement in the future. The most sensitive issues in this domain will be seen in the analyzes conducted below as to individual perceptions that reflect the socio-economic quality of life.

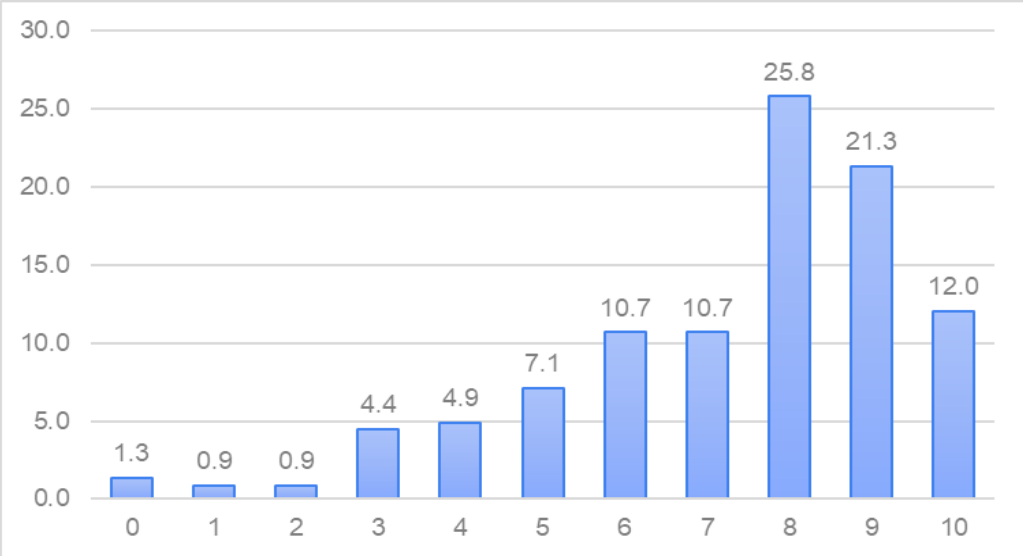
Chart 6 Subjective perception of the respondents on their quality of life



Source: Author's findings

Individuals' perceptions of the future expectations (considering five years from today) for their quality of life are optimistic. This is primarily due to the fact that they see themselves on a much higher ladder in the future. This time the dominant stairs are the 8th, the 9th and then even the 10th step, unlike the previous findings for the current life where especially the 9th and 10th steps were present with a much lower value. (Chart 7) This may reflect primarily the optimistic nature of the respondents or their assessment of the real chances of moving the current situation forward. A real answer for that will be obtained with a new survey conducted after at least five years.

Chart 7 Subjective perception of the respondents about their future consideration for their quality of life

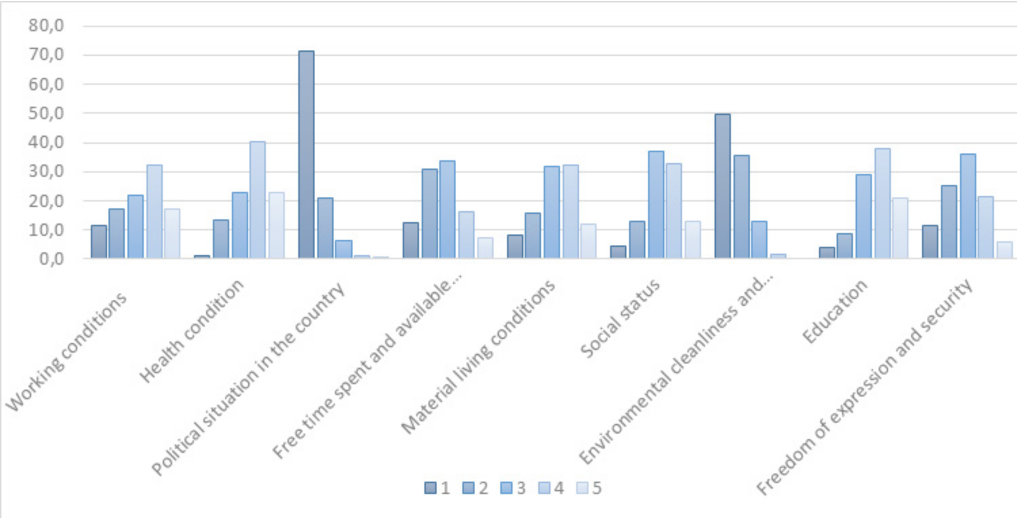


Source: Author's findings

A more detailed explanation of the above is given by the answers to the following questions where individuals express their personal perception in relation to different aspects of quality of life. They express their personal perceptions, their own assessments of the various aspects of both personal and social life, and hence the overall quality of life. When asked how satisfied the respondents are with the individual categories, they state the following.

Working conditions are a category that they evaluate with an average grade of 3.2, although most of them show greater satisfaction with the quality of working conditions, i.e. respondents are divided in their opinions about the quality of these conditions. Combining the results between the level of education and the level of income on the one hand and the assessment of the quality of working conditions on the other hand, mainly people with higher education, as well as people with higher incomes, are more satisfied with working conditions, which is quite expected. At a similar level of assessment are the material living conditions where the average grade is 3.25 which speaks of a satisfied part of the quality of life. However, the dominant presence of respondents with relatively good monthly incomes must be taken into account, i.e. the low level of covered unemployed persons and persons with incomes below the minimum net salary of 15.194 denars. This is because the majority of people living in difficult material conditions or on the poverty line (which can be considered high in relation to other developed countries) were hardly accessible to the survey, or those who were reached did not show any interest in answering the questions as a result of their disappointment with real life situations. There is a slightly higher average grade in the category of education and according to the results this category is rated with an average grade of 3.61. Most of the respondents stated that they are generally satisfied with their education.

Chart 8 Respondents satisfaction of different aspects of quality of life

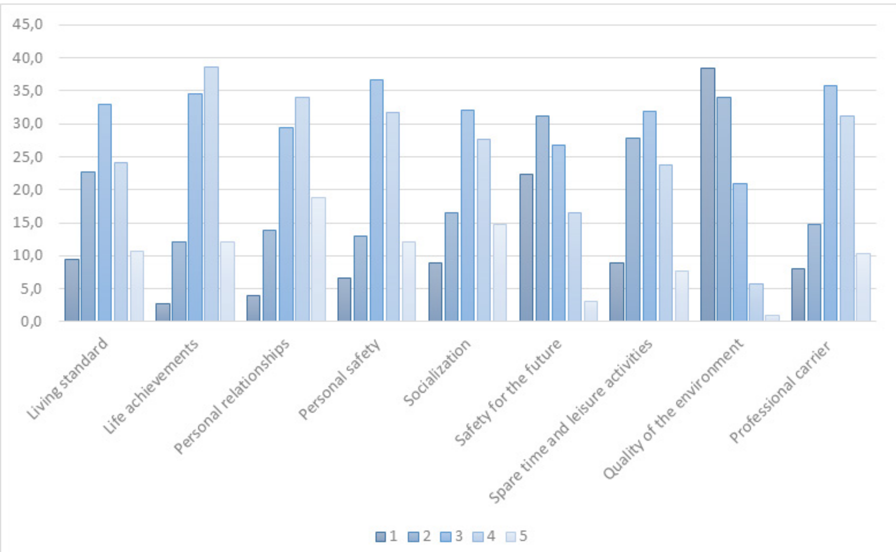


Source: Author's findings

However, as with the working conditions, the respondents are divided also in their opinions about the quality of the educational processes. Thereby, crossing the level of education of the respondents with the assessment of the satisfaction with the education, it was confirmed that with the increase of the level of education, the satisfaction of this category also increases. Next, for the category of health condition, the answers according to the subjective opinion of the respondents give an average grade of 3.7. This means a certain positive attitude towards this category. But more detailed information on this is shown below, in the analysis of other issues. The subjective perception of the respondents regarding the political situation in the country has the lowest average score of 1.37. In terms of leisure and available activities, the respondents are generally dissatisfied, which is confirmed by the low average grade of 2.73, although most are satisfied with their social status in society (3.34 average grade), especially those with higher monthly individual revenues which was confirmed by cross-referenced data. Next, the subjective perception of the respondents is that they are not at all satisfied with the environment and the conditions in which they live. This is largely due to the polluted environment and low environmental awareness, but also the low standard of living of citizens. With an average score of 1.66, the participants in the survey stated that the environment condition has always been at a bad, unenviable level. Freedom of expression and security is rated with an average score of 2.83, which also indicates a relatively low level of satisfaction. (Chart 8)

Regarding the subjective attitudes of the respondents about the standard of living, as one of the aspects of their personal life and important specifics for the quality of life, from the obtained results it can be concluded that it is generally evaluated with an average score of 3.01 and at a relatively same level of 2.99 is estimated the impact of the Covid-19 pandemic on this category at. (Chart 9) Such data indicate the relatively modest satisfaction of the population relating to living standards and its reduction in conditions of pandemic. In this regard, it is necessary to take measures that will improve the material and social living conditions of the population and will reduce the percentage of those living on the margins.

Chart 9 Satisfaction of respondents from various aspects of personal life



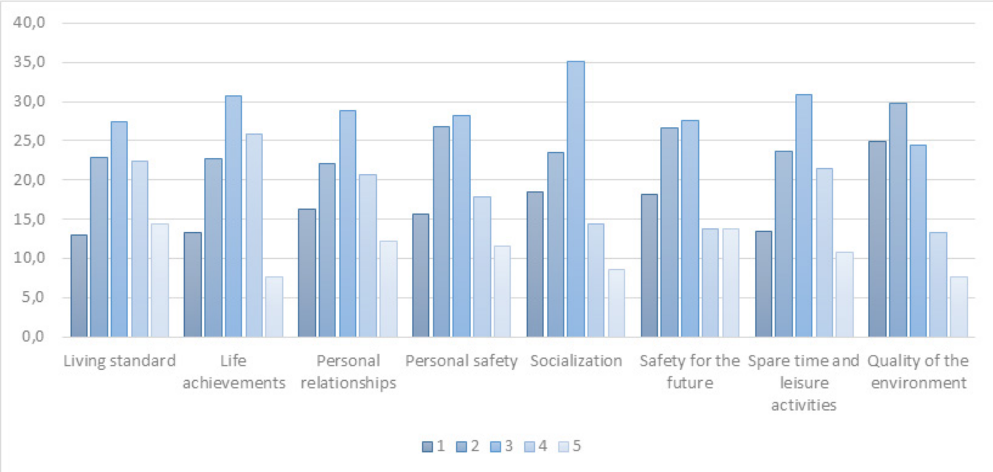
Source: Author's findings

Regarding other categories such as life success, personal relationships, personal safety and professional career, the satisfaction scores are relatively at the same level as for the living standard of the respondents, with an average score not higher than 3.5, i.e. in the rank of 3.20 up to 3.47 depending on the category. (Chart 9) The correlation of values indicates that the satisfaction of the professional career of the respondents is not directly related to the level of education, but depends on the level of monthly individual income and those with the highest level of income are most satisfied in terms of professional career, which is justified. However, this indicates that there is average level of satisfaction with the personal lives of the respondents and still much room for action in order to achieve at least a grade of four or five.

In addition, the categories that further worsens the picture are as follows: security for the future, time to do things that make you happy and the quality of the environment. They are rated even lower below three, namely 2.45, 2.90 and 1, 96, respectively. The most worrying is the assessment of the security of the future, which does not instill much optimism and faith in improving things and certainly the environment, which is just another confirmation of the previously received assessments and views from the previous question. Crossing the data on the level of education and monthly income with the category “doing things that make you happy” confirms that a higher level of education and higher income are not a guarantee of more free time and doing things that make you happy.

At the same time, in terms of assessing the impact of the pandemic in each of these categories, the assessments are even worse, which indicates that the new conditions with the pandemic have worsened the already not very impressive quality of personal life of the respondents. (Chart 10)

Chart 10 Impact of the Covid-19 pandemic on different aspects of quality of personal life



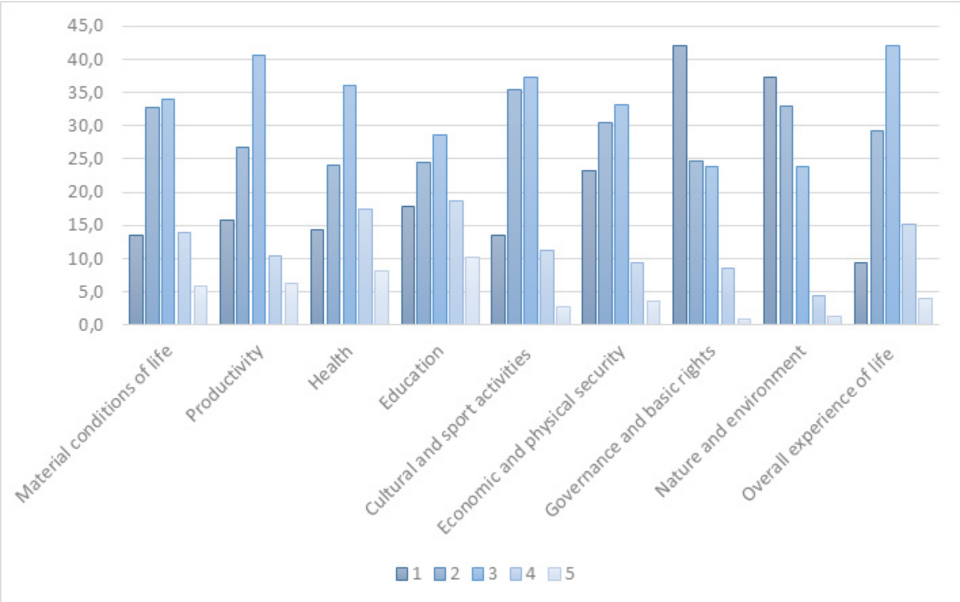
Source: Author's findings

When it comes to the assessment of satisfaction with social life viewed through different categories, it can be noted that the obtained data indicate lower grades compared to those for their personal life.

Namely, they evaluate the material living conditions, productivity and employment, health, as well as education and cultural and sports life with an average grade ranging from 2.52 to 2.77. It indicates the insufficient quality of life in the society as perceived by the respondents. This is especially in the direction of the realization of social life, where the respondents perceive small opportunities that are offered to them at the social level for spending their free time. Specifically, the average rating for the opportunities for cultural and sports life before the pandemic was 2.52. It makes the main negative view of this part of people's lives. The pandemic further affected and hindered the ways of socialization of the population. Frequent quarantines and crises have led to reduced satisfaction of the population with free time. In the rank of these assessments is the overall life experience, where those with higher levels of personal income express the highest satisfaction compared to other income groups. (Chart 11) Thereby, the respondents also stated for the most part that the consequences of the pandemic have an impact on all these previously mentioned categories. (Chart 12)

Compared to the previous one, the categories of economic security and physical security, governance and fundamental rights as well as nature and environment are even worse than the average grade, slightly close to two and slightly above that. Namely, the data on economic security and physical security are only a confirmation of the previous analyzes for such similar categories in the country. Their perception in terms of economic security and physical security is at the level of dissatisfaction with an average score of 2.36. (Chart 11) The pandemic additionally affected the reduction of the level of respondents' personal security, with the coefficient being 2.83. (Chart 12)

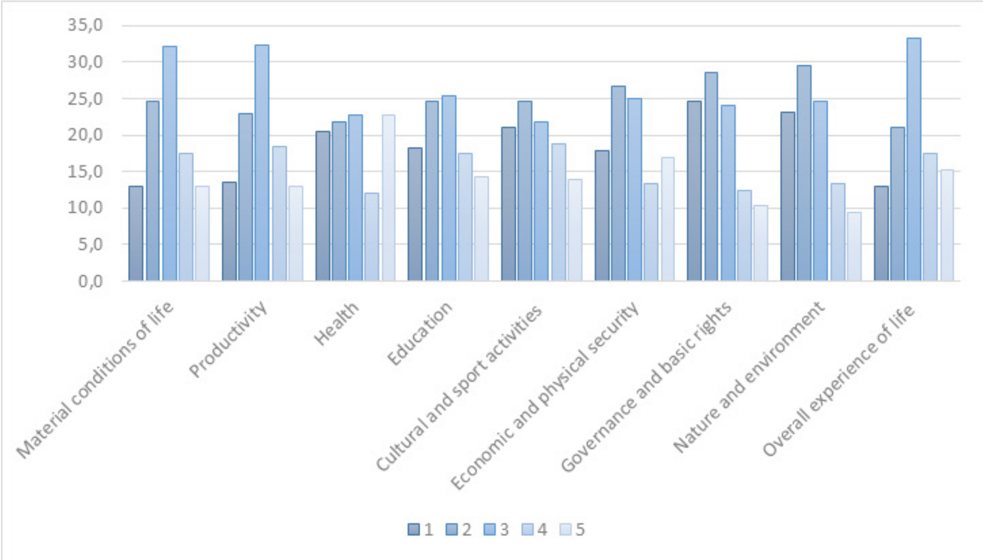
Chart 11 Satisfaction of the respondents on different aspects of quality of life in the society



Source: Author's findings

Next, in addition to the respondents' perception of the political situation in the country, which has the lowest average score of 1.37, both governance and fundamental rights also have an unfavorable rating by the respondents with an average of 1.99. According to them, the pandemic did not have a major impact on the already poorly assessed situation in the country, so their subjective perception of this category has an average score of 2.54.

Chart 12 Impact of the Covid-19 pandemic on different aspects of quality of life in the society



Source: Author's findings

Nature and the environment are assessed with a low average score of 1.96, which once again confirms the subjective perception of citizens that they are not at all satisfied with the environment and the conditions in which they live. (Chart 10 and Chart 12) It is quite expected given the high degree of environmental pollution in the country and the low environmental awareness of the citizens. These conditions can also be explained by the relatively low standard of living in the country. The attitude of the respondents is that the pandemic did not have any significant impact on the level of pollution, especially if it is known that it is a systemic problem that has been going on for years and the situation has worsened far before that.

Conclusion

The differences in the assessment of the quality of personal and social life of the population ,are due primarily to the fact that in creating the quality of personal life are taken into account categories that largely depend on the personal commitment and desire of the individual to improve them and thus improve the quality of the life. Confirmation of this are the higher grades in the categories of life success, personal relationships, personal safety and professional career where the individual is the one who decides in which direction will develop the quality of personal life. In contrast, the categories that are intertwined with social influence immediately receive lower grades. Such are all the obtained grades of the categories that are analyzed in the segment of the satisfaction of the individual from the social life. This is due to the fact that they as individuals can not contribute much to the overall improvement of these categories, and change of the quality of social life.This segment depends on many systemic determinations. Social actions determine the personal motivation and activation of the individual and their success.

In general, the perceptions of individuals, i.e. their own assessment of various aspects of life and overall quality of life are assessed at an average and often below average level. In many of them, with the appearance of the pandemic, there is a tendency for their further deterioration or eventual maintenance at the same level. Areas where the situation is improving are rare, i.e. non-existent. All this points to the need for socio-economic changes and the introduction of concrete measures to improve the circumstances and overall living conditions of the population.

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