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Econometric Analysis of Local Community's Perception Towards Protected Area Management: The Case of Borena-Saynt National Park - Amhara Regional State, Ethiopia

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Abstract

This study tried to examine econometric analysis of local community's perception towards protected area management in the case of Borena Sayint National park. Specifically, the study aims to estimate the direct economic value of natural forest, response on the indirect and option values and, econometric analysis of local community's perception and/or attitude measured based on use value index. The research was conducted in Borena and Mehal Saynt Woredas with severe deforestation and biodiversity loss. Cross sectional research design and stratified-random sampling method were used, following agroclimatic zonation technique. Primary and secondary data were collected from various sources. Data were gathered from a gross total of 396 respondents. Household survey with 360 interviewees using questionnaire, key informants interview with 21 using checklist and, focus group discussion with 15 target individuals using guiding questions. Secondary data obtained from published and unpublished materials, i.e. books, journals and reports, were used. Analysis was performed using analytical tools, descriptive and order logistic regression econometric model in particular. Descriptive analyses tell us to understand the rank of community priorities of the direct, indirect and option benefits. From the direct benefits, honey, livestock, job opportunity, wood, farm tools, housing poles, tourism, timber, hunted meat, medicine, biodiversity, fruit, coffee orderly have been listed from the highest to lowest local community benefits. Similarly, common pole, biodiversity, water source, community heritage, medicine, robbery, wood fuel, carbon sequestration, tourism, livestock feed

are orderly selected as their highest to lowest benefits among direct and option benefits. Hence, Local community prefers indirect benefit of park than direct benefits. The econometric analysis of local community's perceptions towards protected area management of the natural forest, '**Denkoro-Chaqa**' in English means "**Deaf-Forest**". Information obtained from order logistic regression (Ologit) based on response rate of households to infer the intrinsic value showed consistency between perception, selective socioeconomic and location variables. This implies that education, married, old-aged and location-2 as most important factors that respondents agreed with significant degree, and hence the most constructive idea to enhance local community's perception in view of major conservation plans. Reputedly, family base awareness creation with formal and informal education, and other media should be done in core area, buffer zone, transitional zone areas of conservation of natural forest along with take full advantage of local community benefits.

Keywords: econometric analysis, local community perception, protected forest, Borena-Saynt National Park

1. Introduction

1.1. Background of the Study

The government of Ethiopia has given courtesy for enhancing environmental value in wide-ranging by launching the campaign of green finger print. The environmental issue has been noticeably described in the country's constitution as government shall struggle to ensure that all citizens in the country live in healthy environment, people have full right to participate on the design of environmental activities, government and citizens shall have the obligation to protect environmental damages (Ethiopian Wildlife Conservation Authority, 2014). However, Borena Sayint National Park has been a prolonging devastated by degradation and deforestation area for decades even though the park was legally protected (established). Some researches were conducted related research to identify the problem of the parks. Among them, lack of community participation had been one of the bottlenecks that protected areas have been faced (Amogne, 2014). Borena Sayint National park is the hub of water spring and one of the greatest sources of Abay River and the lively hood of millions of local people but nobody gives attention as such. Furthermore, there have not been consistent approaches of conservation practices all over the country's national parks e.g. the Semien Mountain has design strategy such as the establishment of a zoning scheme, with different levels of restricted access for community grazing in core zone, limited use zone, and multiple use zones (Lakew et al., 2007) but such strategy has not been designed in Borena-Saynt National Park of Ethiopia. Nevertheless, the economic dimension of the park has not been addressed by previous researchers.

There are many critiques that Ethiopia has lost natural forests (and inhabited biodiversity) which cannot be determined by the amount of forest in market value but it has rather non market values. The effect of deforestation is not easily reversible because many species would be lost. Different measures have been taken for different problematic areas (Nyongesa et al., 2016; PaDPA, 2006). Scrutiny of the social, economic, and environmental aspects of local community will be the prominent findings for the sustainable development of the natural resources on national parks. Hence, understanding the local community's attitude and perception will have significant impact on preserving Borena Sayint National Park. Likert scale is the paramount measurement to analyze the perception and attitude test of the local community's household in particular. Certainly, it can measure the level of household agreement responses to understand their perception and attitude on natural resource conservation (Guthiga, 2008).

In turn, studies in some other areas have now been attested that community's perception and attitude (voluntariness) for conservation of natural forests with significant contribution. To this end, no studies have been conducted on perception and attitude of local community with econometric model. This together with the lack to a full-fledged scale analysis on the determinants of Local community's perception and attitude towards *protecting national park of Borena-Sayint National Park, Amhara Region, Ethiopia for conservation works in protected areas; as yet, there have not been a steppingstone research attempt, and hence, difficult to ensure sustainable park development and effective conservation activities in core, buffer and transitional areas. This study was, consequently, contributed to fill information gaps in terms of local community's perception and attitude level in the Borena-Sayint National Park of Ethiopia.*

1.2. Objectives of the Study

The general objective of the study was to *examine econometric analysis of local community's perception towards protected area management in the case of Borena Sayint National park. Specifically, the study aims to estimate the direct economic value of natural forest, response on the indirect and option values and, econometric analysis of local community's perception and/or attitude measured based on use value index.*

2. Research Methodology

2.1. Research Design

In this study, cross-sectional research design was used, because it attempts to investigate the relationship between variables at a point in time. The survey work held depending on the characteristics of the population, sample, the type of question, the response rate, the cost and time. The research applied a stratified proportional sampling method by random technique. This was made after identifying the target Woredas. Based on the criterion of adjacent to the natural forest and conservation practice, 11 kebeles in the study area were stratified in to three. According to Borena-

Saynt National park (2017) reported that Jelesa, Anferfra, Dega hawi, Dega-Dibi, and Janiberu as one stratum. The assumption was that people who are living in these areas have better conservational practices and they have still lived friendly with remnant natural forest. The second stratum was kebeles PAs who have medium conservational practices. These are Kotet, Abu and Miskabe. The third stratum was Wozedi, Samagn, Libanos, and Chirkose. These kebeles were chosen with the prior consent that previous researchers had already mentioned as critical sites where deforestation and land degradation been more severe compared to other strata in the park. Likewise, by using second stage sampling selection techniques, all kebeles found adjacent to the natural forest were included from two Woredas. Because, Kebeles found adjacent to the natural forest (Denkoro Chaka), have direct and significant effects on long term natural forest protection. Therefore, nearby kebeles Chirkose, Anferfra, Jelesa, Dega hawi, Dega dibi, Abu, janaberu and Mskabea are found in Borena Woreda, whereas Kotet, Samagn and Wozedi found in Mehal Saynt Woreda.

2.2. Sampling Method and Technique

The study takes one representative Kebele from each stratum with simple random lottery system. Janiberu, Kotet and Wozedi kebeles were selected among three strata. Thus, sampling frame can be easily established. The sample frame represents all the household head in three randomized selected kebeles. Households head were listed from three Kebeles before with drawl the respondents' lottery to satisfy randomization. After the registration of household head as the sample frame, the study uses formula to minimize sampling errors. Thus, it takes the standardize formula of Yemane (1967) to satisfy the sample size determination.

$$n = \frac{N}{1+N(e)2}$$
, Where n=number of households to be studied N=Total household in Woreda, e=Margin of error (5%). Sample selection of the particular respondent also was equal chance by randomization techniques.
$$n = \frac{3518}{1+3518(.05)^2} = 360$$
. Hence, the study collected data from 360 respondents and three schemes of Wozedi, Kotet, and Janiberu Kebeles based on the above formula and each scheme's population proportionality.

2.3. Data Sources

Primary data: The face to face data collection was executed by these enumerators. Interviewer bias and resource expensiveness were expected and it was minimized (Carson, 2000). Subsequently, three data enumerators were recruited from the Woreda to each of the kebeles. The selected enumerators were initially trained on the necessary skill and approach. Mode of data collection was held in Amharic language that was appropriating for the local people and enumerators. Besides, focus group discussion was another qualitative method of data collection which was used in this study. One focus group discussion was held from three kebeles with selected participants.

Secondary Data Sources: The major secondary sources of data were utilized during the study. These are books and periodicals, articles which are related to challenges of park managements, seminar papers, conference proceedings, previous research works of Master's thesis and PhD dissertations as well as socioeconomic and park related studies, including relevant documents and project reports from different institutions.

2.4. Data Collection

Procedures: Probability sampling procedures provide survey with straight forward way to generalize from the responses of alternative small number of to much larger population (Mitchel and Carson, 1988). Initially, based on the nature of this study, two stage sampling was applied to determine the study area. Hence, as natural forest Denkoro Chaka is found in Borena and Mehal Saynt. Therefore, the Woredas were grouped in two subgroups. Borena and Mehal Saynt Wordas were grouped in first sub group and Saynt Woreda only in another second sub group because availability and non-availability of the natural forest is the criteria of grouping the first stage sampling. Hence, the study selected the first sub group Borena and Mehal Saynt Woreda with first stage sampling among three Woredas.

The data were also collected from focus group discussion. Questioners in the form of structured and semi structured in group discussion. Focus group discussion was held on some purposively selected groups including Kebele, Woredas, and Park administrators.

2.5. Data Analysais

Data analysis was conducted in the following various methods and techniques. On top, descriptive statistical methods, SPSS Ver. 16, were used to analyses frequency distribution pattern of respondents in the study area. Random choice method was also applied to analyses the determinants of households in view of local community's perception and attitude, conservation practices and willingness to pay for natural forest.

The study used econometric models to explain the contribution and willingness to pay for local community for natural forest conservation. Study was applying ordered logistic regression, multinomial logistic regression, and bivariate probit model. The study correspondingly categorizes the dependent variable (attitude and perception score) in to five Likert scale in order to explain the attitude of the community regard to willingness to pay money and labour vehicles for meaning full policy implication with respect to independent variables such as sex, education, age, marital status and location of the study. Since the response of respondents is arranged in order (strongly disagree, disagree, neutral, agree, and strongly agree). Therefore, Ologit explained the preferences and attitudes of local community towards forest restoration or conservation while the Mlogit model is expected to examine forest conservation practices of household heads. Since the main goal of the study is explaining the

willingness to pay money and labour vehicles so that bivariate probit model is analyzed and by command of Stata 14 that can explain the result of double bounded dichotomous model.

3. Result and Discussion

3.1. Demographic Characteristics of Respondents

Demographic characteristics of the variables were analyzed based on their socio economic impacts. Out of proposed respondents randomly selected respondents 98% (352) were collected and the rest of 2% (8) were included from contingency questionnaires. Of the total respondents 299 (83%) and 61 (17%) were male and female household heads respectively. Of the total sample size 30% is found in location 2 of Borena Woreda and some of the basic variables evaluated as follow.

The working age consists of the population group between 15-64 years old. The total working age is 2.93 (58.6%) of the total household. Of the total working age group 1.453 (49.6%) is male whereas 1.48 (50.5%) is female. The productive age group is highly helpful for the country's economic development such a conservation practices. This data is estimated to be approached the national survey estimation. Inter-censal Population Survey (ICPS) revealed that the population belonging to the working age category has reached 55.4% of the total national population of the country (CSA, 2012). Therefore, the total respondents of the working age groups are found proportional to the national statistics. Since the age has its own significant impact on the most part of this natural forest conservation.

Similarly, CSA (2013) population projection indicates 88.3% illiterate rural population is found to the age of 65+. But, the total illiterate population size is reported in Ethiopia (41%) and Amhara (45%). However, the study indicates of 360 (37%, 35% 18%, 9%, 0.5%) in that order of not read and write, grade 1-4, 5-8, 9-10 and 11-12. However, the sample size of the study indicates that the illiteracy rate is lower than both the nation (Ethiopia) and the Amhara Region but it has a proximate result to the national data. However, the illiterate percentage of above 64 ages in the study is 93.5%. It is greater than the country's average (88%). Education is one factor unless we use properly.

The following box plot graph shows the status of education in the study area with age, sex and gender compositions.

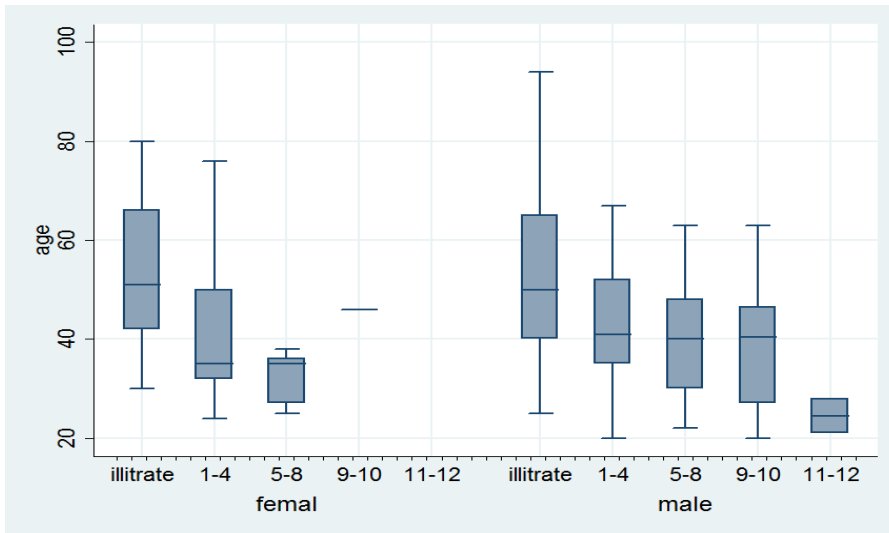


Figure 1: Box plot graph for age and education with male and female

This data is nearly to the national survey estimate. Inter-censual Population Survey (ICPS) revealed that the population belonging to the working age category has reached 55.4% of the total national population of the country (CSA, 2012). This may leads to be as curse unless positive perception and attitude will be imposed. On contrary, this demographic data will leads to the opportunity of protecting natural forest. It is a matter of the management of the golden opportunity of the human resources to achieve the goal of sustainable national park development.

3.2 Descriptive analyses of Economic Value of the Natural Forest Resources

Indirect use, direct use and option values are the major economic value of the natural resources. In the study area local community identified medicine, wood for fuel, livestock feed, tourism revenue are direct economical values and theft and robbery, common pole and community heritage are indirect and option value by adjusting Likert scale responses. Similarly, Carbon sequestration, biodiversity, water and rain, reducing ecological degradation are the indirect economic benefits. However, understanding the economic value and benefits of the local community's increases, the probability to protect national forest conservation also increases in general.

3.2.1 Direct Economic Value of Natural Forest

Local communities explain the direct, indirect and option values in different perspective. Respondents responded that forest honey, livestock feed, Job opportunity, wood for fuel, farm tools, housing poles ,tourism, wood for timber, hunting meat, medicine, forest fruit and forest coffee are sources of income from the highest to the lowest rank. This leads to increase the probability of develop positive perception and attitude towards protecting the national park.

This graph shows the average direct economic values of natural forest ranking by local community,

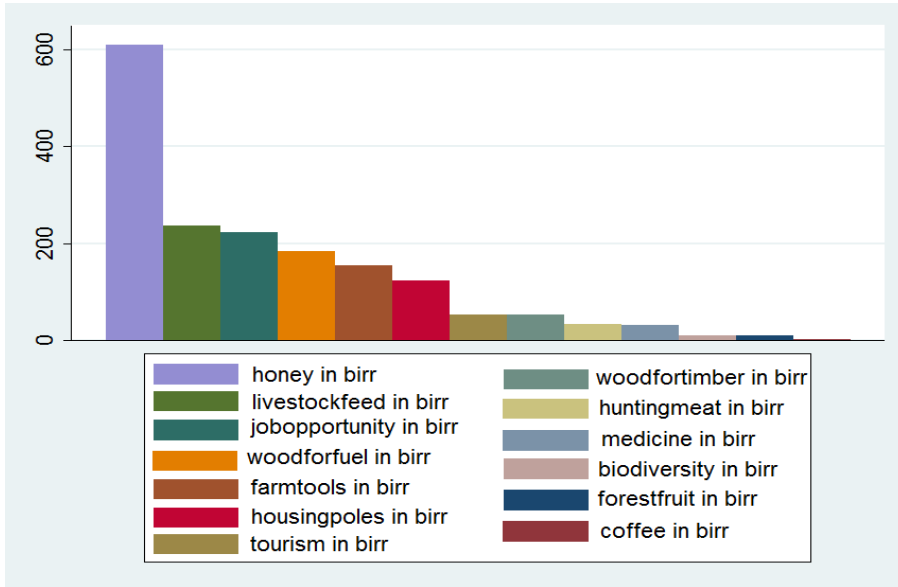


Figure 2: The direct benefits of natural forest with the highest graph to lowest rank

The above data indicate that among the direct benefits, honey, livestock, job opportunity, wood, farm tools, housing poles, tourism, timber, hunted meat, medicine, biodiversity, fruit, and coffee have been orderly listed from the highest to lowest local community benefits.

3.2.2. Response on the indirect and option values

As we so it is said analyzing the understanding enhancement economic value of local community, the probability to develop positive perception and attitude towards protecting natural forest. Based on descriptive analyses respondent's opinion indicates that indirect use and option uses have better economical values than direct uses of the economic benefits.

The following bar graph shows the contrasted economic value of respondents among the indirect and option values.

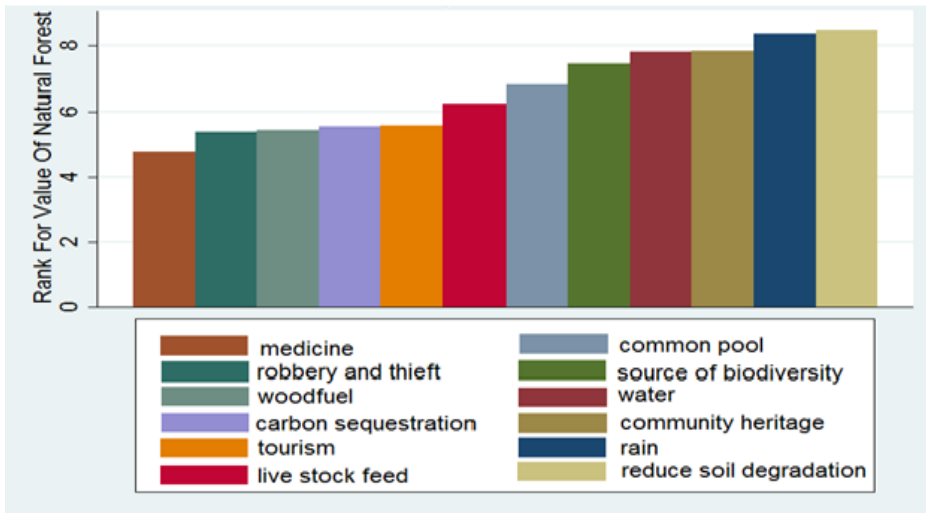


Figure 3: indirect and option economic benefits’ response graph from the lowest to highest

The above graph describes as common pole, biodiversity, water source, community heritage, medicine, robbery, wood fuel, carbon sequestration, tourism, livestock feed are orderly selected as their highest to lowest benefits among direct and option benefits. Hence, Local community prefers indirect benefit of park than direct benefits.

3.3 Econometric analysis of local community’s Perception and Attitude

Brant Test of Parallel Regression Assumption was tested in the study. A significant test statistic provides evidence that the parallel regression assumption has been violated on it. But, we can deal with violation of parallel line assumption as one of the best way. Therefore, do nothing and use ordered logistic regression because the practical implications of violating this assumption are minimal (Afees, 2016). Furthermore, analyzing attitude and perception of household head, Likert scale is the best measurement. Certainly, it can measure the level of household agreement responses to understand their perception and attitude on natural resource conservation (Guthiga, 2008). Hence, the study categorizes the dependent variable (attitude and perception score) in to five Likert scale in order to explain willingness to pay money and labor vehicles for meaning full policy implication with respect to independent variables such as sex, education, age, marital status and location of the study. Since the response of respondents is arranged in order (strongly disagree, disagree, neutral, agree, and strongly agree), the study uses order logistic regression. Since it is ordinal, it doesn’t need base category among dependent variables so that the study explains the agreement level of household head and estimates perception and attitude of the local community at large towards Borena Sayint National Park natural forest conservation.

Table 9: Shows the marginal effect of perception and attitude after ordered logistic regression

Variables	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	dy/dx	P> z	dy/dx	P> z	dy/dx	P> z	dy/dx	P> z	dy/dx	P> z
Sex	0.002	0.72	0.016	0.73	0.006	0.74	-0.015	0.73	-0.009	0.74
Education	-0.005	0.0***	-0.047	0.0***	-0.018	0.01**	0.043	0.0***	0.026	0.0***
Age	-0.001	0.0***	-0.013	0.0***	-0.005	0.0***	0.012	0.0***	0.007	0.0***
Married	-0.016	0.08*	-0.134	0.02*	-0.028	0.01**	0.119	0.02*	0.058	0.0***
Location-2	-0.005	0.05*	-0.052	0.03*	-0.020	0.08*	0.048	0.03*	0.029	0.04*
TLU	0.000	0.73	0.003	0.72	0.001	0.72	-0.003	0.72	-0.001	0.72
Y=	0.01733476		0.22794277		0.27416063		0.37615819		0.10440364	

Note: ***, ** and *significant at 1% and 5%, 10 % level, respectively.

Location2 indicates household heads lived in Borena Woreda of the study site otherwise Mehal Sayint Woreda. As the above table indicates among those who strongly disagree, disagree, neutral, agree and strongly agree cover the predicted power of 1.7% 22.8%, 27%, and 37.6% and 10.4% respectively. It is approaching with the results of satisfied (44%), neutral (23%) dissatisfied (12%) and other no respondent (25%) in the last study (Hua Yang et al, 2015). Explanatory variable age, education, married status, location-2 are significant at 1%, 1%, 10% and 5%, respectively but have expected negative sign when we go to strongly disagree. Except married variable, other significant variables are the same result on its significant and sign with the study of (Hua Yang et al., 2015). An increasing one class in education has on average, the probability to decreased strongly disagreement by 0.5% for natural forest conservation and protection. Like ways, as age increases by one year the attitude and perception of household on average has the probability to reduce strongly disagreement on conservation practices by 0.1%. Being married household head has the probability to reduce strongly disagreement on average decreased by 1.6% for natural forest conservation and protection. Household that lived in location-2 also has on average the probability to decrease strongly disagreement by 0.5%. This indicates that educated, old aged, married and location-2 household have the probability to become committed for natural forest conservation 'Denkoro-Chaqa' and protection in the study area than their counter parts.

On the disagreement option, household age, education, married status, location 2 are also statistically significant at 1%, 1%, 5% and 5% and have expected negative sign respectively. An increasing one class in education has the probability to decrease

disagreement by 4.7% on natural forest conservation and protection. Similarly, as age increases by one year the attitude and perception of household on average has the probability to reduce disagreement on conservation practices by 1.3%. Being married household head has the probability to reduce disagreement on natural forest conservation by 13.4%. Household that lived in location-2 also has the probability to reduce disagree by 5.2%. This indicates that household head becomes educated, aged married and household lived in (location-2) have the probability to become committed for natural forest conservation and protection in Borena Saint National Park..

On the no option or neutral responses, household age, education, married status, and location-2 are significant at 1%, 1%, 1% and 10% have also negative expected sign respectively. An increasing one class in education on average has the probability to decrease neutral response on natural forest conservation by 1.8%. Meaning, as age increases by one year the attitude and perception of household on average has the probability to reduce neutral responses on conservation practices by 0.5%. Being married household head has the probability to reduce neutral respondents from natural forest conservation and protection decreased by 2.8%. Household that lived in location-2 also has the probability to reduce neutral attitudes on average by 2%.

Household ages, education, marital status, location-2 were significant at 1%, 1%, 5% and 5% with positive sign respectively when we go to agree responses. An increasing one class in education on average has the probability to increase agree on natural forest conservation and protection by 4.3 %. On similar way, as age increases by one year the attitude and perception of household on conservation and protection of natural forest on average has the probability to increase agreement by 1.2%. Being married household head has on average the probability to increase agreement on natural forest conservation is increased by 11.9%. Other things being constant, household that lived in location-2 also on average has the probability to increase agreement on natural forest conservation and protection by 4.8%. This indicates that educated, aged, married and location-2 household heads have the probability to become committed for natural forest conservation and protection in the study area.

The attitude and perception test, household age, education, married, household lives in location-2 are statistically significant at 1%, 1%, 1% and 5% and positive expected sign when we go to strongly agree. An increasing one class in education has on average the probability more likely to increase strongly agreed by 2.6% on natural forest conservation and protection. The implication is that as age increases by one year the attitude and perception of household on average has the probability to increase strongly agree on natural forest conservation and protection by 0.7%. Being married household head has on average the probability to increase strongly agreement on natural forest conservation is 5.8%. Household that lived in location-2 also has the probability to increase strongly agreed by 2.9% on natural forest conservation and protection. This also indicates educated, aged, married households

and location-2 have on average the probability to more likely to become committed for natural forest conservation and protection meant to Borena-Saynt National Park.

This finding is similar to Ratsimbazaf (2012) that the old respondents and the more educated people were generally more aware about the ecosystem function of the forest and were concerned about the consequences of completely clearing the forest and they have strong positive perception and attitude towards natural forest conservation. This study is also consistent with other studies where male household head, aged and educated household head has the probability more likely to increase agree and strong agree for natural forest conservation at 7%, 303 % 0.5%, respectively (Lepetu, and Oladele, 2009). Therefore, the policy implication is very clear on education, sex and age treatment. Other study also shared the result and the significant of formal education and its role to change the attitude and perception was central tools for highlighting central policy focus areas for natural resource conservation (Snyman, 2014).

4. Conclusion and Recommendation

4.1. Conclusion

Descriptive analyses tell us to understand the basic relationship of the direct, indirect and option benefits. Similarly, the study focused on the environmental enhancement based on basic explanatory variables. Specifically, the study needs to examine local community's perceptions and attitudes towards the protected area of the natural forest as cornerstone. Hence, households ordered responses were analyzed by ordered logistic regression to understand the local community perception and attitude. Perception and attitude scores has derived from ordered responses of strongly disagree, disagree, neutral, agree, and strongly agree.

The model of order logistic regression (Ologit) basically communicates us the intrinsic value and consistency between perception and attitude of head of household with selective socio economic explanatory variables in the study area. These analyses make ship-shape to respondents to pay attention for the maximum conservation practices in the study area. The result of ordered logistic regression tells us, education, married, and location-2 have building the constructive attitude and perception for major conservation policies such as establishing park, buffer zone, Transitional zone , and conservation of natural forest along with take full advantage of local community benefits. Therefore, local community's perception and attitude are basically determined by socio economic and locations. Hence, the blueprint of natural forest conservation and protection is also determined by the constructive perception and attitude of local community.

Despite the fact that BSP has millions of lively hood impact on the local people but nobody still gives attention as compared to its tremendous advantages. The park is also one of the largest sources of Abay. Geographically, it has sources of water, and the hub of water spring. In addition, it is a source of many tributaries of Abay (Blue

Nile) nevertheless nobody still do give attention. Geographically, the low land up to high land weather conditions is found to be agglomerated in one area as identical as the nature of industries. Hence, the unique- tourism characteristics are found and available in this ecology. Similarly, historical and natural, it is the land of the hub of the freedom (either spiritually or physical) is also found to be the eastern and western Abay (Gion). Obviously Abay River is also the means of the lively hood of the people of Ethiopia, Sudan and Egypt at large. Hence, it is a time of demanding for communication, promotion among stake holders' cooperation to bring regional, nationally or internationally integration to protect this unique but unprovoked national park at the source of the water as well.

5. Recommendation

Formal education has great policy implication to bring positive perception and attitude on local communities towards the long term conservation practices in BSNP. Environmental issues should be mainstreamed from the beginning of education cycle. Mainstreaming shall be purposefully done and focused on the rank of highest to the lowest direct, indirect, and option values (benefits) to persuade the local community.

Set up radio programs that can serve a number of communication functions including: experience sharing among stake holders , enabling active listening to find out farmers' preferences, needs, opinions; raising awareness of services, events, or programs; disseminating information and facilitating discussion about the information; hosting campaigns on behavioural change to long term conservation. It should be installed focused on the programed area.

Conservation needs long term and it is a process of changing human attitude and a transferring of legacies from one generation to another generation. Hence, it should be applied on the basis of local community socio economic interest.

Increasing economic opportunities to increase public awareness for natural forest protection and conservation. This has the probability to develop a through time inheritance value for generations by mainstreaming and capacitating on centre of family institution in order to apply sustainable natural forest conservation as a best strategy.

Natural forest protecting and restoring demands could be consultative and participatory approach because of protection approach may have up raised a potential conflict and pressure on natural forest.

The park development in general should be considered in all core areas, buffer zone and transitional areas. Therefore, founding strong institutions on grass root level to enhance the sustainable protection of the park as they save as a nucleolus of the main park and it should be continuously forming the inter relation among core-buffer- and transitional areas (around park areas to the historical and natural area of East Gojam; East and West Gion) to resolve the problems.

Building trust among local communities; establish equitable utilization of the natural resources among local communities. Fascinated policies should be executed such as compensation, expropriation, carbon trade, tourism, and park economic friendly projects in general for local communities.

Other omitted perception and attitude determinant variables will be further studied. Religion is one of the socio economic factors to determine the perception and attitude of local community. It was not included in this study. Similarly, buffer zone and transitional area of the local community's perception and attitude is very important for sustainable park development. Hence, should be for further studied.

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Organizational Support to HRM in Times of the COVID-19 Pandemic Crisis

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Abstract

The paper studies organizational support with respect to Human Resource Management during the COVID-19 pandemic. It examines HRM initiatives regarding changing in jobs, working routine, workplaces, and remote working conditions. The paper analyses how HR managers supported employees during the pandemic and how top-management encouraged employee wellbeing. It also explores whether HRM practice and employee emotions are a strategic focus for companies. Quantitative data for this research was collected with survey from forty-eight organizations located in Georgia. The findings suggest that HRM supported staff with helping them to update their skills for remote working, established flexible working hours, and adopted less strict policies regarding performance management. Additionally, HR managers have been encouraged by the top-management in implementing initiatives concerning employee physical and emotional wellbeing. Furthermore, HRM should be a strategic focus for any organization to lay foundation of employee relationship and organizational culture in order to overcome difficulties and adapt to the changes. The novelty of the research highlights the importance of HRM practice when economies are facing the threat of recession. It contributes to HRM in terms of supporting employees during the pandemic as well as from the top-management perspective to promote HR initiatives, and paves the way for further studies in this field.

Keywords: coronavirus, employee wellbeing, emotional experience, flexible work, remote working, Georgia

Introduction

The Covid-19 pandemic and accompanying regulations aiming at avoiding the spread of the virus influenced organizations of any size and type, along with employees and managers. The crisis caused alterations in working routines, working places, and employee wellbeing in general. Therefore, support from the human resource

managers has played an essential role to help the staff to adapt to the new normal and to contribute in the transition process.

Large companies meet the lockdown policies with more preparation as they had the stocks in place. Issues with transportation and logistics due to the strict regulations have led to the reduction in trade. Besides, demand failure, cancelation of contracts and orders, postponing or cancelation of business trips, and increased prices of inputs as a result, have caused company income reduction. However, in some cases demand increased after the lockdown for technics, food delivery services, and online shops.

Although the issue of HRM practice and employee experience should be a strategic focus, as employee wellbeing can contribute to a company's success, there is a small amount of research in this regard, especially in the context of Georgia (the country).

Therefore, this research aimed at studying organizational support to HRM with their initiatives during the Covid-19 crisis taking into account alterations in jobs, working routine, and workplaces in Georgia.

The research questions are as follows:

- (a) How have HR managers supported employees during the pandemic?
- (b) Which communication systems including online meetings and online tools were managers used to keep in touch with workers?
- (c) Did top-management support HR managers' initiatives regarding employee wellbeing during the pandemic?
- (d) In which extent HRM practice and employee emotions have been a strategic issue for Georgian organizations?

The rest of the paper is divided into the following parts: First, the overview of the existing literature regarding HRM support activities during the crisis is presented. Second, the secondary data concerning the impact of lockdown on Georgian business is highlighted followed by the description of empirical research method for the primary study. Next, the results of the data analysis are summarized and discussed. Finally, conclusions are made and further research topics are emphasized.

Theoretical Background

The new coronavirus pandemic has caused many challenges to organizations regardless of their form of ownership - for-profits, nonprofits, or governmental. In general, a crisis increases the anxiety, stress, uncertainty among employees and managers, but these effects are intensified by continuous pressure of dismissal or salary cuts (Chatrakul Na Ayudhya, Prouska, & Beauregard, 2019). Crisis can have negative impact on employees' health; demanding work schedule or addressing a crisis can cause burnout (Maslach & Leiter, 2008).

Moreover, the economic crisis implies reduction in working hours, changes in workplace and working conditions, increase in workload, less job choices for workers and cut of wages, feeling insecure and worsen wellbeing (Eurofound, 2013). For this reason, a wide range of changes occurred in human resource management as companies adjusted HRM practices to respond to the global economic crisis in 2008 with the aim to improve organizational efficiency (Naudé, Dickie, & Butler, 2012; Johnstone, 2019). Consequently, HRM needs to understand employee feelings and take actions proactively. Employees working from home are lacking informal contacts and consequently reported decreased mental health (Smith, 2020). Managers should show empathy and compassion to the workers, while supporting them with flexibility (Howlett, 2020). Besides, they need to understand each employee's unique situation and respond taking into consideration those unique circumstances (Howlett, 2020).

Although mental health is always important, employee emotions needs to be taken into consideration especially during the crisis. In general, HRM can improve quality of life of the employees, and perceived organizational support can reduce the health harm of work to the employees (Mariappanadar, 2020).

In order to give employees trust, stability and hope during the crisis, continuous interaction is recommended (Fallon, 2020; Adams, 2020). Leaders should provide updates to inform employees about new developments, statistics, or changes in guidelines (Fallon, 2020). The study by Smith (2020) shows that people were willing to communicate with their company at least weekly, whereas about 29 percent of them wanted daily communication (Smith, 2020). The communication system can help employers to ensure that workers are safe on the one hand, and on the other hand, the employees can instantly notify their managers if they need any help (Parsi, 2016).

According to the Crisis Resilient Workforce Model elaborated by Deloitte (2015), communication should be based not only on employees needs, but it is also critical what is communicated and by whom.

Even before the pandemic, many countries were facing to decent work problems, and gaps in working hours, wage, and workplace conditions (Connell, Burgess, & Hannif, 2007). This impacts on the job quality that is an important part of HRM program as it influences both the organization and the economy (Connell, Burgess & Hannif, 2007).

It is also noteworthy that flexibly designed workplaces proved to have positive effect especially to women (Subramaniam et al., 2013).

The research by Coenen and Kok (2014) confirmed that though flexibility in terms of remote working enhances productivity and performance aside from cooperation within different divisions of a company, face-to-face relations still could not be replaced by online contact.

Though flexible workplace design can lead to less conflict between work and life, it requires individual employees' autonomous motivation, which may cause an employee to be engaged in the work additional hours in lieu of enjoying free time activities (Peters & Blomme, 2019). Therefore, HRM should plan the flexible work in such manner that employees have enough time for nonworking activities in order to maintain their physical and mental health.

Furthermore, trainings and personnel development programs are essential also during the crisis. Capability development of employees is considered as a strategic option even during turbulence, and its benefits include the potential to adapt to changes and to contribute in an organization's ability to achieve its goals (Maley, 2019).

HRM contributes hugely during crises and uncertainties because of the several roles it plays in relations with people and work management in tandem with organizational strategic decisions (Zagelmeyer & Gollan, 2012; Gulua, 2020).

Thus, with the intention of improving situation in a company during the pandemic, HRM should constantly communicate with employees. At the same time, HR managers also should be encouraged and supported by top-management in their efforts during the crisis.

Impact of Covid-19 Pandemic on Georgia

Population of the Republic of Georgia totals 3,7 million people, GDP per capita amounts 4763 USD, unemployment rate equals to 11.6%, and inflation is 5.7% (Geostat, 2020). Although economic growth remains relatively low, Georgia has still achieved notable success and international recognition thanks to the effective reforms over the past years (Mushkudiani & Gechbaia, 2019).

Since the beginning of the pandemic, the Georgian government has carried out strict lockdown policy, and hence, total confirmed cases have been only 1568 of which 1279 are recovered, and fatal outcomes constitute 19 people (StopCov.ge, 2020). As a result of lockdown policies and tough regulations, the pandemic impact on Georgian business is serious. Decrease in demand, issues in the supply chain and transportation, a shortage of stocks, and increased costs exerted a negative impact on organizations in Georgia. Consequently, many companies especially in tourism and hospitality sector went bankrupt. Fewer employment opportunities and broad scale layoffs force a large portion of both self-employed and salaried workers into difficult circumstances (Babych, Keshelava, & Mzhavanadze, 2020).

Moreover, decline in domestic consumption causing from policy changes to prevent novel coronavirus from spreading, has been resulting in significant reduction in household consumption, for instance, spending on transportation, electronics, clothing, and services (Babych, et al., 2020). Consequently, some companies have to dismiss employees or grant them unpaid leaves, and others are breaking up. In

particular, 59% of micro self-employed enterprises suspended business activities (PwC Georgia, 2020). Furthermore, tourism arrivals and receipts have declined as a result of precautionary behavior and the travel bans whereas Georgian economy has been heavily relied on the tourism sector (Babych, et al., 2020).

66% of Georgian companies experienced financial loss, and business turnover has decreased for the last months in many enterprises (GCCCI, 2020). Consequently, the half of the surveyed companies reduced staff, and 40% of firms in the tourism business fired all their employees (PwC Georgia, 2020). Additionally, 53% of the companies intend to maintain their employees for the next 6 months, but 43% of the employers have reduced the salaries (GCCCI, 2020).

On the other hand, 56% of the medium (50-249 employees) and 61% of the large (more than 250 employees) enterprises shifted to remote working (PwC Georgia, 2020).

According to the Georgian Chamber of Commerce and Industry, a small number of the Georgian companies (17%) intend to switch their business online and work remotely, but they do not have relevant skills and experience (GCCCI, 2020). In addition, 7% of the companies aim at transition to online business in the future (GCCCI, 2020).

Thus, under the circumstances of the pandemic, the organizational support to human resource management in their efforts to manage people appropriately is vital, notably when remote working and digitalization offer new business opportunities.

Research and Data Analysis Methods

The quantitative research approach was adopted in order to find answers to the research questions. Data was collected in June 2020 by self-administered questionnaires distributed through the Internet in the form of Google survey and through the Email.

The questionnaire for the survey was based on qualitative research results, which involved Expert interview with Georgian HRM experts (Gigauri, 2020).

The questionnaire included various types of questions, namely dichotomous questions, multiple choice questions and multiple response questions, and 5-point Likert type scale format ranging from 1=strongly disagree to 5=strongly agree questions. The majority of the questions were closed-ended, and one question was open-ended.

Overall, Human Resource Managers from 150 organizations were invited to participate in the survey, and sample size constitutes 48 managers from companies operating in wide range of sectors such as: (1) Healthcare, AI, IT, telecommunication, insurance, consulting, media, tourism, food and hotel business; (2) Manufacturing, production, construction, Alcoholic and nonalcoholic beverages; (3) Bank and financial sector; (4) Transportation, Logistics, distribution, E-commerce; and (4) public sector i.e. governmental agencies.

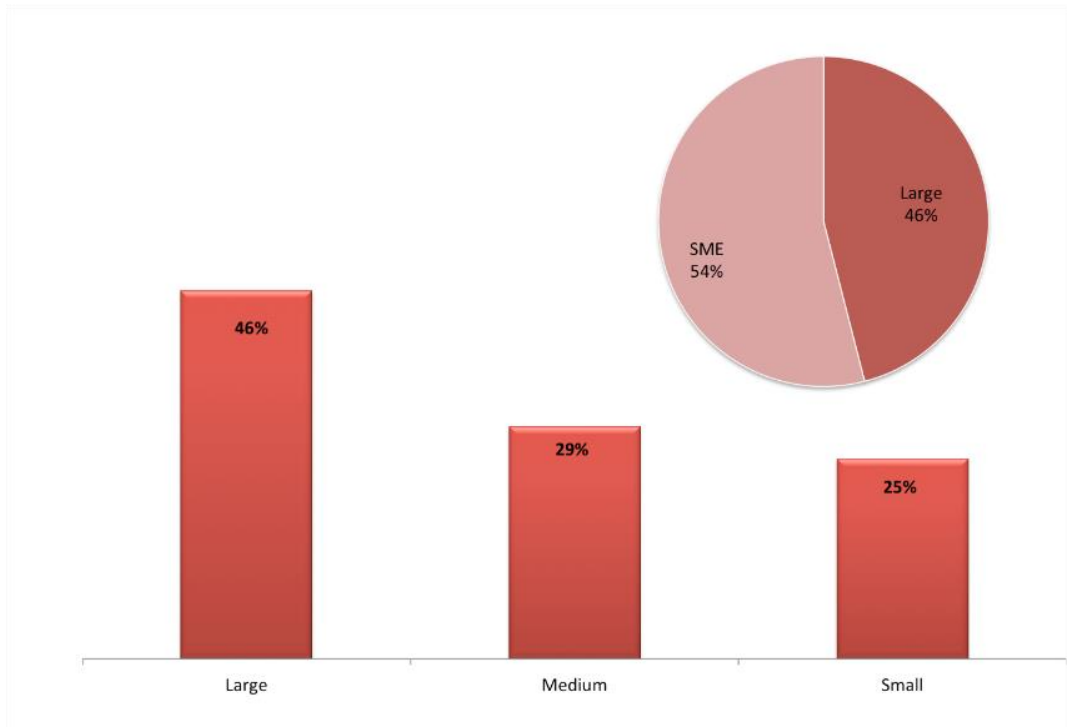
The gathered quantitative data was analyzed through SPSS (2020) and MS Excel with descriptive statistics, frequency analysis, and cross-tabulations. Cronbach's Alpha for the corresponding items is between 0.8 and 0.9 confirming the reliability of the questionnaire.

Research Findings

According to the classification of National Statistics Office of Georgia (Geostat, 2020), the average annual number of employed exceeds 250 persons in a large enterprise, the number of employed persons in medium-sized companies ranges from 50 to 250, and small enterprises have less than 50 employees.

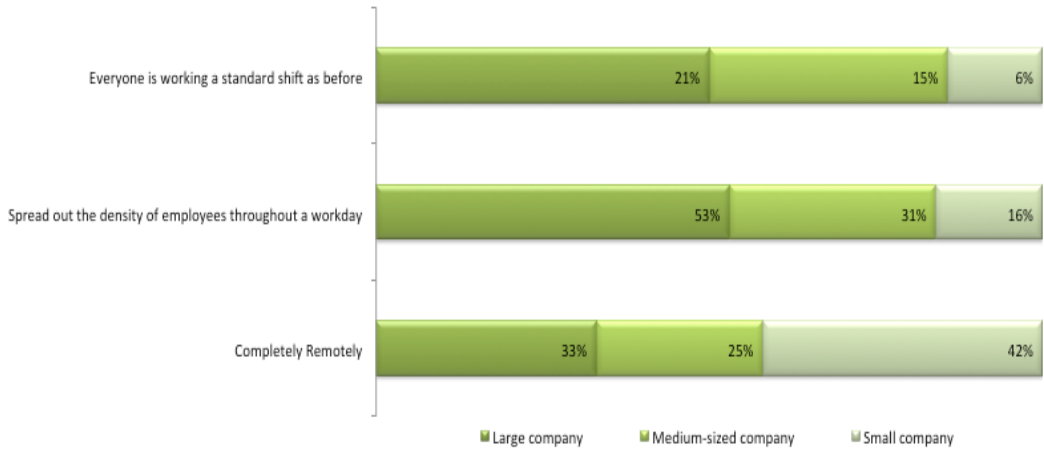
46% of the managers participated in the survey represented large organizations, and 54% are from SMEs (Fig.1).

Figure 1. Organizations by Size



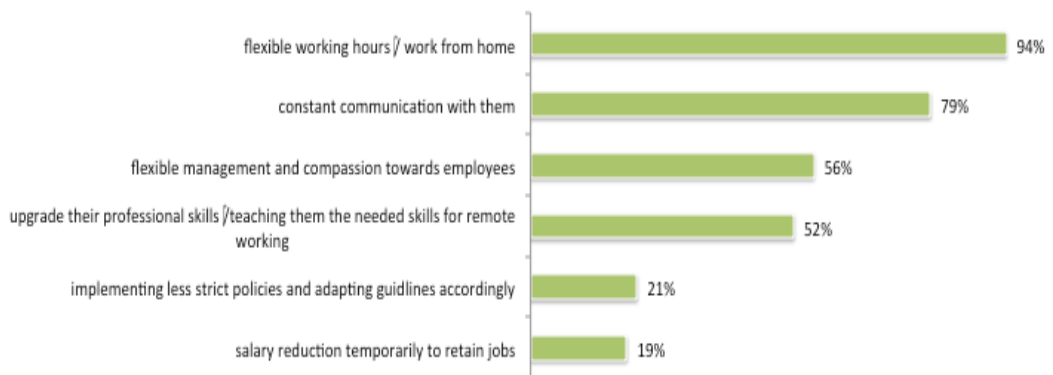
The Covid-19 pandemic and follow-up regulations have caused changeover to online working at all organizations. As a result, companies changed their policy to allow employees to work remotely. The respondents confirm that they worked completely remotely or in shifts during the pandemic (Fig.2).

Figure 2. Working routine during the new coronavirus crisis



In order to support employees to perform their jobs during the pandemic, the organizations in most cases established flexible working hours and allowed work from home. Moreover, the managers were in constant communication (79%) with the employees and treated them with compassion (56%). Besides, 52 percent of the respondents claimed that they helped the employees to upgrade their skills needed for remote working. 21 percent of managers stated that they have implemented less strict policies as well as adapting guidelines in compliance with the remote working schedule. Only 19 percent of the respondents reported temporal salary reduction to retain jobs (Fig. 3).

Figure 3. HR managers supporting initiatives during the Covid-19 crisis

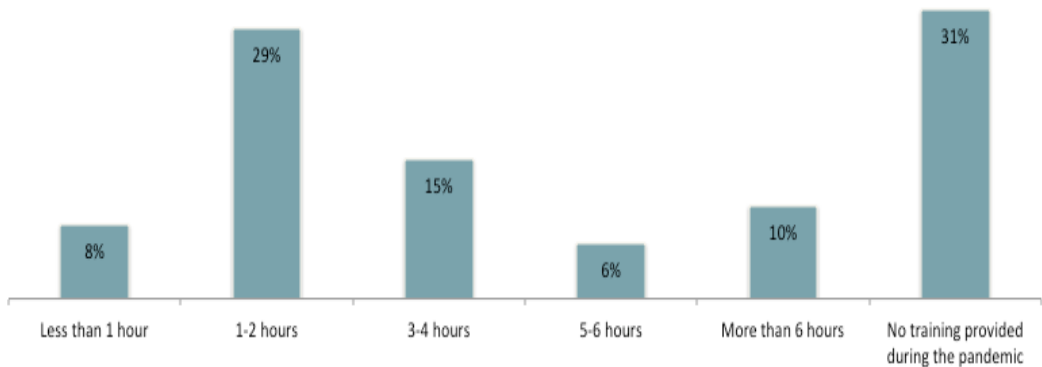


Note: Multiple-response item

The managers participated in the survey answered the open-ended question regarding HRM issues they have been focusing on during the pandemic. The content analysis revealed that the most significant activities have concerned employee health and safety. In addition, HR managers have addressed organizational values and culture, held consultations to inform the staff about the pandemic situation including governmental restrictions and regulations. Besides, recruitment and selection, performance appraisal, change management, and quality management have been questions of great importance to Georgian organizations. Moreover, HR management has concentrated on employee motivation, communication, stress management, time management, and crisis management. According to the respondents, one of the most critical issues during the Covid-19 crisis has been employee retention and payroll coupled with personnel development and trainings counting online coaching.

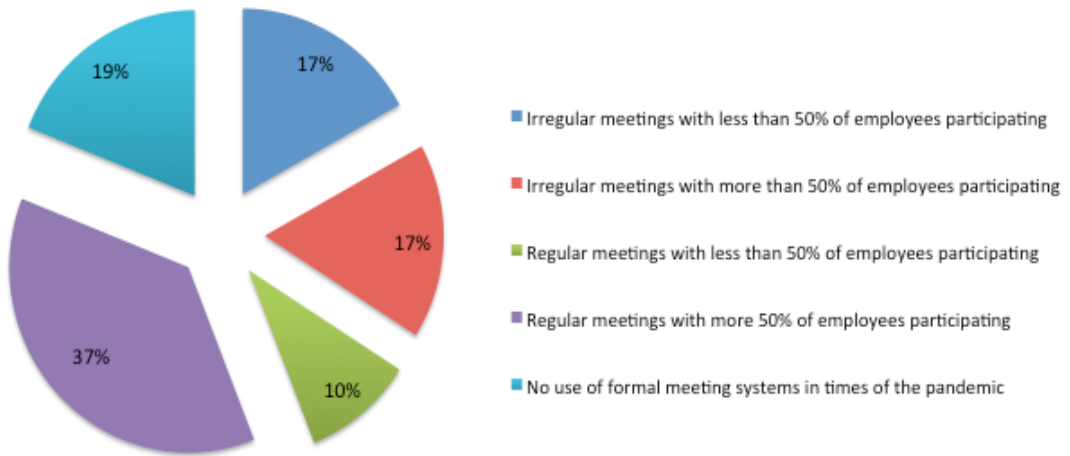
With respect to formal trainings, the majority of the managers (31%) taken part in the survey responded that there was no training provided during the pandemic. Nevertheless, 10 percent of the respondents confirm to have held formal trainings in conjunction with online trainings more than 6 hours per week. In most cases, organizations conducted formal trainings 1 to 2 hours per week during the pandemic, and roughly 16 percent arranged trainings more than 5 hours. On average 15 percent of the respondents conformed that their employees receive 3 to 4 hours formal trainings (comprising online trainings) per week during the Covid-19 crisis (Fig. 4).

Figure 4. Training hours per week during the pandemic



In addition to trainings, formal meetings were also held mostly online through the Internet communication tools. The surveyed managers claimed that regular meetings took place with the attendance more than 50 percent of the employees. 19 percent of the respondents stated that formal meetings were not conducted to inform employees about the organizational situation, strategy, changes, and results (Fig.5). However, at some extent the irregular meetings including online meetings were used to provide information on organizational situation to the staff.

Figure 5. Formal Meetings during the pandemic



Furthermore, communication with employees, managers, and other stakeholders plays a significant role during the crisis. Therefore, in order to maintain regular communication with the employees, the respondents mentioned online communication tools such as Zoom, Skype, Google Meet, Microsoft Teams, organizations have used simultaneously with Phone and Email (Table 1).

Table 1. Communication tools during the pandemic

How did you maintain regular communication with your employees?	
Via Phone and Email	19%
Via Online communication tools (Zoom, Skype, Meet, etc.)	4%
Via Phone, Email and online communication tools	77%

The support from the top-management was vital to the human resource managers in their activities to ensure employees' wellbeing during the lockdown. Concerning the attitude of top-management towards employee wellbeing and HRM practice in the course of the pandemic crisis, the respondents needed to indicate their level of agreement or disagreement with the following statements.

Top-management completely supports employees/ HRM.

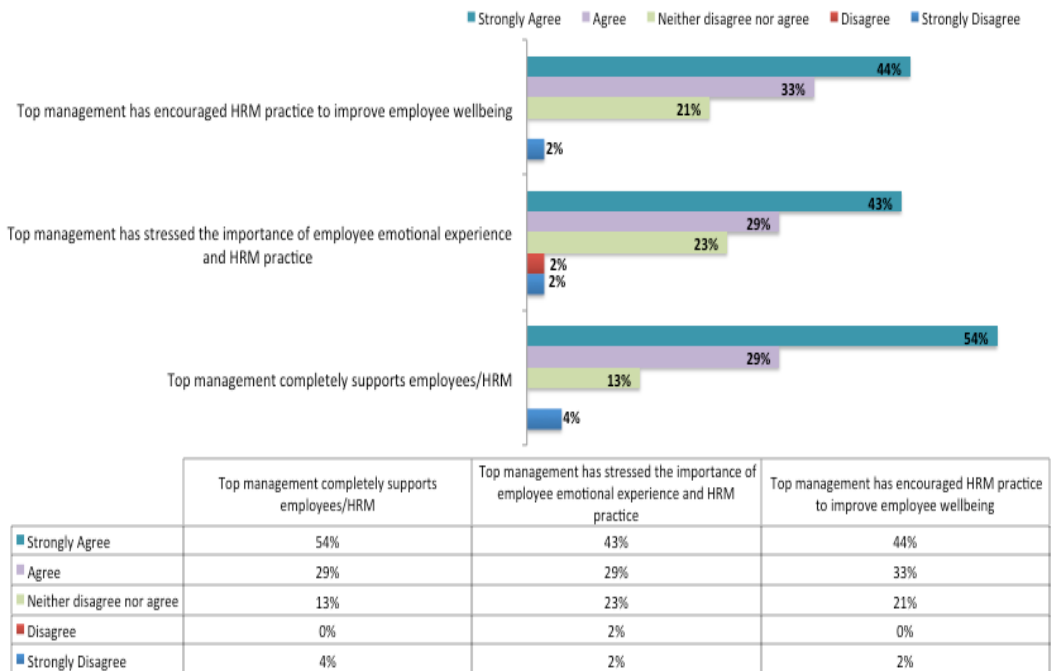
Top-management has stressed the importance of employees' emotional experience and HRM practice.

Top-management has encouraged HRM practice to improve employees' wellbeing.

Items were responded to on a Likert scale of 1-5, where 5= Strongly agree, 4= Agree, 3= Neither disagree nor agree, 2= Disagree, and 1 = Strongly disagree.

According to the responses, the majority of the managers agreed that the top-management of their organizations completely supports employees, understands the importance of employee emotional experience, and encourages HRM practice to improve employees' wellbeing (Fig. 6).

Figure 6. Level of Agreement and Disagreement about the Attitude of Top-management towards Employee Wellbeing during the Pandemic



A reliability analysis was carried out on this 5-point Likert scale item. Cronbach's alpha showed acceptable reliability with high internal consistency, $\alpha = 0.93$ (Table 2).

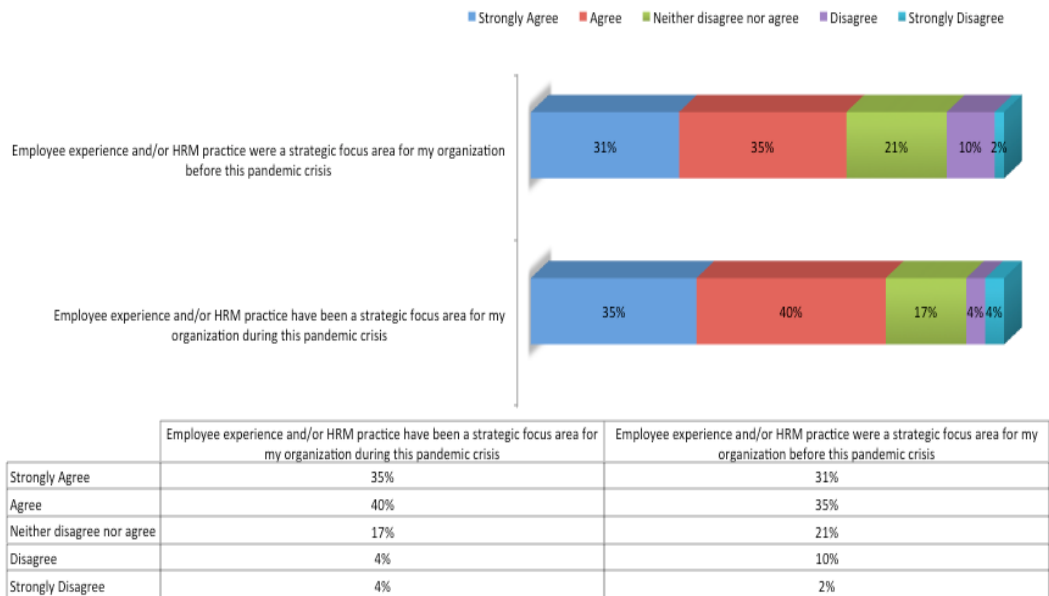
Table 2. Reliability Statistics: Perception of top-management support towards employee wellbeing

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.930	0.932	3

In respect of Strategic human resource management, the majority of the organizations have considered HRM practice being a strategic focus area during the pandemic as it was before the crisis (Fig. 7). 35 percent of the respondents strongly agree and 40 percent agree to the statements that employee experience and /or HRM practice have been a strategic focus for their organization during the pandemic. Whereas, 35

percent agree and 31 percent strongly agree that employee experience and /or HRM practice were strategic orientations for their organizations even before the pandemic.

Figure 7. Strategic Focus on HRM



The 5-point Likert scale questionnaire is reliable with high internal consistency as Cronbach's alpha coefficient amounts to $\alpha = 0.84$ (Table 3).

Table 3. Reliability Statistics: Strategic Focus on HRM

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.844	0.844	2

To summarize, the research findings demonstrate the importance of organizational support during crisis in different ways. The organizations attempt to encourage HRM practice emphasizing employee wellbeing.

Discussion and Conclusion

The presented research found out that the working routine changed due to the new coronavirus as organizations enforced the appropriate regulations from the country government to prevent the spread of the virus. Consequently, the majority of Georgian organizations introduced remote working system. However, distance working is completely new to the Georgian environment. On the one side companies need to gain knowledge and experience in this regard to manage remote working effectively. On

the other hand, employees need to acquire technological skills to keep productivity during remote working routine.

According to the research results, HR managers took initiatives to support employees escorted by establishing flexible working hours. The majority of Georgian worked from home, which required constant communication from the management and less strict policies regarding performance management. Besides, HRM supported the staff with helping them to update their skills necessary for remote working.

The research demonstrated that salary reduction temporarily to retain jobs took place only on a small scale in contrast with the tendency emphasized in the literature. This can be explained by the small sample participated in this study as well as by the fact that during the survey salaries were not reduced but in the longer-term such decisions might be taken. The whole implication of the lockdown was not fully acknowledged by the managers to report during the survey. Hence, further research can reveal this issue more accurate.

The most significant supporting activities by HR managers were related to employee health and safety, which was determined by the pandemic. If a worker became infected the whole enterprise might paralyze or even get closed. In addition, HRM focused on implementation of formal restrictions and regulations imposed by the government, and manage stress among employees caused by both the pandemic and the unexpected changes. Moreover, HR managers highlighted organizational values and cultures, motivated employees during the pandemic, and took into account workers viewpoints.

The majority of the organizations either cancelled formal trainings or reduced to 1-2 hours per week. This confirms the less experience in digitalization in Georgia. Companies preferred to postpone planned formal trainings until pandemic is over to conduct them face-to-face instead of online. On the contrary, formal regular meetings have been arranged to inform the staff about current developments. Thus, the most organizations chose to carry out urgent tasks online while postpone others. Yet it should be pointed out that personnel development and training programs must be held during the crisis in order to retain spirit, motivation, and productivity at the high level.

Under the circumstances, communication tools are important part to support employees. As online technologies facilitate the better communications, HR managers need to choose them in accordance with the employee preferences. Next research can determine the preferred online communication tools at the organizations.

It is also noteworthy that the support by the top-management is of utmost importance for both human resource management and employees, especially during the crisis. The research confirmed that HRM have been encouraged by the organization in their initiatives concerning employee physical and emotional wellbeing. Furthermore, HRM should be a strategic focus for any organization to lay foundation of employee

relationship and organizational culture in order to overcome difficulties and adapt to the changes.

Thus, HRM is of primary importance to support employees, management and an entire company in a critical time, and hence, contribute to the success of the organization.

Study Limitations and Future Research

The main limitation of this study presents the small size of the sample, which did not allow generalizing the findings. Nevertheless, the research offers values as it can be used as a foundation for further studies.

Future research will show the exact measurements how HRM supports workers in the process of remote working, how employees perceive the support, and which themes are covered by training sessions. In this vein, communication efforts and employee wellbeing should be closely examined with a larger-scale research of both employees and HR manager.

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The Improvement of Retargeting by Big Data: A Decision Support that Threatens the Brand Image?

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Abstract

With the emergence of Big Data and the increasing market penetration of ad retargeting advertising, the advertising industry's interest in using this new online marketing method is rising. Retargeting is an innovative technology based on Big Data. People who have gone to a merchant site and window-shopped but not purchased can be re-pitched with the product they showed an interest in. Therefore, click rates and conversion rates are dramatically enhancing by retargeting. However, in spite of the increasing number of companies investing in retargeting, there is little academic research on this topic. In this paper we explore the links between retargeting, perceived intrusiveness and brand image. As results show the importance of perceived intrusiveness, ad repetition and ad relevance, we introduce new analytical perspectives on online strategies with the goal of facilitating collaboration between consumers and marketers.

Keywords: big data, retargeting, perceived intrusiveness, ad relevance

Introduction

Behavioral targeting is a technical analysis of people behavior, and as a consequence a technical analysis of target. It is based on the latter's past consumers behaviors and provides tailored proposals for individual needs and expectations. Behavioral targeting includes a multitude of techniques and types of ads. In this highly competitive market, a technique called retargeting seems to be the Promised Land for advertisers. Indeed, while the estimate clickthrough rates do not exceed 0.1%^[1], retargeting (also known as remarketing) improves conversion rates ^[2] by 5 and 10%. Retargeting keeps the brands in front of bounced traffic after consumers leave the website without purchasing. These "visitors" so-called bounced visitors are, then retargeted *via* dynamic creative (also known as personalized retargeting), which allows an advertiser to display a banner created on-the-fly for a particular consumer based on specific pages and requests. Advertisers customized and optimized real-time messages that follow consumers from site to site until the bounced visitors return to the e-commerce site to complete their order or sales funnel. Companies like

Criteo ensure to retarget and re-engage 90% of these bounced visitors in the 24 hours that followed their visit and display these ads on more than 4,000 partners sites (editors). Retargeting is based on intensive use of Big Data that extend retargeting to e-mailing and predictive analysis. This extreme customization of the offers is a great help to decision making for businesses because it allows to "push" the offers that are most likely to generate sales. Retargeting reshapes in a very efficient way advertising creation, product claims, promotional campaigns and the detection of key segments. However, these techniques are regarded as intrusive by users and forced people to adopt ad avoidance strategies (clear cookies after a visit, sites avoidance...). The objective of this research is to assess the consumers acceptance of this form of communication and, beyond the strict efficiency on sales, the impact of the retargeting on brands image. In a first part, we will detail what bring Big Data to retargeting and, more generally, what decision support Big Data represent. We will describe, also, the eco-system that addresses infrastructure and investments focused on these advertising field. In a second part, we present the results of research conducted on 200 consumers on their perception of retargeting. In the third part, we will discuss the results of the study and the possible impact of the use of Big Data on brands image and the efficiency of retargeting.

The contributions of Big Data in e-commerce: from business intelligence to retargeting

A "data intelligence" become impossible?

Big Data are difficult to define. They derive their origins from academic unpublished works of John Mashey and others belonging to Silicon Graphics^[3] in the mid 1990s. The first academic reference published on Big Data comes from Francis X. Diebold (2000), today considered as the founder of the academic reflection on Big Data. He said that he had been strucked as many of these colleagues by the new statistical potentials offered by these recent extensive data. These capabilities were even criticized by some academics including Sala-I-Martin (1997) making fun of the two millions of regression that it was possible to do with Big Data. The current dynamic factor models (or *Dynamic factor models* for DNF) dispense with many statistical tests, including the classic approach based on probabilities (Reichlin, 2003). Moreover, as pointed out by Diebold (2000), Big Data are built on an academic vision rather than a business vision. Big Data are special data (Huggett, 2020). This is evidenced by the importance of IBM supercalculators or the influence of major IT consultancies as the Gartner in the definition and further reflection on Big Data. Therefore, Diebold (2012) is considering Big Data from two perspectives :

Big Data as a phenomenon affecting the entire scientific assets and business of the company. Thus, the Big Data size evolves according to the sectors and is growing exponentially. What was considered satisfactory in terms of size and provision of information is regarded as insufficient the next month. Several reflections are carried

out to define the concept of data life cycle in the field of management (Kim and al., 2020 ; Simonet, 2012).

Big Data as an emerging discipline. Diebold (2012) underlines the large areas taken over from other branches as computer science, information systems, econometrics and statistics. He concludes that Big Data are a perfect illustration of an "interdisciplinary" discipline. More recently, Stitzlein and al. (2020) provide an overview of the influence of big data in a multidisciplinary perspective.

For digital marketing, Big Data are coming to revolutionize the knowledge and management of customer relationship, through Business Intelligence and data analysis. Indeed, they bring an immediate monetization to e-commerce sites. However, their implementation in the heart of marketing strategies has not been immediate (Ghasemaghahi et al., 2020). Chen, Chiang and Storey (2012) or Ziliani (2019) detail the steps that led businesses to reconsider their approach to markets and customers in light of Big Data. Business Intelligence-1.0 was the first step in discovering the Data as a market. These customer data have been structured and collected by companies and then stored and analyzed in RDBMS for *relational Database management systems*. Data warehouses relied on tools of extraction, transformation and loading of data collected in compliance with all legislations based on relevant existing laws. These tools provide consumers rankings and data viz (from the inactive customer through the hot prospect). These scores were based on multiple statistical and technical data mining methods: classification, regression, segmentation, predictive models... The so-called Business Intelligence 2.0 was brought by the Web. A mass of data could be gathered on the Internet through search engines and the pioneers of e-commerce. These data have a number of characteristics often summarized in terms of the 3 V namely volume, variety of sources and velocity (extreme and continuous growth). They have to grow exponentially with users generated content (UGC). Indeed, in the first instance, the user gave involuntarily considerable information to the actors of e-commerce. The IP addresses associated with cookies that each site may file on the consumer's computer allow to trace a route of navigation in a very precise way: sites, page depth, conversion funnel, bounce rate. Web Analytics tools began including the most well-known Google Analytics and Xiti providing daily reports on the number of connected users (unique visitors), average time consultation of the site, keywords and requests... Secondly, the emergence of social networks has fed Big Data with information gathering, information given by consumers. This social content covers a variety of topics: unveiling of private life, viral sharing content, microblogging, conversations around brands... Thus, the volume of data and the complexity of their treatment become a real obstacle to an intelligent use of Big Data. Recently, the co-founder of Google, Eric Schmidt said that the volume of information generated by today's men reached in two days what had been observed over several centuries. Each day, Facebook produced over 500 terabytes of data while Google handled more than two million searches per minute. Simon (2011) returns to the impressive numbers of Big Data: 500 exabytes

for the number of data available on the Web, consumption only for the United States of 3.6 zettabytes, a trillion of videos uploaded on YouTube. Consumers have become the '*always - we consumers*', constantly, connected consumers who provide themselves a considerable number of data. These data can be processed through a technological ecosystem that starts, gradually in place: fall of costs of storage of Data, technology maturity type NFC or RFID that finally make them accessible, appearance of such dedicated trades that Data scientists, generation of the cloud etc. The data become important intangible resources. They have to grow again with step 3 of Business Intelligence: one of the connected objects and mobile applications (smartphones, tablets). The interaction man-machine, analysis of sensory data, taking into account the contexts of navigation, or even sentimental attitudinal data that are captured by so-called NLP tools (for *natural language processing*) foreshadow this 3 step which will allow the emergence of young technology companies. For example, type Hadoop software developed by Open Source as Apache communities give birth to a multitude of start-ups. Big Data can be analyzed in terms of conversations between consumers picked up on social media like Twitter (Matos and al., 2019 ; McKelvey and al., 2012; Tinati and al., 2012).

Companies like Quantcast Analytics improve conversion rates, hotels bookings or purchases of new cars. They detect the unnecessary clicks, establish Predictive analyses that predict early summer travel, consolidate the behavioural data observed on the applications. Nevertheless, a significant number of data makes it difficult to use. Many publications are pointing the finger trouble using scientifically Big Data because they are unstructured data. However, as Jackson (2013), it is a mistake to qualify such data as "big" as they are, in fact, deeply different from what we had previously. McKinsey, due to their Gigantism Big Data go beyond the capabilities of information systems analysis. The consulting firm Protiviti Inc. notes that Big Data cannot be analyzed with the traditional tools of databases management. Moreover, the monetization of data led companies to search for new techniques and methods (Lohr, 2012). In advertising, the personalization of the message becomes an essential axis of market development.

Personalization: a remedy to the confusion

Customizing advertising content is accepted by the companies. It is seen as a solution to the problem of the hieratic growth of data. 52%^[4] of digital managers consider the ability to customize the content is fundamental in on-line strategies. Risks associated with a low customization of their offer on the Web are pointed to by marketing managers. They cite, including, a disappointing experience, an ineffective site built on intuition rather than on data, products and "unintelligent" services based on a truncated view of the consumer. The lack of customization can lead to a deterioration in trading results and a weariness of consumers annoyed by the irrelevance of offers from performed queries. Where a real investment in the two axes of the digital personalization:

Website customization

Personalized communications

The site customization is usually triggered the *home page*. Indeed, the home page is often the first point of contact for the brand with the consumer. It can offer adapted to the different segments identified as part of its customer relationship management. The goal is to reduce the bounce rate (people who leave the site on the first page) and reduce the conversion funnel (number of pages to download in order to buy the product). This appearance of simplicity of the mechanics hides a real technological performance. The CRM (*customer relationship management*) must be able to identify the consumer, the segment to which it belongs and the content planned for this segment in a few milliseconds. This refined data management is the specialty of companies such as Neolane or Selligent.

The personalization of communication is used to bring potential buyers on the site. This customization can be done via the e-mail (e-mail adapted presenting an offer designed for the segment to which belongs the consumer) or digital advertising through three levers: the purchase of keywords on the search engines like Google and their partner sites, the display which corresponds to the purchase of advertising space in different formats (banners, pop - up etc.), affiliation that allows brands via platforms of affiliation to relay communication. Today, all of these levers is customizable. This customization is based on:

The purchase of client files through dealers (brokers or mega data) files which can combine thousands of data and so dozens of possible segmentation criteria

Data acquisition thanks to the navigation of users. The deposit of cookies on their computers and their IP addresses allow you to have information about their location, their preferences, their courtship of sites and their products (through key words typed) research but also their exposure to such or such advertising and their attitude (simple display or click-through rate). The generalization of the Facebook Open Graph^[5] mix customer data and social recommendations. An unique Web identifier (User ID or user identification) is poised to win leading to a better "tracking" of the consumer.

The analysis of navigation within the sites. With the Web Analytics tools, it is possible to analyze the average shopping basket, the navigation within the site but also what site the user came from (referral) and exact performance of carried out advertising campaigns (number Internet users arriving through advertising, number of clicks generated, average basket etc.).

Furthermore, all on-line data are supplemented by offline data and mobile data: stores loyalty cards, geotagged, interaction with a network application (card electronic, interactive kiosk, mobile, chips) RFID,....).

Retargeting, effective advertising customization

Mouncey (2012) described the various researches conducted in the field of customization. He insists on the need to provide consumers with the relevant information made possible by a better knowledge of these. Within these new models, the launch of TouchPoints 4^[6] (model of media exposure) represents a real revolution made possible by Big Data. It foreshadows the new models of advertising exposure that integrates the multi-channel data. Thus, it is possible to model the exposure of consumers to the different media digital^[7] and do it in a context of purchase. If the implementation of these new models is considered to be bearer of radical change, retargeting appears as customizing the most effective advertising in recent years. This customization is made possible by the use of Big Data and worried about the profession. Indeed, retargeting is seen as emblematic of a new more technological marketing that will take away a significant number of trades including some creative professions (since creation is automated) and some dedicated trades in the reflection on the brand (including strategic planners). As noted in^[8] Cavazza (2013), "retargeting is to optimize the purchase of banners targeting individual users based on their shopping journey." Some already prophesying the death of strategic planning for the benefit of surgical targeting algorithms. Specifically "If a user leaves the merchant site of an advertiser, it can send a more personalized message on another site so that the user return on his^[9]". This customization is designed by a recommendation algorithm. This last analysis queries, the user profile, the path to purchase in a few thousandths of seconds and uses a skeleton of banner which has customizable dynamic spaces. The most used banners are those who follow the user throughout his navigation and include the product for which he hesitated but he has not bought. Saute a surfer on the merchant site that he just left and do buy is one of the great imperatives of commercial sites. Companies like Criteo made retargeting an extremely effective way to improve the profitability of advertising digital^[10]. However, if the profitability of this technique is not contested, the perception of this type of communication with the consumer is very little studied. Recent research (Mogaji, 2020 ; Perraud, 2011) analyzed the effect of digital advertising formats on intrusiveness that is perceived by the consumer. It appears that 'some formats using causes a strong perception of intrusiveness at the user. Furthermore the perceived intrusiveness negatively attitude toward advertising format, the ad and the brand. "(Perraud, 2011, p.1). However, retargeting effects have not been studied. However, retargeting is a specific format which requires dedicated studies. Retargeting is:

Increasingly used by businesses, this now on social networks like Facebook or commercial e-mail

Customizable to the extreme which can increase the impression of violation of privacy and intrusiveness but also the feeling of relevance of advertising

A format whose persuasion is based on repetition as a banner of retargeting will be seen on a period shorter or longer^[11] on all the websites on which the user navigates

Design and main results of the research

Therefore, this study attempts to answer the question. Retargeting has an influence on the perceived advertising intrusiveness and more generally on the brand image and intend to return to the site? The theoretical framework mobilized concerns:

The effects of the communications personalization on consumers and more specifically ad relevance

The concept and measurement of perceived intrusiveness

Conceptual framework

Customization and ad relevance

Ad customization is increasingly studied in two directions: the customization according to the profile of the consumer (Kim and al., 2020 ; Bauer, Reichardt, Barnes and Neumann, 2005) or location (Pura, 2005). According to Tsai and al. (2020) or Chellappa and Sin (2005), individuals are willing to share personal information in exchange for perceived benefits. An assessment is done between the perceived risk to disclose his private life and the benefits. Moreover, as show Khelladi and al. (2013), the contextualization plays a key role. Customize the advertising message based on the customer profile is not enough. We must also convey this message to the most appropriate time. Finally, custom advertising (also known as behavioral targeting) increases the effectiveness of campaigns and understanding of consumers. Yan and al. (2009) show that users who click on the same type of advertising exhibit similar behavior on the Web (1). The click rate can be increased by an average of more than 670 percent thanks to the segmentation and the design of well-targeted ads (2). Advertisements designed from recent queries consumers are more effective than those based on oldest requests (3) which tends to prove that customizing triggers the impulse purchases. With respect to the relevance of the announcement, Derbaix and Pêcheux (1995) show that there is a link between commercial involvement and personal relevance. This involvement influence the motivation to deal with the announcement and the attention.

Concept and measurement of perceived intrusiveness

Intrusiveness "pertains to the extent to which commercials disrupts the flow of an editorial unit. Findings show that consumers' attitudes toward advertising are high when the quantity and the intrusiveness of clutter are low. Competitiveness of clutter has no significant impact on attitudes toward advertising. the "degree to which conveyed by media advertising interrupts the fluidity of the editorial unit" (Ha, 1996). Advertising exposure is even more important that there is a link between the ad frequency and perceived intrusiveness (Gauzente, 2004). Thus, more ad repetition is strong, the more the feeling of intrusiveness on advertising. Hérault (2010) shows

that the intrusive nature of a communication may affect, in a digital context, the adoption of technology process and intend to use (continuity of use). The perceived intrusiveness can be measured using various protocols. We supported this research on the work of Li, Edwards and Lee (2002) adapted from Gauzente (2008). The scale of perceived intrusiveness contains the following labels: it's intrusive, it's intrusive, that bother me, it is a breach of my privacy. This scale used in much research (Hérault, 2010; Gauzente, 2008) present good psychometric qualities.

A research model is proposed in the following figure (figure 1). It takes into account as a central variable perceived intrusiveness. It includes two antecedent variables: ad repetition and ad relevance compared to the queries that are one of the two features of the retargeting and, more generally, the use of Big Data in digital advertising. Brand image is considered to be a variable mediator of intend to return to the site and perceived intrusiveness. We will therefore make the following hypotheses:

H1: perceived intrusiveness can influence negatively the intention to return direct way (H1a) and indirect (H1b) via brand. Briggs and Hollis (1997) cites by Perraud (2011) show that the format of an advertisement has an effect on the perception of brand and on attitudes and behaviors.

H2: ad repetition has a positive influence on perceived intrusiveness.

H 3: ad relevance has a negative effect on perceived intrusiveness. Perceived intrusiveness is considered, for the consumer, has a gene for his cognitive process, the fact that the advertising is relevant with this process can diminish the feeling of intrusiveness.

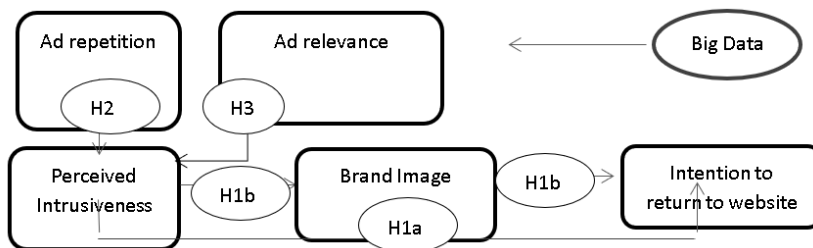


Figure 1: conceptual model

Research design and main results

We conducted two exploratory researches, a qualitative and the other quantitative. The first qualitative research was about 20 individuals (average age 36 years, 70 percent of women, 30% of men in June 2020). After exposition to a retargeted ad, we collected their impressions. This first study was preparatory to the quantitative study and had no generalized character. Nevertheless, we were able to identify some areas of reflection on the perception of digital advertising and beyond Big Data by the consumer (table 1). We also wish to clarify that the whole sample was made up of students of continuing training in marketing.

Emerging themes of the qualitative interviews	Key observations
The magic of technology	The technology that enables retargeting is misunderstood and unknown to consumers surveyed. Their knowledge of Big Data is very rough. The basics of cookies, behavioral targeting or tracking are poorly understood. The technology to the extreme customization is considered "to magic." " <i>How do know? How can they be so precise? »</i>
The concern about the use of the data	An important concern is the use of personal data. This concern focuses on social networks considered more intrusive than queries on search engines.
The image of the brand	The brand seems to suffer from retargeting. Repetition seems the most promising of a deterioration of the image of the brand. Comments such as ' <i>the brand can't convince, then it's harassing us</i> ' are frequent.
The desire to purchase the product	The urge to buy the product is ironically increased vision of personalized advertising. What is appreciated is the <i>cross-selling</i> (ability of advertising to propose a complementary offer in addition to the product)

Table 1: key findings of the exploratory study

Regarding the quantitative survey, we did an experiment on 200 Internet users. They were asked to follow on their computer, a specific navigation scenario. For men (60% of the sample), the specific query type wear on equipment of garden on the Google search engine. At the time of the survey, a commercial link from a major specialized distributor displayed. He asked users to click on the link to access the offer and follow the funnel of purchase until the time of the choice of the means of payment. The second step was to leave the merchant site and then to browse several sites who had been selected beforehand as sites practicing retargeting. Half of the sample had to navigate three site consecutively, the other half on 6 in order to get a certain variance in rehearsal. All the sites relayed the promotional ad which included a price offer for garden furniture. The same scenario was followed for the female sample with as query a fashion item. The merchant site selected was a mail that practice of systematically retargeting. At the end of this experiment, a questionnaire was submitted to all of the sample. Beforehand had been tested on another sample the scale of intrusiveness that is perceived and the scale on the extent of branding (Keller, 1993). For reasons of synthesis, we will only present the meaningful connections between variables in the model.

Significant relationships between variables	Repetition of ad - perceived intrusiveness	Ad - perceived intrusiveness relevance	Perceived intrusiveness - Image of the brand	Perceived intrusiveness - Intention to return	Image of the brand- Intention to return
[12] Student's T	17.4	-12,01	-4.13	NS	-4.7
Validation of the hypothesis	H2 validated: the repetition	H3 validated: the ad	H1b validated: the perceived	H1 has not validated:	H1 b validated:

	of the ad increases the perceived intrusiveness.	relevance diminishes the sense of perceived intrusiveness.	intrusiveness degrades brand image.	there is no link between perceived intrusiveness and intend to return.	there is a link between brand and the intention to return to the website.
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Table 2: key relationships between variables in the model and validation of the hypotheses

Perceived intrusiveness affects the brand image. Brand appears as pursuing consumers in its offers without respecting their navigation. Loss of image has a direct and negative influence on the intention to return to the site. However, when brand image^[13] is not taken into account by consumers, perceived intrusiveness has no influence on the intention to return. The latter does not account issuing brand in its judgment of the ad but only the promotional offer. Finally, ad repetition increases perceived intrusiveness which implies that brands media strategies must take into account very carefully the average level of repetition. As for the relevance of the ad, it plays a positive role in the perception of retargeting by the consumer^[14]. Customizing an ad has a positive influence on the persuasion of the user and confirms the findings of the literature. However, it must be used within the brand positioning and with an acceptable repetition level to the consumer.

Conclusion

This research highlights the importance to the consumer of the acceptance of new targeting techniques made possible by Big Data. This acceptance can be facilitated by perceived relevance received ads (they correspond to a real service and facilitate research) and the implementation of intelligent capping systems which limit repetition.

The attitude of the consumer over the use of its private data in a commercial context raises many questions in marketing today. The European CNIL and private consumer initiatives demand better supervision of the use of such data ^[15]. Big Data used for advertising purposes are already over the field of competitive intelligence.

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Notes

- [1] CTR Average display advertising clickthrough rates (CTRs) – 2020 compilation, <https://www.smartinsights.com/internet-advertising/internet-advertising-analytics/display-advertising-clickthrough-rates/>
- [2] The conversion rate is defined as the percentage of visitors making a purchase on a site during a visit.
- [3] Silicon Graphics was a company specializing in computer graphics, 3D, video processing and computing performance. It went bankrupt in 2009.
- [4] source: Quarterly Digital Intelligence Briefing: Personalization, Trust and Return on Investment in association with Adobe.
- [5] some examples of tools called social Plugin built into most e-commerce sites: buttons 'like', 'comments' space, via his Facebook connect button...
- [6] for further information see: www.ipatouchpoints.co.uk
- [7] the various digital media are grouped under the acronym "Poem" for P (paid media - purchase of keywords, paid digital media), O (owned media - website of the mark), E (earned media - presence on) social networks), M (media).
- [8] Cavazza (2013), big data are the best and the worst enemy of your brand, fredCavazza.net.
- [9] the Godinec A. (2009), what is the advertising retargeting?, JDN, 29/04/2009.
- [10] Criteo is the average click of a custom banner rate of 0.6%, but it can go up to 2,5% in some campaigns. Using retargeting, Amazon has 35% of its sales with this technique.
- [11] the so-called retargeting cookies have a life of 30 days.
- [12] the Student's t test assesses the significance of the relationship between indicators and build it. It is significant from 1.96.
- [13] in this case, it is ignores the mediating character of brand image.
- [14] the relevance of the announcement has a positive influence on the image of the brand (T of Student: 6.7). This link has been observed during the analysis of the results but had not been the subject of preliminary assumption.

[15] Facebook was sentenced in July 2013 to pay 20 million dollars in damages and interest to members for an advertising model hybrid using the preferences of the users to the brand promotion.

Economic Growth Model and Foreign Direct Investment: Evidence from Albania

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Abstract

Background: A number of reasons are expressed about the importance of foreign direct investment (FDI) in developing countries. FDI increases the investment capital in the host country and transferring of new technologies, conducts the distribution and enlarges the economic productivity, improves the level of competitiveness and exports, develops new markets, etc. *Objectives:* In this research, the main objective is the economic growth (GDP) analysis in Albania affected by FDI flows and the other fundamental macroeconomic factors of growth/productivity. *Methods/Approach:* The data in this analysis are time series with quarterly frequencies from 1997 to 2018. The econometric model estimation is multifactor regression of the expanded Solow's model. Statistical approach base on logarithm and first-order stationarity. *Results:* Economic growth is a simultaneous phenomenon of FDI, domestic investment, the scale of economic openness (focusing on exports), the aggregate average salary, and the efficient use of public debt, especially external debt. *Conclusions:* FDI flows are the main factor in total economic productivity, and have a larger contribution to the gross domestic product than domestic investment, per unit invested capital, in Albania.

Keywords: FDI flows, Solow's model, economic growth

Introduction

Many economic theories have noticed different ways of how FDI inflows might give benefits to the host country. Even though these parts of economic theories and economic thoughts were real and proved by economical practice in different countries, the other part of the theories are not estimated due to the point of economic views and concepts related to states, regions, or the international economy. In the research field worldwide, academics and institutions during the last two or three

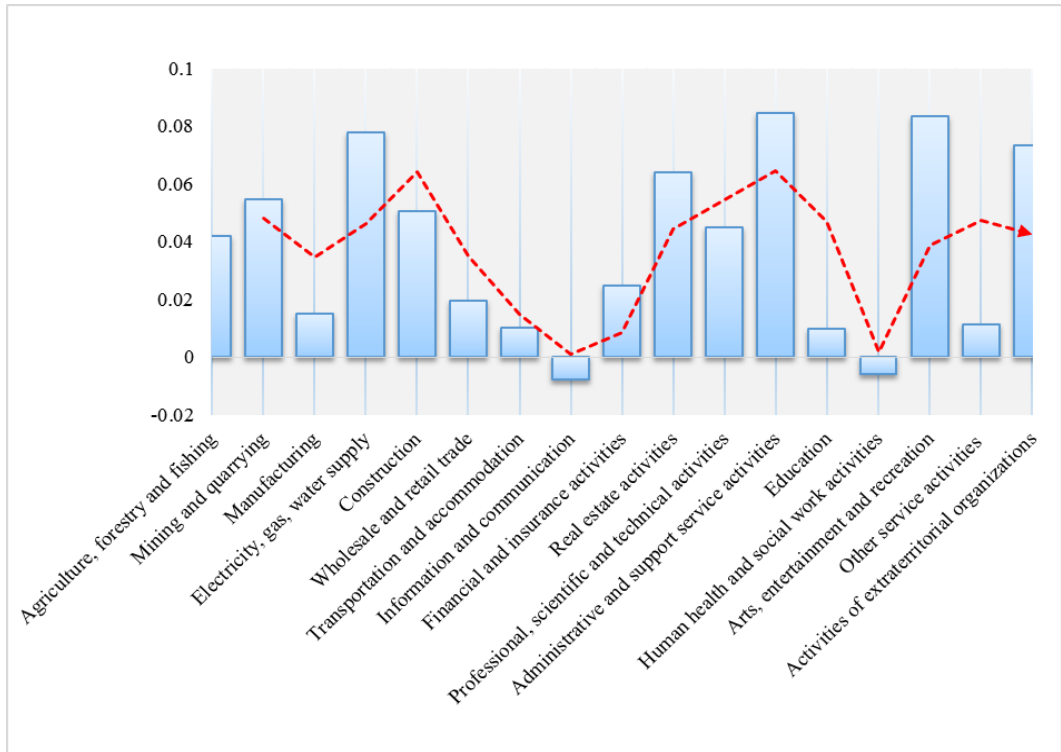
decades, the focus of their findings was about FDI and portfolios of these investments. If we wander to express the chronology of investment analysis and development, we notice three phases: (1) the linkage of economic theories and FDI; (2) the concept of doing business abroad except the origin country; and (3) the analysis of factors and effects with regard to FDI inflows. The first two phases involve the time horizon from the 60s to the 80s, while the third phase started in the 90s and continuous until nowadays.

These last years in Albania's economy, FDI's weight account for nearly 10% of gross domestic products. According to Albanian's economic institutions are noticed many good effects such as increasing of the investment capital in the host country; transferring of new and novel technologies also and skills and knowledges about them like labor specializing; the distribution and growth of the economic productivity; improvement of the competitiveness level and exports; development of the new domestic markets; etc. On the other hand, the most important and crucial economic issue is the fact that FDI does not affect the level of public debt or does not create accrual debt in the economy. FDI inflows are like a tool with high efficacy for financing the trade deficit and national current accounts of the host country, especially when exists a large gap of trade deficit and many times with big problems.

These last years is developed a new theoretical approach to the negative effect of FDI's in the weak economy (host country with a smaller economy and trade positions). This phenomenon has caused many problems in developing economy with tight transactions in the international trades, because of big foreign investors have abused with dominant trade positions in the host country. In this case, it is worth mentioning the acquisition of concessions by these investors and that the government of the host country uses these investors as a major achievement in its policy agenda. Furthermore, these foreign investors blessed by the host country government, sometimes in an aggressive way use price transferring for the only reason to minimize fiscal payments.

The aim of this study is to analyze the FDI inflows in Albania as a very important investment in this economy, but these flows during last years have had up and down with high volatility. In order to identify the existence of sustainability of FDI or not, Figure 1 shows the intensity of FDI inflows by economic sectors (time series data 2016-2019 with average quarterly frequency).

Figure 1. Intensity of FDI by Sectors (average 2016 – 2019)



Source: Authors' chart in Excel. Data from Bank of Albania.

Figure 1 shows the volatility of FDI inflows and the marginal effect with high volatility, meanwhile, the intensity of inflows is declining or is taking a negative level in both economic sectors. In recent years, the analysis revealed that Albania as a host country is getting worse and worse especially in some sectors for attracting foreign investors.

Base on all over as mentioned above, this research will develop the effect of FDI inflows in the Albanian economic growth. The proceeding data are time series of macroeconomic indicators from 1997 to 2018 (with quarterly frequency). It will be used the autoregressive model to get the best findings. In this study will be analyzed the elasticity of GDP related to FDI and other macroeconomic factors as the average salary, the economic openness, external public debt, domestic investment, remittances, and interest rate of the loan, etc. We highlight the fact that not considering the effect of covid-19 pandemic and FDIs into Albanian economic growth.

Literature Review: FDI and its effect on economic growth (GDP)

A number of economic model and theories were approached by the economic researchers and the economic theorists, for explaining the main factors which achieve to increase economic growth and to identify the big differences of economic growth

rates between different country incomes. To be more meaningful, it is needed to analyze these theories in two time-phases:

First phase: Neoclassical growth theory (1960-1990). This theory explains economic growth like a mathematical function of "labor", "capital", and "technology". The first model for this kind of evaluation was invented by Robert Solow (1957), who was a Nobel Prize winner. This macroeconomic model is valuable for discrete and continuous data, but the most using model is the discrete data version model. Lately, Solow's model is mentioned with the name "exogenous growth" due to not analyzing internal correlations between production factors. According to exogenous growth theory, the model must consider the other factors as economies of scale, income growth, technological changes in the production process, etc.

Second phase: Modern economic growth theory (after the 90s). The variable "labor" in Solow's model shows the "labor force" related to only the basic capabilities of employees. The simplest way for taking into consideration the effect of human capital in economic growth in Solow's model is the involvement of this factor as a production factor. Many years later from the invention of Solow's model, the researchers Romer (1990), Mankiw, Romer, and Weil (1992), enhanced and enlarged the concept of growth theory by giving a modern usage with a new variable "foreign direct investment". Furthermore, these researchers declared that technological progress is the main force that affects economic growth in a country. According to their studies, FDIs are an account of capital invested in the host country, as well as major contributors to the import of new and advanced technologies in these countries. Also, exist many studies in favor of FDI and correlation with economic growth for host countries by estimating other extra factors which are derivated: the rise of human capital skills, the improvement of market competitiveness, etc. (Dunning, 1993; Borensztein et al, 1998; and De Mello, 1999; Blomstrom, Gliberman, and Kokko, 2000).

Keller and Yeaple (2003) found out that existed a positive correlation with statistical significance between FDI and GDP of host countries. As a matter of fact, the main conclusion is a strong and positive correlation with statistical significance between FDI and economic sectors with more new technology in use. Taking this fact into account, as a consequence, FDI has a positive impact on growth productivities. In the same conclusion are and researchers Griffith, Redding, and Simpson (2003) who analyzed the growth dynamics of productivity in the United Kingdom for years 1980 - 1992 (analyzing the growth dynamics of productivity for international corporates). In addition to this, they concentrated on two mechanisms about how FDI inflows could affect the host country: (1) the level of economic growth; (2) the scale of domestic productivity.

The positive correlation with statistical significance between FDI and GDP of host countries exist in many studies, but with more impact in the government policies are:

according to the study of Nair-Reichert and Weinhold (2001), the average value of FDI has a positive correlation with GDP with data from 24 developed countries;

also, Choe (2003) in his study found out that FDIs have causality effect (with statistical significance) in the economic growth for 80 host countries (developed and developing economies);

the same conclusion is Solomon (2011) who analyzed 111 host countries (developed and developing economies);

when the host country is a small economy, like Albania, or Western Balkan states, FDI inflows are the major potential of economic growth (Lleshaj and Korbi, 2019). However, according to Jurčić, Franc, and Barišić (2020) the institutional quality factors have not been important in determining FDI inflow per capita in Croatia

On the other hand, we can mention case studies that conclude the negative correlation between FDI with economic growth. For instance, researchers Aitken and Harrison (1999) found out this conclusion for the economy of Venezuela state. However, Hanson (2001), developed a research based on three case studies in different countries, and his conclusion was in favor of the weak or not statistical significance between FDI and GDP.

Methodology: The extended Solow's model and FDIs

The simplest function of macroeconomic growth by Solow's model is the output function $Y = f(K, L)$, with K is denoted the capital in the economy, and L is denoted the labor force. This model assumes that the output function represents constant scale income. The basic Solow's model shows that capital accumulation cannot explain the increase in economic sustainability, because high savings rates in the economy lead to temporarily high economic growth, as well as, the economy is being approached the case in which capital and output are constant. This model after 1990 was expanded by including into the production function an endogenous variable which is technological progress that over time expands the productive capacities of the economy. In the modern concept, Solow's extended model includes endogenous effects, because of endogenous" economic growth models have been applied to see the effect of FDI on a host country's economic growth. According to the Cobb-Douglas function, it follows the extended Solow's model which has the following equation:

$$\log(GDP_t) = \beta_0 + \beta_1 \log(FDI_t) + \beta_2 \log(DI_t) + \beta_3 \log(AS_t) + \beta_4 \log(IRL_t) + \beta_5 \log(EO_t) + \beta_6 \log(RPD_t) + \beta_7 \log(R_t) + \varepsilon_t$$

Where $\beta_1, \beta_2, \dots, \beta_7$ are respectively the elasticity of the dependent variable with respect to the independent variables and t is the time dimension of the series $t = 1, 2, \dots, T$ and ε_t is the term of the model error. The description of the variable is in Table 1. Also, to evaluate the parameters β_i of the model will be used the ordinary least squares method (Gujarat and Porter 2009). In order to these estimations to offer conclusions with high statistical reliability (the best statistical confidence), the model

will be tested for all the main assumptions of the Gauss-Markov Theorem: (1) the linearity must be according to the parameters β_i ; (2) the mathematical expectation of the residuals is $E(\varepsilon_t) = 0$; (3) the residual variance ε_t is constant, $V(\varepsilon_t) = E(\varepsilon_t^2) = \text{constant}$; and (4) the covariance $\text{Cov}(\varepsilon_i; \varepsilon_j) = 0$ and $\text{Cov}(x_i; x_j) = 0$ for each $i \neq j$, for every independent variables x_i .

Table 1. Description of Macroeconomic Variables, Time Series and Data Source.

Variables	Description	Data source
Dependent variable:		
GDP	Gross Domestic Product (unit of measurement in ALL, at current prices).	INSTAT (statistical database)
Independent variables:		
FDI	Foreign Direct Investment inflows (unit of measurement in dollars, at current prices, converted into ALL).	Bank of Albania (www.bankofalbania.org)
AS	Average salary in the economy, or labor cost (unit of measurement in ALL).	INSTAT (statistical database)
EO	Economic openness, or the size of foreign trade in relation to GDP. Economic openness = (import + export)/GDP, (unit of measurement in %).	INSTAT (statistical database) Ministry of Finance (www.financa.gov.al)
EPD	External public debt (unit of measurement in ALL).	Ministry of Finance (www.financa.gov.al)
DI	Domestic investment (unit of measurement in ALL).	INSTAT (statistical database)
R	Remittance flows in the economy (unit of measurement in ALL).	Bank of Albania (www.bankofalbania.org)
IRL	Interest rate on loans of businesses in the economy (with a term of 12 months, unit of measure in %).	Bank of Albania (www.bankofalbania.org)

Source: Variables selected by the authors.

In all regression models with time series data, they must take into account their stationarity. Estimating the stationarity of time series (i.e. the time series of values that has stochastic behavior) the two most commonly used tests are: the Augmented Dickey-Fuller (ADF) test (Dickey, et al., 1979) and the Phillips-Perron test (PP) (Phillips and Perron, 1988). A time series variable is stationary (i.e. stable) if its mean and variance are constant over time and the covariance between the two values depends only on the length of the time period that separates them and not on the time moments when they occur. Only after a time series is stationary is it accepted as a dependent or independent variable in a regression model (Hill, Griffiths, & Lim., 2010). According to ADF test, we test whether a time series of data is influenced by its initial value, by the trend of time or by both simultaneously. The conversion of a time series to stationary the method is realized with differences that are also tested. The basic equation of the ADF test with respect to constant and trend is:

$$\Delta X_t = \lambda_0 + \lambda_1 t + \lambda_2 X_{t-1} + \sum_{i=1}^{k-1} \beta_i \Delta X_{t-1} + \varepsilon_t$$

Where the time series X_t (the variable taken in the study) in the form of the first difference (integral of the first order) is $\Delta X_t = X_t - X_{t-1}$ in the period t ; λ_0 is the constant of the terms; t is the time trend; and k is the number of parameters being evaluated. Based on the above equation, is tested the null hypothesis: $H_0: \lambda_2 = 0$ (the series has a unitary root i.e. it is not stationary). Accepting or not of null hypothesis will be measured with the probability of statistical significance $p < 0.05$, according to the maximization of the greatest probability of occurrence (AIC). Also with the same statistical importance will be tested the return of a series by means of differences in stationary.

Empirical analysis and findings: Estimation of the Growth Model

According to the empirical analysis for the extended Solow's model in Albania, we identify the relationship of the dependent variable gross domestic product (GDP) with the independent variables shown in the table 2.

Table 2. Parametric Estimations of the Economic Growth Model in Albania.

Dependent variable: $\Delta \log(\text{GDPT})$	Coefficient or model parameters	Probability of statistical significance
Constant	+ 0.0202	0.0001
Independent variables:		
$\Delta \log(\text{FDIt})$	+ 0.0506	0.0004*
$\Delta \log(\text{ASt})$	+ 0.4354	0.0109*
$\Delta 2 \log(\text{DIt})$	+ 0.0855	0.0000*
$\Delta \log(\text{IRLt})$	+ 0.3469	0.0674**
$\Delta \log(\text{EPDt})$	- 0.2291	0.0003*
$\Delta \log(\text{Rt})$	+ 0.0334	0.1354
$\Delta \log(\text{EOt})$	- 0.2472	0.0000*
AR(1)	- 0.2653	0.0059*
Adjusted R2	0.6042	---
F-statistic	16.2631	0.0000*
Wald F-statistic	11.5193	0.0000*
Durbin-Watson stat	2.1390	---

Note: AR(1) is the first lag of the residual (error term of the model) for eliminating autocorrelation. Also, is noted: *) for statistical significance level of $p < 5\%$ and **) for statistical significance level of $5\% < p < 10\%$.

Source: Data proceeding in Eviews 11 by authors.

At first, through the ADF-test, time series were transformed into stationary (all series are first-order stationary except variable ID which is second-order stationary, appendix), and then these stationary series were used for parametric estimating of the economic growth model in Albania as following:

$$\Delta \log(GDP)_t = 0.0202 + 0.0506 * \Delta \log(FDI)_t + 0.4354 * \Delta \log(AS)_t + 0.0855 * \Delta^2 \log(DI)_t + 0.3469 * \Delta \log(IRL)_t - 0.2291 * \Delta \log(EPD)_t + 0.0334 * \Delta \log(R)_t - 0.2472 * \Delta \log(EO)_t - 0.2653 * \varepsilon_{t-1} + \varepsilon_t$$

According to the Fisher test, the model is statistically significant with significance level $p < 1\%$. The model also has a satisfying determinant coefficient referring to real economies, with an adjusted value $R^2 = 60.4\%$.

Table 3. Analysis of the Residual (Economic Growth Model).

The test	Description	Test result
Model function: Ramsey RESET-test	This test estimates if the model function is appropriate or not. Null hypothesis: "the function of the model is logarithmic"	According to the Ramsey RESET test, the form of the model function is logarithmic (with statistical significance level $p < 1\%$).
Multicollinearity: VIF-test (Variance Inflation Factors)	This test estimates if the independent variables are correlated with residual or error of model, ε . Null hypothesis: model does not have multicollinearity	According to the VIF test all independent variables are less than 10 d.m.th our model does not have multicollinearity. (this is explained by the use of time series differences to convert them to stationary).
Autocorrelation: LM-test (Breusch-Godfrey)	This test estimates if the residual of the model, ε_t , has or not serial correlation. Null hypothesis: model does not have autocorrelation	Doing the autocorrelation test with two-time delays (suggested by the test itself), it figures out that our model has waste autocorrelation. Ky autokorrelacion mund të rregullohet duke identifikuar korrelacionin e mbetjes with me ε_{t-1} , d.m.th. me AR(1).
Heteroskedasticity: Breusch-Pagan-Godfrey and Wald F-statistic	This test estimates if the residual of the model, ε_t , has or not constant variance. Null hypothesis: model does not have heteroskedasticity	According to the test null hypothesis is rejected, so the model has heteroskedasticity. Eliminating this phenomenon is done by adjusting the standard deviation of the residual.
Normality of the residual distribution ε : Jarque-Bera-test	This test estimates if the residual of the model, ε_t , has or not normality distribution. Null hypothesis: the residual of the model has normality distribution.	According to the test null hypothesis is rejected. Albanian's economy analyzing by the variables mentioned in the model, has a problem with normality distribution of residual, this means that model is usable and valuable to forecast data up to mid-term.

Source: The table summarizes the tests once they were proceeded EViews 11 by the authors. Note: AR(1) is the first lag of the residual (error term of the model) for eliminating autocorrelation.

This economic growth model has successfully passed all the criteria of creating efficient models according to the main assumptions of the Gauss-Markov theorem (table 3), so the model is statistically useful to explain the direction and strength correlation of the variables. Also, it has parameters and direction of correlation in relation to macroeconomic theories, as written in the empirical literature. This situation expresses that in general Albania's economy and its macroeconomic indicators have a trend like economies around the world, which shows the positive effect of FDI in the host country.

Further analyzing the model and its parameters, we have used t-test which estimates statistically significant positive correlations (with significance $p < 5\%$) between gross domestic product and variables: foreign direct investment; the value of the average salary; and domestic investment in the economy; as well as a weak positive correlation with statistical significance (with significance $p < 10\%$) with the aggregate interest rate on loans of businesses in the economy. Whereas, gross domestic product in Albania has a negative correlation with statistical significance (with significance $p < 5\%$) with the value of external public debt and the scale of economic openness. In addition to the findings of the econometric testing, the model does not have a statistically significant correlation between gross domestic product and the level of remittances. Also, the constant of the model is a statistically significant parameter (with significance $p < 5\%$) which expresses the contribution of the technological progress level in Albania's economy. As we see the technological progress is a component of the production function that has always been affected by a very little positive impact on GDP growth, only average 2% of economic growth is caused by technological progress. In the following, we will analyze the contribution of each variable to GDP growth in Albania according to the extended Solow's model.

Capital Investment. The model estimates the fact that if foreign direct investment (FDI) will increase with 1% (under constant conditions of other variables) then GDP growth will increase by 0.05%. While, if domestic investment (DI) will increase with 1% then GDP growth will increase by 0.09%. There are two main economic reasons for this change: Firstly, the domestic investment (private and public) from 1993 to 2007 had had an average weight of capital or multiplier about 11 times higher than FDI whereas from 2008-2018 it had an average weight of capital about 5 times higher than the FDI. In recent years, exist a decrease in the multiplier of domestic investment and negative marginal investment higher than increasing FDI. As a result, for the same unit of capital invested, FDI has been more profitable for the Albanian economy than domestic investment. This conclusion proves one of the main hypotheses of this study: *"Foreign direct investments are a major factor in total productivity in the economy, and has a greater contribution to the gross domestic product than domestic investment, per unit of invested capital."* Secondly, FDIs in Albania have a positive impact on the level of employment, i.e. the number of employees (especially in the tailoring enterprises), having an "endogenous" impact on employment growth. As a result of the high informality of the Albanian employment market, measuring the "endogenous" effect of FDI on the number of employees and the unemployment rate has a high error (this is the reason why this effect was not measured by the model).

Average salary (AS). According to the model, if the aggregate average salary will increase by 1% (under constant conditions of other variables) then GDP growth will increase by 0.44%. The average salary tends to increase in the economy the level of disposable income and causing an increase of population well-being as well as increasing the level of total productivity in the economy. In the Albanian economy, the

variable average salary has an important impact (i.e. GDP growth has a higher elasticity with the average salary level than any other variable in the model). So, one of the government policies with a focus on economic growth should use the average salary as an effective mechanism.

Interest rate on loans (IRL). According to the model, if the interest rate on loans of businesses in the economy will increase by 1% (under constant conditions of other variables) then GDP growth will increase by 0.35%, although the correlation is weak. Lending has two destinations, consumption and investment. These also constitute some of the components of GDP calculation. But with a glance seems contradictory the positive link between the aggregate interest rate on loans and GDP. In this case, the deregulation of the credit market in the Albanian economy and the relationship with the cost of credit, basically should be seen through the monetary policies of the Bank of Albania. Bank of Albania from 1991/2 to 2000 has used direct monetary policy instruments by setting credit (rate) ceilings, then from 2001 to 2018 it has used indirect monetary policy instruments using the basic interest rates by decision of the Supervisory Council of Bank of Albania. Throughout the history of the Albanian banking system, privatization starting from 2003 to 2005, and the birth of many other commercial banks (with foreign capital), lending was directly influenced by commercial banks themselves. One of the main goals of the money supply and related to monetary policies has been the price stability or the inflation stability on the scale of 2-4% and especially in recent years 2-3%. This also shows the positive and statistically significant correlation of the lending interest rate with GDP.

External public debt (EPD). According to the model, if the external public debt will increase by 1% (under constant conditions of other variables) then GDP growth will decrease by 0.23%. According to publications of the Ministry of Finance, this external debt has been taken for the most part by the IMF and the World Bank. Funds provided by the World Bank have often been socially aimed at reducing poverty in the country. Another reason for the negative correlation of public external debt with GDP is the impact of the exchange rate, the devaluation of the ALL against the Euro and the USD has cost the public budget by increasing the cost of these debts.

Economic openness (EO). The model estimates the fact that if economic openness will increase with 1% (under constant conditions of other variables) then GDP growth will increase by 0.25%. External trade relations are not contributing positively to economic growth. This is explained by the dominance of imports compared to exports, for all the time taken in the study.

Remittance (R). The economic growth model for Albania expresses a positive correlation of remittances flows in the economy with GDP but not statistically significant. The value of remittances has a breaking point in the third quarter of 2007. From 1993 to the third quarter of 2007 there is a positive impact of remittances on GDP, with weak statistical significance (with $p < 10\%$). While, after the third quarter of 2007, remittances are statistically insignificant to affect GDP growth. Calculating

the value of remittances for many years has had high economic informality (in transition years). A significant proportion of remittances are made in cash from the physical movements of the migrants themselves. Last years, the importance of remittances in Albania's GDP has decreased, especially this is reflected in the devaluation of the ALL currency against the Euro and USD, coming as a continuous phenomenon of the effect of the global financial crisis 2008 and the real economic crisis that followed in the European Union (Greece and Italy are the most part of the Albanian emigrants), as well as by the increase in the emigration rate of Albanian families in different countries of the world.

Conclusion

In the first half of the last decade, the rate of change of foreign direct investments in Albania is high, while the intensity is decreasing or becoming negative in some economic sectors, making the host country a less attractive place for foreign investors from many origin countries. According to extended Solow's model, this study identified statistically significant findings as following:

FDIs are an important factor of economic growth for Albania and for the same value of invested capital, economic growth has a higher scale of elasticity related to FDIs than domestic investments.

According to extended Solow's growth model, during the period 1997-2018, the rate of technological progress (the constant of the model) has given a contribution of 2% of GDP growth. This is another reason for attracting FDI and to increase the rate of technological progress in the Albanian economy.

Economic growth in Albania is a simultaneous phenomenon of FDI, domestic investment, the scale of economic openness (focusing on exports), the aggregate average salary, and the efficient use of public debt, especially external debt. In addition to this argument FDIs have a direct impact on GDP, also have an endogenous positive impact on domestic investment, employment, etc.

Taking all statistical analysis, findings, and conclusions into account is very essential that central and local government institutions, funds and financial advisory institutions, and all stakeholders, may consider these findings of this scientific paper for different decision-making such as attracting foreign investors, salary level analysis, increasing the formalization of the economy, etc.

The main limitation of this study derives from the shortcomings of national institutional measurements and individual economic data by sectors. This limitation narrows the concept of the composition of the macroeconomic factor in economic growth. Also, the study did not use the method of finding endogenous and exogenous factors because the identification of instrumental sets is not very clear for the case of Albania, due to no clear economic evidence and policies with a time series effect. Such an analysis is also a challenge of ongoing studies in this field.

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Appendix

Time series stationarity test

ADF-test	Level		First difference		Second difference	
	t-stat.	Prob.	t-stat.	Prob.	t-stat.	Prob.
<i>Variable log(FDI); I(1)</i>						
Intercept	-0.219982	0.9304	-8.271341	0.0000		
Trend and intercept	-8.836136	0.0000	-8.212810	0.0000		
None	2.030848	0.9895	-7.827439	0.0000		
<i>Variable log(GDP); I(1)</i>						

<i>Intercept</i>	-3.981752	0.0024	-3.901488	0.0031		
<i>Trend and intercept</i>	-4.062522	0.0102	-4.798873	0.0010		
<i>None</i>	2.285469	0.9945	-2.995029	0.0031		
Variable log(AS); I(1)						
<i>Intercept</i>	-3.504898	0.0100	-6.166823	0.0000		
<i>Trend and intercept</i>	-3.055643	0.1236	-6.973867	0.0000		
<i>None</i>	3.009055	0.9993	-3.710927	0.0003		
Variable log(EO); I(1)						
<i>Intercept</i>	-1.063196	0.7270	-5.370213	0.0000		
<i>Trend and intercept</i>	-3.285465	0.0757	-5.152546	0.0003		
<i>None</i>	-0.806236	0.3639	-5.381129	0.0000		
Variable log(EPD); I(1)						
<i>Intercept</i>	-0.117478	0.9435	-3.546914	0.0089		
<i>Trend and intercept</i>	-4.377910	0.0039	-3.693459	0.0279		
<i>None</i>	1.345397	0.9543	-3.263078	0.0014		
Variable log(DI); I(2)						
<i>Intercept</i>	-4.457793	0.0005	-2.405216	0.1436	-7.842360	0.0000
<i>Trend and intercept</i>	-1.569022	0.7967	-6.955182	0.0000	-7.826638	0.0000
<i>None</i>	0.534675	0.8294	-2.447745	0.0148	-7.840286	0.0000
Variable log(IRL); I(1)						
<i>Intercept</i>	-1.200883	0.6712	-7.917388	0.0000		
<i>Trend and intercept</i>	-2.002647	0.5917	-7.844202	0.0000		
<i>None</i>	2.969525	0.9992	-7.261535	0.0000		
Variable log(REM); I(1)						
<i>Intercept</i>	-2.081732	0.2525	-10.08913	0.0000		
<i>Trend and intercept</i>	-1.798634	0.6970	-10.15924	0.0000		
<i>None</i>	0.668554	0.8585	-10.08754	0.0000		

Source: Data proceeding in EViews 11 by authors. Note: I(1) shows that the series is first-order integral (i.e. returns stationary with first difference; I(2) shows that the series is integral of second-order (i.e. returns stationary with second difference).

Evolution of Public Debt in Albania during 1990-2017 and its impact on the Economic Growth

Amarda Cano

Abstract

Public debt is one of the most important macroeconomic indicators due to its impact on the economy of each country. Literature suggests that the effect varies in each country depending on the level of economic development and situation. Public debt will have a direct impact on a country's economic growth, but there are contrasting opinions amongst economists regarding the use of public debt, particularly in situations of distress and in developing countries. Albania is a country that would be in need of a decrease of the debt/GDP ratio. This can be done through a stimulation of the economy rather than a decrease of the public debt. The empirical analysis shows that the increase on real public debt can negatively influence the GDP, yet, we do not observe a specific level above which the effects worsened. Instead, we notice that whenever the public debt was increasing, the cost of debt would sometimes decrease because the governments substitutes the debt borrowed from second tier banks with debt borrowed from the IMF.

Keywords: evolution, public, debt, Albania, 1990-2017, impact, economic, growth

Introduction

Public debt is one of the most important macroeconomic indicators due to its impact on the economy of each country. Literature suggests that the effect varies in each country depending on the level of economic development and situation. Public debt will have a direct impact on a country's economic growth, but there are contrasting opinions amongst economists regarding the use of public debt, particularly in situations of distress and in developing countries. The two main lines of thought are: the theory of debt neutrality and conventional theory, which will be explained in detail in the following chapters.

Stiglitz (2007) argues that it is crucial for developing countries such as the Balkans to recognize that besides posing a huge burden on the economy, public debt can cause an economic downturn leading up to the bankruptcy of a country (case of Moldova and Argentina).

However, according to him, this situation is attributed to not only the economic conditions, but also to the irresponsible lenders that fail to accurately analyze a

country's solvency and the quality of the investments for which the debt has been used. It is sometimes the lenders themselves who encourage the policy makers to borrow more than what they can handle. Consequently, there is more room for the policymakers to undertake corrupt activities by abusing the borrowed funds. Typical cases are the use of debt for road infrastructure or other major works. Generally, the sizeable funds that support the policies stimulating the economic development encourage corrupt behavior of public officials (Acconcia & Cantabene, 2008).

The underlying hypothesis is that debt has a negative economic consequence in a country and austerity policies have more effect on countries with consolidated finances, while in developing countries such as Albania often bring an even higher growth of public debt.

Literature Review

Throughout the economic transition, Albania has had a tradition of using public policies for stimulating economic growth and social cohesion. These policies have been generally based on large infrastructure investment funds. However, because of the lack of laws, absent procedures, unskilled administration and increasing corruption, these funds have not always been efficient in increasing the economic growth rate and developing the country to the required level. A similar situation can be observed amongst the other Balkan countries.

Tirole (1996) explores the implications of the interaction between the reputation of a group and its members. Individuals who belong to a group with bad reputation for being corrupt will therefore have a strong incentive to be corrupt too. This perpetuates corruption as a group. Expansion of corruption not only increases investments' costs and decreases their quality, but it also causes distortions in fiscal payments and a rise of the informal economy (Friedman et al., 2000). This creates a situation where investments are discouraged, FDIs are reduced (Abed & Davoodi 2002), the funds used for education and health are restrained (Mauro, 1998), income redistribution gets aggravated (Olken, 2006), productivity is limited (Lambdsorff & Kyklos, 2003), economic growth is weakened, public spending increases and, consequently, a higher use of public debt is incentivized (Tanzi & Davoodi, 2002).

According to Kaufmann (2010), politicians tend to stimulate large investments in infrastructure. This is achieved with an increase in public spending and debt growth. He demonstrates that corruption brings an increase in debt stock and as a consequence increases the costs for debt repayment in the future. All of this can often lead to a vicious circle of corruption and public debt.

In recent years, there has been a significant increase in debt attributed to the reconstruction of city centers in Albania. This initiative has not had an impact on employment or economic growth, yet, according to policymakers, it has strongly affected the social welfare of citizens.

Data Analysis

The IMF for developing countries considers that the optimal public debt to GDP should be 45%, while the maximum is 60%. In the last six years in Albania, public debt has gone from 59.4% to 71%, exceeding its maximum level, and at the same time the average economic growth was 2.7%.

As the public debt has grown larger, there has been a considerable increase in the cost of debt. This has happened regardless of the recent continuous efforts of the Albanian government to borrow only from IMF and WB at low cost. This is due to the fact that during the period of 2009 to 2012, Albania has been borrowing from second-tier banks with relatively high interest rates, almost three times more than the interests negotiated for the 1 billion-euro debt from the IMF in 2013.

Tabela 2.1 GDP and Public Debt in Albania

Year	2010	2011	2012	2013	2014	2015	2016	2017*
Debt in billion \$	5.37	6.31	7.16	7.81	8.39	8.27	8.41	8.65
GDP in billion \$	10.36	10.73	10.76	10.82	11.04	11.39	11.79	12.23
Debt/GDP in %	52%	59%	67%	72%	76%	73%	71%	70.7%
GDP Growth	3.7%	2.6%	1.4%	1.1%	1.8%	2.6%	3.5%	3.8%
Public Debt cost in billion \$	0.379	0.48	0.54	0.552	0.682	0.912	1.02	n.d

Source: World Bank, 2017

If we refer to Table 2.1, we will see that the public debt from 2011 to 2016 has gone from 6.31 billion to 8.41 billion, an increase of 2.1 billion dollars. While in the same period of time GDP has risen in real terms to just 1.06 billion, so debt in the last five years is almost double the real GDP growth. While debt cost has increased by \$ 540 million. This cost is an important indicator for a country like Albania where the budget for planned investments in the recent years is almost similar to the cost value of the abovementioned debt.

Usually, the effects of the debt in GDP are not immediate and can be 1-5 years late. However, the table helps us realize that the public debt in Albania has not shown instantaneous effects on the economic growth of the country.

Over the last two decades, the Albanian economy has undergone a number of important structural changes, which have primarily aimed at creating a sustainable economic growth and an increase in the living standards in Albania.

During the aforementioned period, our country has somewhat maintained a positive economic growth with an average of around 4% a year in the last 20 years, which is still not compliant with the requirements of a country that is trying to obtain

membership in the EU. According to a simple calculation, if we take into account the economic growth of Albania and average EU growth during 2009-2014, we are left with a result of 74 years that Albania will need in order to reach this average (Muço, 2015).

However, the Albanian government has been trying to get closer to the EU economy by undertaking several liberalization reforms promoting economic growth. The latter have stimulated the economic growth, yet often these reforms expose the financial sector to internal and external risks, do not sufficiently improve the business climate and thus have served an anti-stimulus for economic growth.

During the period of 2000-2010, there has been a shift of labor from sectors with low productivity, where we can mention agriculture and underdeveloped industries, towards those with high productivity, such as construction. This shift along with fiscal consolidation and the higher incentives towards foreign investments has contributed to the the average annual economic growth of 4.8% (WB, 2010). We have started our analysis from year 2000 and onwards in order to avoid the beginning of the 90s and the period of 1997-1998 where the structural breakdown happened.

According to the Bank of Albania (2011), economic growth has come as a result of the significant improvement of the business environment, energy, financial sector, tax administration and public finance management. These policies combined with the acceleration of public investment had a very positive impact on the country's economic development.

During the years of 2000-2008, the average economic growth of Albania was about 6% a year with the highest recorded growth being an annual growth of 6.85% in 2008. This year coincides with the introduction of a flat rate of 10%, which gave rise to a formalization of the economy and brought a significant increase in FDI. Additionally, there was a growth of 64% of public investments during this year accounting for \$ 0.8 billion.

As the global economic crisis started to settle in, the Albanian economic growth felt a slowdown from 3.3% in 2009 to about 1.1% in 2013. This decline came also as a result of three main factors. One of them was the significant drop in remittances coming from emigrants that were largely used for private consumption and investment. The second factor includes the decline in public investment and finally, the economic crisis that hit Greece and Italy, strongly affected Albania as they were the two strategic economic partners of the country.

The public investments hit a high of \$ 0.815 billion in 2009, but have since continued to shrink down to a new low of about \$ 0.4 billion in 2016.

Evolution of Public Debt throughout 1990-2017 and its impact on the Economic Growth

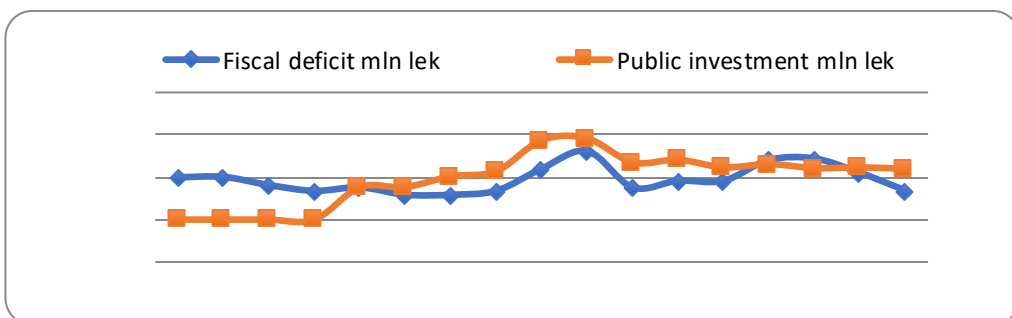
During the 1990s and throughout the transition period, Albania has been constantly helped by various international financial institutions and donors through soft grants and loans, with the purpose of constructing and restructuring the economy, while transitioning from a centralized economy to a market economy. As Albania was taking more steps towards development these generous donations started to decline. Albanian governments have been constantly relying on domestic and foreign financial markets, which have helped them collect the necessary funds for public investments. The budget of the state has always resulted in a deficit that was usually financed by borrowing, and consequently led to a public debt that reached high levels compared to the 60% ceiling set by the IMF.

If we take into consideration the recent years, the deficit has been constantly growing from 2005, 29 billion ALL, which accounts for 3.6% of the GDP, to 80.8 billion ALL, accounting for 7% of the GDP. During this period, the government tried to avoid the crisis effects from neighboring countries by significantly increasing the public investments. The government's increased borrowing to keep up with the public investments lead to the abovementioned increase in the deficit.

Starting from 2010, the government undertook a series of measures to improve fiscal indicators, particularly the fiscal deficit by reducing it by 53% compared to 2009, bringing it to 3.11% of GDP.

During 2011 to 2015, there was a round of upward fluctuations in the budget deficit. However, in the last two years, the government has worked hard towards reducing it through the increase of fiscal consolidation and the addition of new taxes. The local economy experts have judged these austerity policies to be negative because they will curb consumption, whereas according to the IMF they will be effective by reducing the public debt as well as the budget deficit which has kept a constant level of 2% during 2016 and 2017.

Graph 2.1: Fiscal deficit and public debt

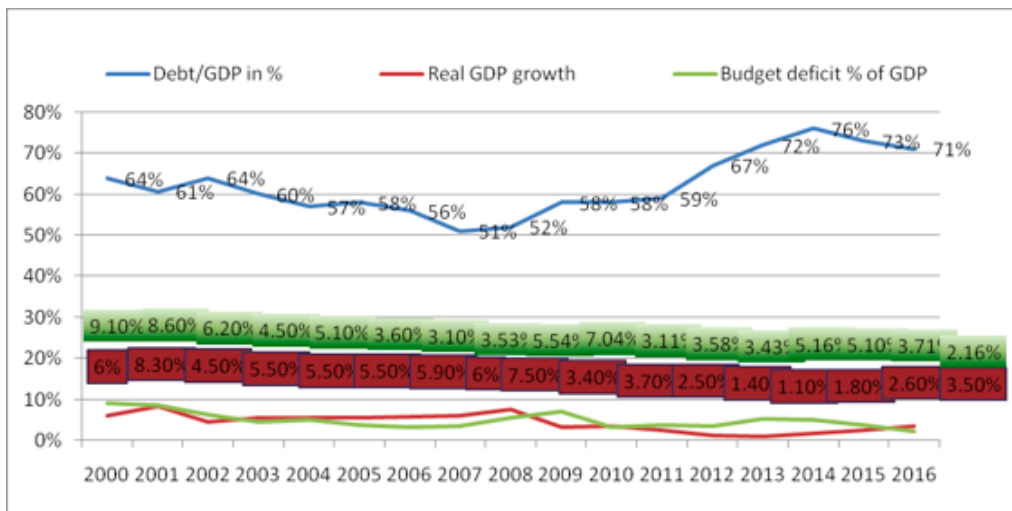


Source: World Bank, IMF, MF, 2017

As far as it regards the way the debt is structured, it is safe to see that during the 7 year period between 2000 to 2007, domestic and foreign debt have dominated (Initially it was distributed 70% domestic and 30% external). The growth rate of the domestic public debt has been more stable if we compare it to the rate of public external debt. Particularly, after 2007 the rate of the external public debt. After 2007, the growth rate of the external public debt ascended much higher than the one of the domestic public debt.

GDP has increased at an average rate of 2-3% yearly, whereas the external debt has had an average of 18% (reaching a ratio of 52% of it being internal and 48% external). On one side this growth has been viewed negatively because it can affect the country's financial stability through a higher exposure to changes in the global financial markets and exchange rate risk. On the other side, this debt has a relatively cheaper cost because it is borrowed from the IMF. Additionally, the highest share in the public debt of Albania is occupied from the euro currency whose devaluation recently has decreased the cost of debt even more.

Graph 2.2: Real GDP growth and the budget deficit as a % of GDP



Source: World Bank, IMF, 2017

As far as it regards the performance of public debt in Albania throughout the years, we could say that 2016 marks the reduction of debt with regards to the previous year for the first time since 2010. The debt has had a real increase of 1.2% per year since 2000 to 2010. The years 2009 and 2013 mark the highest growth in real terms with 4.5% and 8.3% respectively.

According to the Ministry of Finance report (2016) from 2005-2013 for every x amount of debt, investments have increased by 1.04*x, and recently the latter has

risen by 1.74*x. Nevertheless, this hike in investment due to debt has not been reflected in the GDP growth.

Whereas, the debt structure has now reached an equilibrium between external and domestic debt being 48% and 52% respectively. According to currency, about 50% is denominated in Albanian lek, 34.9% in euros, and 9.9% in dollars.

Keeping half of the debt in local currency is a positive thing, because it demonstrates direct confidence in the currency and the economy, which is very important for the reduction of the risks that investors have to take in the Albanian economy.

If we look at the Western Balkan countries, they have all had the tendency to make mass privatizations. Given that the state rarely manages its own businesses, they have opted for denationalization in order to improve the management of the assets and thus, transform them into enterprises that provide profitable services. Additionally, it has also been one of the demands of IMF for these countries to privatize the state-owned enterprises, and consequently reduce the public debt.

Conclusion

Albania is a country that would be in need of a decrease of the debt/GDP ratio. This can be done through a stimulation of the economy rather than a decrease of the public debt. The empirical analysis showed that the increase on real public debt can negatively influence the GDP, yet, we did not observe a specific level above which the effects worsened. Instead, we noticed that whenever the public debt was increasing, the cost of debt would sometimes decrease because the governments would substitute the debt borrowed from second tier banks with debt borrowed from the IMF.

Investing in sectors such as agriculture, which would set the country for more competitive products during a time when the neighbouring countries have already lost some of their competitive advantages because of the current economic crisis. Therefore, if the government were to borrow with the goal to invest in the technology in agriculture or training to increase human capital productivity, this debt would definitely increase the overall productivity of a country, wages, and later on would positively affect the consumption and economic growth.

The risk is higher when public policies are used for major investments in infrastructure to stimulate growth. This encourages corrupt behavior, which widens easily as a group (Tirole, 1996). The expansive corruption has negative effects on the cost and quality of investments and supports distortions in fiscal payments and growth of an informal economy (Friedman et al., 2000; Kaufmann, 2010). This later leads to the vicious circle explained in Chapter 2.1.

According to Skidmore (1996) one of the many forms corruption becomes present is nepotism in the state administration, which touches even public hospitals where directors choose their own people or friends.

Similarly, in Albania it is quite often to see the majority of the public administration overflowed with unskilled people purely because they are paying, are militants or close relatives of policymakers.

Friedman et al. (2000) demonstrates that corruption is accompanied by a rise of informal activities and inefficiencies in tax collection, reducing thus, the fiscal revenues, due to fiscal evasion. It is usually the least corrupt governments the ones that tend to hold a high fiscal pressure.

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The Repercussions of the Digital Twin in the Automotive Industry on the New Marketing Logic

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Marcel Biewendt

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Abstract

Rapid development of virtual and data acquisition technology makes Digital Twin Technology (DT) one of the fundamental areas of research, while DT is one of the most promissory developments for the achievement of Industry 4.0. 48% percent of organisations implementing the Internet of Things are already using DT or plan to use DT in 2020. The global market for DT is expected to grow by 38 percent annually, reaching \$16 billion by 2023. In addition, the number of participating organisations using digital twins is expected to triple by 2022. DTs are characterised by the integration between physical and virtual spaces. The driving idea for DT is to develop, test and build our devices in a virtual environment. The objective of this paper is to study the impact of DT in the automotive industry on the new marketing logic. This paper outlines the current challenges and possible directions for the future DT in marketing. This paper will be helpful for managers in the industry to use the advantages and potentials of DT.

Keywords: digital twin, automotive, marketing, industry 4.0

JEL-Classification: M31

Introduction

1 x 10⁷⁴ is the variance of possible configuration for a Mercedes E-Class in 2020. In order to market these deviations, a model of exchange is inherited. In the period before 1900, a dominant logic was used, based on the exchange of industrial goods. The focus was on material resources, embedded values and transactions. Despite this, new horizons have emerged in recent decades, focusing on intangible resources, the common creation of assets and mutual relations. A new dominant marketing logic has emerged in the 21st century, where the delivery of services rather than goods is crucial to economic interchange (Vargo & Lusch, 2004). This new logic is called Service Dominant (S-D) Logic.

It was designed by Stephen Vargo and Robert Lusch and first published in 2004 in the Journal of Marketing under the title "Evolving to a New Dominant Logic for Marketing". To understand S-D Logic, the essay follows a simple example: The car manufacturer does not sell a product, but provides a service through the product, which the customer pays for in return by providing money. The aim of this essay is to review the connection of the digital twin (DT) to the article "*Evolving to a New Dominant Logic for Marketing*" (Vargo & Lusch, 2004). In addition to the scientific examination of DT, a connection to the new dominance logic is being prepared, which is intended to show DT's influence on marketing. To this end, the effects, impact and relevance of DT will be analysed.

Digital Twin - Theory of digital transformation and state-of-the-art

The digital transformation is becoming the most important topic for the industry. Companies that are unable to adapt to the digital world will undoubtedly fall victim to "*digital Darwinism*". Established companies will disappear and only the most adaptable companies that respond to technological trends will survive. (Ismail, Khater, & Zaki, 2017; Schwartz, 2001).

The digital transformation requires an organisation to develop a wide range of skills that vary in importance depending on the business context and specific organisational needs. (Gonçalves dos Reis, Melao, Amorim, & Matos, 2018). McDonald and Rowsell-Jones depict that "[...] *Digital Transformation goes beyond merely digitizing resources and results in value and revenues being created from digital assets*" (McDonald & Rowsell-Jones, 2012). Westerman et al. recognized "*Digital Transformation [...] as the use of technology to radically improve performance or reach of enterprises*" (Westerman, Calmêjane, Bonnet, Ferraris, & McAfee, 2011).

Stolterman and Fors defined "*Digital Transformation [as] the changes that digital technology causes or influences in all aspects of human life*" (Stolterman & Fors, 2004). The digital transformation is even changing the value creation of industries where value is created solely through physical materiality, most visibly in the automotive industry (Yoo, Henfridsson, & Lyytinen, 2010). Digital innovations such as self-propelled cars, connectivity and large amounts of data are revolutionising the automotive industry (Riasanow, Galic, & Böhm, 2017).

Over the last decades, simulation has developed from a technology largely restricted to computer experts and mathematicians to a standard tool that is used by engineers every day to answer a wide range of design and engineering questions. Individual application simulation has been limited by experts, e.g. the mechanics in the 1960s, to very specific topics. Since 2015, DT simulation has been a core functionality along the entire life cycle, e.g. supporting operation and service with direct links to operating data (Boschert & Rosen, 2016).

"The vision of the Digital Twin itself refers to a comprehensive physical and functional description of a component, product or system, which includes more or less all

information which could be useful in all - the current and subsequent - lifecycle phases” (Boschert & Rosen, 2016).

With the rapidly developing virtual and data acquisition technology, DT technology has emerged as one of the most significant research areas and one of the core competencies for the realisation of Industry 4.0. For example, 48% of organisations implementing the Internet of Things are already using DT or planning to do so by 2020. The global market for DT is expected to grow by 38% annually, reaching \$16 billion by 2023. In addition, the number of participating organisations using DTs will triple by 2022 (Boschert & Rosen, 2016).

Hence, digital transformation and digital twin offer the possibility to support the new dominant logic and to provide digital services through IoT, large-scale data analysis and AI. The relevance of the article can be demonstrated by Mercedes-Benz AG's vision of the transformation from car manufacturer to mobility service provider (Mercedes-Benz AG, 2015).

New dominant logic – Theory and current state of affairs

The S-D logic promotes a perspective from which services are the fundamental basis of economic trade and postulates a goods-dominant logic (G-D logic) as a counter-image. According to G-D logic, companies produce units of goods. Value is bound and destroyed by consumption. From the perspective of S-D logic, goods only serve as assets for the transport of services, which are provided by applying the goods and thereby develop their value. A distinction is made between the exchange value and the utility value, which is determined by the customer. Accordingly, value is no longer created solely from within the company, but always together with the customer (co-creation).

"Marketing thought leaders are moving away from tangible output with embedded value, where the focus was on activities that were focused on discrete or static transactions. In turn, they are moving towards dynamic exchange relationships involving the execution of processes and the sharing of skills and/or services where value is created together with the consumer (Vargo & Lusch, 2004). In 2004, the focus is shifting away from Goods-Centered Model of Exchange (4P), towards Service-Centered Model of Exchange (8P), such as skills, information, and knowledge, and towards interactivity and connectivity and ongoing relationships (Vargo & Lusch, 2004). Table 1 summarize the fundamental premises of the article.

Table 1: Fundamental premises - 8P Method

FPs	Foundational premise	Comment
FP 1	Service is the fundamental basis of exchange	The application of the operant resources, the service, as defined in the S-D logic, is the basis for any interchange. Service is substituted for service.
FP 2	Indirect exchange masks the fundamental unit of exchange	Since services are rendered through complex combinations of goods, money and institutions, the service base of exchange is not always evident.

FP 3	Goods Are Distribution Mechanisms for Service Provision	Goods (both durable and non-durable) derive their value through use – the service they provide.
FP 4	Knowledge Is the Fundamental Source of Competitive Advantage	The capacity for comparison to bring about desired changes fuels a competitive environment.
FP 5	All Economies Are Services Economies	Service is becoming clearer as a result of increasing specialisation and externalisation.
FP 6	The Customer Is Always a Co-producer	Implies value creation is interactional.
FP 7	The Enterprise Can Only Make Value Propositions	Companies can offer their applied resources to add value and, after the acceptance of value propositions, jointly (interactively) generate value, but they cannot independently provide and/or deliver value.
FP 8	Service-Centered View is Customer Oriented	Since service is understood and shaped in terms of customer-determined benefits, it is by nature customer-oriented and relationship-oriented

Source: Own figure, modified and derived from relationships (Vargo & Lusch, 2004)

In Table 2 Vargo and Lusch added two new perspectives in 2008 (Vargo & Lusch, 2008):

Table 2: Fundamental premises – 8P + 2P Method

FP 9	All social and economic actors are resource integrators	Organisations are in place to incorporate micro-specialised skills and convert them into complex services in response to market requirements.
FP 10	Value is always uniquely and phenomenological determined by the beneficiary.	Value is idiosyncratic, experience-based, contextual and meaning-filled.

Source: Own figure, modified and derived from 2008 (Vargo & Lusch, 2008)

Digital Twin - Benefit and use case for the new dominant logic

Due to the change from a goods-centred to a service-centred model, the creation of DT's real products leads to continuous customer loyalty. The DT is not a mere depiction, but rather an evolving digital signature, reinforced by historical, current and projective patterns of physical object behaviour that create new levels of value.

Digital twins measure practically everything, from operating performance, temperatures and heat generation to wear and tear. By assessing real-time data from their assets and applying machine learning techniques, the industry can collaborate with their customers to anticipate required maintenance, reduce unplanned downtime and schedule profitable improvements (Hackworth, 2019). The importance and benefits of the digital twin for the customer is are listed below (Murphy, 2018):

- Lower maintenance costs by predicting maintenance issues before breakdowns occur,
- Improved customer service as customers can remotely configuring customized products and

- Improved product quality, and enhanced insight into the performance of products.

1 x 1074 is the variance of possible configuration for a Mercedes E-Class in 2020, which makes the variance too complex for a customer to grasp. Virtual paths through the model jungle - DT helps to select the Mercedes E-Class model variety and visualises it through virtual reality applications, the DT makes innovations visible and explains them clearly.

Digital twin makes suggestions for configuration - The customer specifies his budget limits and the model variety of the Mercedes E-Class. Based on these parameters, DT makes suggestions on how the vehicle could be configured.

During configuration, every detail of the car can be changed and the effects are displayed. Everything is done with one click - but it is possible that no dealer has the configured Mercedes E-Class in stock. DT then queries the existing vehicles and suggests the models that come closest to the customer's configuration. With just one click, the customer can see what vehicle equipment is available and then decide.

Conclusion – Impact of the DT for the new marketing logic

The automobile manufacturer does not sell a product, but provides a service through the product, which the customer in return pays through the provision of monetary resources. Therefore, the service offered from automobile manufacturer is the DT.

The DT can be directly connected to the service-centered model in marketing, as it provided intangibles assets e.g. information about car and give the customer the possibility of interactivity and connectivity due to connected and analyzed data, which leads to ongoing relationships.

The main Effect and impact of DT for the marketing logic, which will have a positive impact on the consumer behavior and loyalty. Through the use of IoT, involving the use of advanced large data analysis and AI, DT is in touch with customer demands and thus the service is customer driven.

By analyzing the relevance of the DT for the S-D logic, it came up that consumer solutions can be offered predictively. As a result, offers and advertisements will look more appealing and meaningful and will foster deeper customer bonds based on enhanced levels of loyalty. When it comes to providing a better overall customer experience, physical objects paired with DT technology are a perfect match and meet the exact shift from tangible to intangibles asset in marketing logic. Therefore, the digital twin is indispensable for the new dominant logic and for the automotive industry.

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Rebooting and Rejuvenating India's External Sector Post-Pandemic

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Abstract

The integration of Indian economy through the channels of trade and capital flow has been accelerated over the last two decades. Even during the Covid-19 pandemic, policy stimulus continued to promote export-led growth in the economy. These decadal efforts to retain the exiting market share and capturing the new market continues to face number of challenges for India. India is presently known as one of the most important players in the global economic landscape. After the US-China trade war scenes, the outbreak of Covid-19 pandemic has questioned China's integrity across many countries of the world. When developed countries thinking over shifting their manufacturing base out of China, attracting this large chunk of capital flight has challenged Indian government. Data shows that the aggressive policy measures taken by both the central and state government to tap the crowding out of investment from China apparently succeeding. But this is a short-term picture, will it continue in the long-run? That is questionable. The 'Make in India' or 'Atmanirbhar Bharat' initiatives, export-led growth policy stimulus during pandemic, rise in exports of food products, generic medicines, newly entered FDI's and flood of FII's in Indian economy. All these dots need to be connected at the backdrop of India's New Foreign Trade Policy (2021-26). This research paper would like to focus on each one of the above mentioned initiatives by the Indian government and its significance to the entire trade policy as such. Paper would also like to consider the sustainability part of these initiatives.

Keywords: trade, capital flows, trade policy, market share, exports, pandemic, sustainability

Introduction

Efficiency and growth can best be achieved by competition in world markets and preferential market access can encourage firms to enter the export market. The external balance is determined directly by the spontaneous interplay of optimizing behavior by domestic and foreign agents. The state of the external balance, therefore, signals occasion for policy action

The integration of Indian economy through the channels of trade and capital flow has been accelerated over the last two decades. Even during the Covid-19 pandemic, policy stimulus continued to promote export-led growth in the economy. These decadal efforts to retain the exiting market share and capturing the new market continues to face number of challenges for India.

India is presently known as one of the most important players in the global economic landscape. After the US-China trade war scenes, the outbreak of Covid-19 pandemic has questioned China's integrity across many countries of the world. When developed countries thinking over shifting their manufacturing base out of China, attracting this large chunk of capital flight has challenged Indian government. Data shows that the aggressive policy measures taken by both the central and state government to tap the crowding out of investment from China apparently succeeding. In-house policy changes, reforms, initiatives in Indian markets will surely contribute in enhancing its economic growth parameters.

The 'Make in India' or 'Atmanirbhar Bharat' initiatives, export-led growth policy stimulus during pandemic, rise in exports of food products, Pharma specific to generic medicines, newly entered FDI's and flood of FII's in Indian economy. All these dots need to be connected at the backdrop of India's New Foreign Trade Policy (2021-26).

This research paper has focus on each one of the above mentioned initiatives by the Indian government and its significance to the entire trade policy as such. Paper has also considered the sustainability part of these initiatives. Regarding methodology, secondary data sets have been used extensively in the paper to support the research statements.

Make in India Initiative and Export Performance

Make in India initiative has been the major national programme of the Government of India that was launched in 2014 and designed to facilitate investment, foster innovation, enhance skill development, protect intellectual property and build best in class manufacturing infrastructure in the country. The primary objective of this initiative was to attract investments from across the globe, enhance the pace of economic growth in India and mainly strengthen India's manufacturing sector, which in turn can boost the Indian exports. The focus of Make in India programme was mainly on 25 sectors. They include: automobiles, automobile components, aviation, biotechnology, chemicals, construction, defence manufacturing electrical machinery,

electronic systems, **food processing**, IT & BPM, leather, media and entertainment, mining, oil and gas, **pharmaceuticals**, ports and shipping, railways, renewable energy, roads and highways, space, textile and garments, thermal power, tourism and hospitality and wellness. Of these, the followingsix sectors were projected as the Superstars that include Automotive, Electronic systems design and manufacturing, renewable energy, Roads and highways, **Pharmaceuticals and food processing**. There has been robust growth of Pharmaceuticals and food processing in terms of their export potential in the pre and post Pandemic Covid 19. Also as per the FDI Policy of 2018, these two sectors are categorized under 100% FDI through automatic route (makeinindia.com). Therefore in this paper we are focusing on these two sectors in terms of the present and the future (pre and post Pandemic) focus of Indian exports. Exports in September 2020 were \$27.58 Billion, as compared to \$26.02 Billion in September 2019, exhibiting a positive growth of 5.99 %.

Let us have a look to the trends in overall exports of India since the launching of Make in India initiative.

Table 1 Overall Export growth

Year	Billion \$	% of GDP
2014	468.35	22.97%
2015	416.79	19.81%
2016	439.64	19.16%
2017	498.26	18.78%
2018	538.64	19.85%
2019	528.30	18.41%
2020 (till December)	313	12.07%
Proposed in 2021	350	NA

Source: www.statista.com

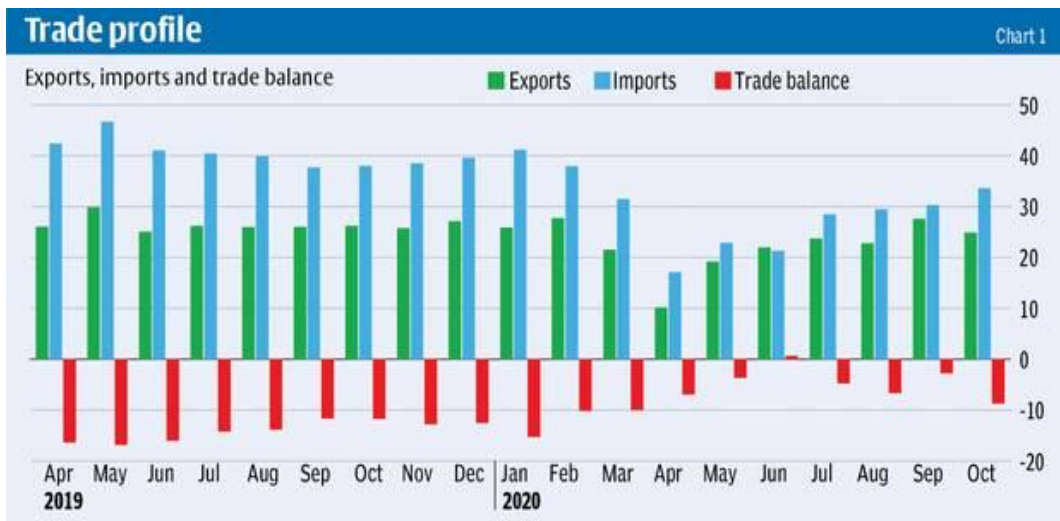
Major commodities/commodity groups which have recorded positive growth during September 2020 (Post Pandemic) against September 2019 (Pre Pandemic) are **Other cereals (337.22%)**, Iron Ore (109.65%), **Rice (93.86%)**, Oil Meals (47.52%), Carpet (42.89%), Ceramic products & glassware (36.17%), Oil seeds (35.69%), **Cereal preparations & miscellaneous processed items (33.57%)**, **Drugs & pharmaceuticals (24.38%)**, Handicrafts excl. handmade carpet (21.82%), **Meat, dairy & poultry products (19.97%)**, Jute manufacturing including floor covering (18.64%), Cotton yarn/fabrics, handloom products etc. (15.39%), Spices (11.44%) and Tobacco (11.09%) . (The trends of the items in the bold are shown separately ahead in Table 2 and 3). These trends resulted in some positive facts for the economy in terms of its External sector. They are

Merchandise trade: The trade deficit for September 2020 was estimated at \$2.72Billion against the deficit of \$11.67Billion in September 2019, which is a decline of 76.66 %.

Services: As per RBI’s Press Release (October 2020), the trade balance in Services (i.e. Net Services export) for August 2020 is \$6.84Billion. The estimated trade balance in September 2020 was little more at \$6.85Billion.

Overall Trade Balance: Taking merchandise and services together, overall trade surplus for April-September 2020-21 is estimated at \$17.74Billion as compared to the deficit of \$49.91Billion in April-September 2019-20. **(Source: Ministry of Commerce and Industry PIB Oct 2020). All these facts are acknowledged in an article by C P Chandrashekhar and Jayati Ghosh titled “India’s external sector gloom amidst the global pandemic” Dec 28,2020 Business Line.** It is well explained by the following graph.

Graph 1 Trade Profile of India: Pre and post Pandemic



Source: “India’s external sector gloom amidst the global pandemic” Dec 28,2020 Business Line.

Food processing

In case of the food processing, it is the 2nd largest in terms of global food production, 1st in the production of many agricultural commodities, 5th largest in the production, consumption, exports and expected growth as per the estimates of World Food India, 2019. It is one of the Sunrise Industries in India that blend the agricultural and industrial growth. India’s food processing sector is one of the largest in the world and its output is expected to reach \$ 535 Billion by 2025-26 (IBEF). It lies at the centre of the Make in India initiative and rightly expresses the notion ‘vocal for local’.

New initiatives like a planned infrastructure outlays of around 100 lakh crore Rupees and 25 lakh crore Rupees to boost the rural economy have put the food processing sector on a high growth trajectory. The Pradhan Mantri Kisan Sampada Yojna, for example, is a comprehensive package to create modern infrastructure with efficient supply chain management from farm to retailers. Recently introduced Atmanirbhar Bharat vision, the scheme of Formalization of Micro Food Processing Enterprises (FME) with an outlay of Rs.10,000crore is the best example of export led growth policies in India. In this regard, *India's food sector attracted \$ 4.18 Billion FDI between April 2014 and March 2020.*

Let us have a look on India's agricultural exports of which the processed food is the significant component.

Table 2 Selected Agricultural Exports

Product/Item	2019-20		2020-21 (March-Dec 2021)	
	Quantity in MT	Value in Rs. Crore	Quantity in MT	Value in Rs. Crore
Non-Basmati Rice	5036190	14352	8217255	22856
Basmati Rice	4454713	31025	3380654	22038
Buffalo Meat	1152324	22661	804996	17621
Miscellaneous Processed Items		4677		4412
Fresh vegetables	1927788	4616	1882068	4120
Processed vegetables	223145	2210	284691	2361
Processed Fruits & Juices	568865	4590	394843	3707
Cereal Preparations	342996	3871	285553	3416
Other Cereals	500837	1449	1878183	3067
Alcoholic Beverages	139601	1648	196476	1891
Wheat	217010	438	976083	1869
Dairy products	111145	1982	79264	1609
Pulses	229637	1491	215070	1533
Milled Products	283275	1063	280628	1124
Processed Meat	442	15	477	9
Total		114057		102451

Source: APEDA (Agricultural and Processed Food Products Export Development Authority)

The above Table reveals very clearly the performance of the exports of processed food items like Processed vegetables, meat, Milled products, Pulses etc. which have shown

clear cut increase either in the quantity or the worth of these exports. The Non-Basmati rice, Other Cereals and the Alcoholic Beverages have shown impressive rise in quantity as well as the worth with reference to pre and post Pandemic. Taking into account the 2020-21 figures for just 10 months of that post Pandemic year, even if the figures for Dairy products, Cereal preparations, Fresh vegetables ect. show little decline in the quantity or the worth, their export potential in the coming days is unquestionable. The overall performance of this sector exports in the post Pandemic stands commendable.

Pharmaceuticals

India is one of the largest producer/provider of pharmaceutical products and a leading player in the global generic medicine market (20%), exporting nearly 50% of its production. Since the launching of the Make in India, the growth of this sector has been impressive and that is continued, rather enhanced during and post Pandemic period. India enjoys an important position in the global pharmaceuticals sector. According to the IBEF (India Brand Equity Foundation), Indian pharmaceutical sector is expected to grow to US\$ 100 billion, while medical device market is expected to grow US\$ 25 billion by 2025. Pharmaceutical exports include bulk drugs, intermediates, drug formulations, biologicals, Ayush and herbal products and surgical. By November 2020, India exported pharmaceuticals worth US\$ 15.86 billion in 2020-21. Pharmaceutical exports from India stood at US\$ 16.28 billion in 2019-20 and US\$ 2.07 billion in October 2020.

Table 3: Worth of the Pharmaceutical exports of India

Year	Value in Billion US Dollars
2012	10.1
2013	12.6
2014	14.5
2015	14.9
2016	16.9
2017	16.8
2018	17.3
2019	19.1
2020	15.86 by November 2020

This impressive growth of the Pharmaceutical exports had been the result of multiple factors. The Union Cabinet allowed the amendment of existing Foreign Direct Investment (FDI) policy in the pharmaceutical sector in order to allow FDI up to 100% under the automatic route for manufacturing of medical devices subject to certain conditions. Due to this stimulus, the drugs and pharmaceuticals sector attracted

cumulative FDI inflow worth US\$ 16.86 billion between April 2000 and September 2020 according to the data released by Department for Promotion of Industry and Internal Trade (DPIIT).

Fiscal incentives to promote the Export growth

Fiscal incentives are the incentives provided through the Fiscal policy in terms of some tax concessions, rebates, and subsidies. Some of these are

Indian government has planned to set up a fund of Rs 1 lakh crore (\$ 1.3 billion) to boost companies to manufacture pharmaceutical ingredients domestically by 2023.

Under Budget 2020-21, Rs. 65,012 crore (\$ 9.30 billion) has been allocated to the Ministry of Health and Family Welfare.

The Government has allocated Rs. 34,115 crore (\$ 4.88 billion) towards the National Health Mission under which rural and urban people will get benefited.

Rs. 6,400 crore (\$ 915.72 million) has been allocated to health insurance scheme Ayushman Bharat - Pradhan Mantri Jan ArogyaYojana (AB-PMJAY).

Government of India has designed 'Pharma Vision 2020' to make India a global leader in end-to-end drug manufacture and the Approval time for new facilities has been reduced to boost investment.

Government has provided some support on manufacturing and exports. The major support from the Government has been on tax concessions, basically available to small and medium companies (MSMEs). They come with excise exemptions.

New Textile Policy of India is in the pipeline and is going to emphasis more on textile exports wherein India has a comparative advantage. Cotton Corporation of India has procured 90.87 lakh bales during the current cotton season 2020-21. Certain Indian Textile Products are listed in the US Trafficking Victims Protection Re-authorization Act (TVPRA) child labour/ forced-labour List 2020. Steps have been taken through Embassy of India in the US for delisting of such products.

Despite the fact that the Covid 19 Pandemic brought the world economy to a standstill, it is clear from above discussion that the Indian economy has performed really well in terms of its export growth at least in some sectors already mentioned. The per capita exports in India stood at about USD 241, as compared to USD 11,900 in South Korea and USD 18,000 in China by 2020. Looking at the initiatives taken by the Indian government so far, **Indian economy has a huge potential to become a strong exporter on the world stage.** Being Federal in nature, this can be achieved by making **India's states and union territories** active participants in the country's export efforts. It is interesting to look at the Export Preparedness index Report 2020. The **NITI Aayog in partnership with the Institute of Competitiveness** released this report. This Report aims at **identifying challenges and opportunities**, enhance the effectiveness of government policies and **encourage a facilitative regulatory**

framework for exports. It ranks the Indian states on the basis of four pillars: Policy, Business Ecosystem, Export Ecosystem and Export Performance and 11 sub-pillars. The Top five states as per their scores (on 100) in this regard are

Gujarat – 75.2

Maharashtra – 75.1

Tamil Nadu – 64.9

Rajasthan – 62.6

Orissa – 58.2

The above picture represents the imbalance in the Export preparedness of Indian states as 70% of India's exports are dominated by five states- Maharashtra, Gujarat, Karnataka, Tamil Nadu and Telangana. To maintain the existing performance of Indian exports, apart from the Union government, the state governments too need to gear up with greater initiatives.

FDIs and FII inflows in India

Pandemic is going to affect investors and economies differently depending upon the country context and FDI motivations. FDI could play an important role in supporting economies during the economic recovery following the pandemic. Evidence from past crises has shown that foreign-owned affiliates, including small and medium enterprises, can show greater resilience during crises thanks to their linkages with, and access to the financial resources of, their parent companies (e.g. Alfaro and Chen, 2012; Desai et al., 2008). FDI could be particularly important for emerging and developing economies given that other sources of international financing, including portfolio investment, have fled these economies (see OECD Investment policy responses to COVID-19).

In case of India, FDI is a major driver of the economic growth and an important source of non-debt finance for the economy. Investors' friendly FDI policy and removing policy bottlenecks became the prerequisite for attracting more FDIs in India. Measures taken by the Government on the FDI policy reforms, investment facilitation and ease of doing business have resulted in increased FDI inflows into the country.

Indian Ministry of Commerce data reveals that total FDI inflows recorded of \$ 58.37 billion during April to November 2020 which is the highest one for the first eight months of the financial year 20-21 and 22% higher as compared to the first eight months of 2019-20. Major chunk of FDI have come in the sectors like Manufacturing, Communication Services, Retail and Wholesale Trade, Financial Services, etc.

Government of India is specifically focusing on two sectors for FDI inflows, namely Defence and Insurance. Defence has been a priority sector of the Indian government since 2014. Make in India and Atmanirghar Bharat initiatives have also been emphasizing on defence sector. The defence arena opened up 100 percent for the

private sectors' participation in year 2001 and slow FDI allowances were allowed to enter in to the sector. Recently Ministry of Defence (MoD) along with the Reserve Bank of India (regulatory body for the FDI allowances) the FDI threshold has been raised from 49 percent to 74 percent under the automatic route. Defence Production and Export Promotion Policy (DPEPP) of the MoD highlighted the long gestation and capital intensive nature of this sector still has huge potential in employment generation and export performance. This will focus on dynamic defence, aerospace and shipbuilding industry, for reducing dependence on imports, for promoting export of defence products and creating an environment that fosters innovation and R&D.¹

Very recently the FDI limit for Indian Insurance sector has been increased from 49 % to 74 %. Insurance practices have not dawned fully among Indian population. Increase in FDI limits for Insurance sector will bring global insurance practices along with new product features and selling strategies in the country.

Many economists believe that the World was suffering from 'secular stagnation' before this pandemic and continue to observe the same trend post this unprecedented situation. Secular stagnation here would mean having interest rates and inflation permanently lower than the historical rates. Most of the advanced countries have slowed on productivity growth, aging and population stagnation reduces the proportion of work force and the shift from industry to services which are less investment intensive have contributed further to trigger up this stagnation. The combined effect of this is persistent glut of global savings and reduction of investment demand which is actually putting downward pressure on prices and interest rates and apparently will continue in the long run. This will keep money flowing to emerging markets, in search of high returns.

Same is getting reflected in inflows of Foreign Institutional Investors (FIIs) in Indian equity and debt markets. Foreign Portfolio Investors/Foreign Institutional Investors (FPI/FII) have been one of the biggest drivers for India's financial markets, having invested around Rs. 2.17 trillion (US\$ 30 billion) in 2020-21 (as of January 07, 2021).² This has been the highest among all other emerging markets. Other the above mentioned core economic variables; there are other non-economic variables which must have pushed up the FII inflows in India, which would include reduction in Covid-19 cases, vaccine progress, unlocking process of the economy, etc. India is being viewed as a potential opportunity by investors with the economy having the capacity to grow tremendously. Buoyed by strong support from the Government, FII investment have been strong and is expected to improve going forward.

¹ <https://economictimes.indiatimes.com/news/defence/view-time-for-government-private-sector-to-pick-up-pace-to-strengthen->

² <https://www.ibef.org/economy/foreign-institutional-investors.aspx#:~:text=Foreign%20Portfolio%20Investors%2FForeign%20Institutional,FIIs%2FFPIs%20to%20the%20country.>

Trade tack ticks in the past and now

Trump administration initiated ‘Trade-war’ in 2018. During the 2016 presidential campaign, Donald Trump repeatedly gave assurances that American trade policy would be favorable to the American people. Ex- US President Donald Trump referred to the series of import tax on some countries and its most important reference thread was built with China.

In the initial months of the Trade War, the US demanded that China should stop subsidizing the 10 industries prioritized in its “Made in China 2025” plan. These include robotics, aerospace and software. China dreams to be the World’s primary artificial intelligence center by 2030. The United States had accused Beijing of stealing intellectual property rights. US believes Chinese laws undermine intellectual property rights by forcing foreign companies to engage in joint ventures with Chinese companies, which then gives the Chinese companies access and permission to use, improve, copy or steal their technologies. The Trump administration estimated that the theft of American intellectual property was \$ 225 billion dollars to \$ 600 billion every year. In addition, according to some important evidence, Chinese companies, often by the involvement of government officials, run cyber attacks on American companies to steal intellectual property.

The European Union, Canada, Mexico along with India started raising import tariffs to safeguard their positions. Eight countries filed a complaint with the WTO saying that the US cannot use national security as a defence against them. India was never a part of this trade war but it did feel the heat of this fight between two giants of the world economy. To be on a safer side India opted to concentrate on the rupee value stability and maintaining the required foreign exchange reserves for the security. We could sense the politicization of this trade war, silence of WTO over the fight, wasted interests of some of the EU countries. However, the future of China's economic relationship with the US remains uncertain after a two-year trade war between the two giants. US President-elect Joe Biden mentioned that he wouldn’t quickly remove tariffs imposed by the Trump administration and will consult allies before developing a China strategy.

After the US-China trade war scenes, the outbreak of Covid-19 pandemic has questioned China’s integrity across many countries of the world. When developed countries thinking over shifting their manufacturing base out of China, attracting this large chunk of capital flight has challenged Indian government.

In case of trade, the export-led growth strategy served China well over the past three decades but is now at risk, given that major trading partners have yet to transition from the rescue stage and are facing deep recessions, limiting the demand for Chinese exports. New restrictive trade practices in some countries also increase the risks for existing Chinese production and employment patterns. (Ehtisham Ahmad, Nicholas Stern and Chunping Xie 1 June 2020) Another set of literature on patterns of trade

post-covid specifies that the focus will remain on the reconfiguration of international supply chains (e.g., Ivanov & Dolgui, 2020; Verbeke, 2020) “The export boom is one of the biggest economic surprises this year regarding China’s outlook,” with the country benefiting from effective containment of the virus and strong Christmas orders, said Zhou Hao, an economist at Commerzbank AG in Singapore.

Barring few similarities like geographical proximity, size of the economy, factor endowment, the political, social and economic differences between India and China are substantial. We must agree that the competition between China and India is mutually complementary and win—win cooperative. Whether its domestic economy or external sector, policies of these two countries vary to a large extent. Export-led growth has been on agenda for Chinese Economy for a long and that reflects in its market share as well. India has been emphasizing on the domestic market capacities and their enhancement for long and continued with small portion of external sector. It is the first time that India has aggressively mentioned its export-led growth ideologies through the capture of domestic potential. Therefore, it is pertinent to make a note of the India’s New Trade Policy which is still under process for the years 2021-26 obviously in context of other government initiatives and the significance of this entire package as such.

India’s New Foreign Trade Policy

India’s new Foreign Trade Policy which is under process, will come into effect from April 1, 2021. Indian trade policy always is for Five years span and formulated by the Ministry of Commerce and Industry in accordance with other ministries. A key driver for India to achieve the USD 5 Trillion mark in an expedited time frame would be boosting exports, both merchandise and services, through systematically addressing domestic and overseas constraints related to the policy, regulatory and operational framework for lowering transactions costs and enhancing ease of doing business, creating a low cost operating environment through efficient, cost-effective and adequate logistical and utilities infrastructure. Improvements in the operations of the domestic manufacturing and services sector in combination with efficient infrastructure support by the government would result in correcting the imbalances within India and feed into the trade policy. (Ministry of Commerce & Industry).

Up till now regional authorities of Director General of Foreign Trade (DGFT) were engaged with the States/ UT Governments. Considering the federal structure of India, it is necessary to engage the district levels as well to tap the potentials lying there as an export hub. This has to be done through systematically addressing domestic and overseas constraints related to the policy, regulatory and operational framework for lowering transaction costs and enhancing the ease of doing business, and creating a

low-cost operating environment through efficient logistical and utility infrastructure.¹

New policy is surely going to focus on Improvements in the operations of the domestic manufacturing and services sectors in combination with efficient infrastructure support by the government which would result in correcting the imbalances within India.

Conclusions

Economic reforms aimed at Improving resource allocation by eliminating market distorting policies, minimizing the regulatory burden on business, reducing FDI Volatility by increasing economic and political stability, and removing natural resource dependence by diversifying the economy can induce FDI led growth in the long run.

In the present pandemic scenario the Foreign Direct Investment has been the battlefield for emerging markets. Indian government has genuinely provided many incentives and schemes time to time to boost the growth of FDI in India. These incentives apparently have contributed in creating a conducive environment for investment, opening up new sector for foreign investment, modern and efficient infrastructure. Time to time amendments in FDI policy with a view to make it more investor friendly has helped. Foreign Investment facilitate portal has been introduce by govt. for investor to facilitate the foreign direct investment.

Boosting exports would become a key driver for India to achieve the USD 5 trillion mark economy in an expedited time framework. This has to happen in a sustainable manner. India cannot afford to ignore or even further creation of market imperfections. Unprecedented pandemic followed by lockdown across the World has given some time for introspection. The 'Make in India' or 'Atmanirbhar Bharat' initiatives, export-led growth policy stimulus during pandemic, rise in exports of food products, generic medicines, newly entered FDI and flood of FIIs in Indian economy. All these dots need to be connected at the backdrop of India's New Foreign Trade Policy (2021-26). Taking the sustainability issue into consideration, the existing composition of Indian exports needs a substitution in terms of more green exports and their promotion accordingly.

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The Adversarial Proceedings Principle in the Civil Process

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Abstract

One of the most important principles of civil process is the adversarial proceedings principle. This principle characterizes the civil process from its beginning in the trial in the court of first instance, in the court of appeal, until its conclusion in the High Court. Moreover, with the new changes that have been made in the civil procedural law, this principle finds application even before the beginning of the trial in the first instance. According to these changes, the party against whom the lawsuit is filed, before the trial against this party begins, has the right to present its claims against the lawsuit, in a document called "Declaration of defence", leaving enough time for the fulfillment of this right for a period of 30 days. This scientific work will consist of two main issues. The first issue will address the meaning and importance of the adversarial proceedings principle in the civil process. In this issue, two different systems will be analyzed in the application of this principle, analyzing the advantages and disadvantages of each of them. The second issue will analyze the elements of the adversarial proceedings principle, looking at these elements in practical terms and the consequences that their non-implementation may bring. In this scientific work, the adversarial proceedings principle will be seen as part of the fair legal process provided by the Constitution of Albania and analyzed in several decisions of the Constitutional Court of Albania. This principle will also be addressed in the framework of international law, focusing on the way in which this principle is expressed in Article 6 of the European Convention on Human Rights and in the decisions of the Strasbourg Court regarding the fair legal process. At the end this scientific work will be given its conclusions, as well as the bibliography where this work is based.

Keywords: state of law, equality of parties in the process, the adversarial proceedings principle, the right of private defence, the right to a fair trial

Introduction

1. The meaning and importance of the adversarial proceedings principle in the civil process.

This principle is one of the basic principles of the civil judicial process, which, based on its importance is also provided in the Constitution of the Republic of Albania. A special provision of the Constitution expressly provides that everyone has the right to be heard before being judged by the court. From the interpretation of this constitutional provision, it results that it defines the right of every person to be informed about the trial that is taking place against him. The recognition of this right is made in order for him to present his claims in the case, before the court decides, in relation to the case in question.¹

In accordance with this principle of the Constitution, the Code of Civil Procedure, in some articles, has defined this very important principle of civil judicial process. According to the provisions of this Code, the parties have the right to be notified of the trial that is taking place against them, and no party can be judged without being heard or summoned to trial.² It is important to note that the participation of the respondent in the trial is a right and not an obligation. This means that the party against whom the trial is conducted is not obliged to participate in the trial, except in cases when the law expressly provides for the appearance of the party before the court.

The adversarial proceedings principle in the civil process is one of the oldest principles of civil law, known in Roman law as the term: "Audiatur et altera pars", can also be translated as the principle of equality of arms in the process³. Hearing the party before being judged by the court is the basic precondition for applying the principle of adversarial proceedings. Of course, if the opportunity to be heard is not given to the party, we can not have an application of this principle and in this way we would be dealing with a violation of the fair legal process.

The right of a party to be heard before a trial is not an absolute and unrestricted right, which means that the party must be legally and in accordance with the rules of civil procedure, the right to be heard before being judged. In cases where the party has been duly recognized the right to be heard before the trial, being regularly informed of the day and hour of the trial and this party has not appeared in court, without reasonable cause, this does not deprive the court to resolve the dispute even without hearing the party.

¹ Article 33/1 of the Constitution provides: "1. Everyone has the right to be heard before being judged by the court".

² Article 18 of the Code of Civil Procedure stipulates: "No party may be judge without being heard or summoned to trial."

³ See also: Kola, Tafaj, F; Vokshi; "Civil Procedure", Part I, Edition II, printed by the Publishing House "Albas", Tirana 2018, page 32.

This position of the respondent party, by not appearing in court, despite the regular notice, constitutes in itself the principle of availability of the party, which may come to the hearing and be heard, or may not appear and present or may not present evidence. The adjudication of the case even without the appearance of the party, without reasonable reasons, in cases when the party has been duly notified, does not constitute a violation of the principle of adversarial principle, but is in full compliance with this principle.

This also results from the constitutional provisions which stipulate that the right to be heard before being judged does not benefit the person who evade justice.¹ Even the Code of Civil Procedure issued in this conclusion, as it states that no party can be judged without being heard or without being summoned to trial, which means that for the application of the adversarial proceedings principle summoning of the party is sufficient. The application of the principle of adversarial proceedings is related to another important principle of the civil process which is the "equality of arms" in the process according to this principle, the parties in the civil process should be given an equal opportunity to defend themselves, to present evidence and to oppose the evidence presented by the other party. Failure to implement the principle of equality of arms in the process, constitutes a violation of the right to a fair legal process, provided by Article 42 of the Constitution of Albania and Article 6, point 1 of the European Convention on Human Rights, a fact established also in some decisions of the Constitutional Court of Albania and the Strasbourg Court.

Seen from a historical point of view, the principle of adversarial proceedings has been applied in court proceedings since ancient times, finding a very large application, especially in Roman law. The above principle was not applied in the medieval period and was reborn in the state of liberal democracy, in these last two centuries and to continue to be applied today, in almost all civil processes of modern states, regardless of the system of law.

Also, starting from the rights that the parties have in the process, but especially the role that the court has in it, based on the application of the principle of adversarial proceedings, the civil judicial process **can be investigative or contradictory**². **The civil investigative trial** has the following characteristics:

a) The court in the civil investigative judicial process has an active role in the development of this process. It is the most important part of the process and all parties are at its service, to present any evidence and act that the court deems important;

¹ Article 33/2 of the Constitution provides: "2. This right (meaning, to be heard before trial, underlining of the author) cannot benefit the person evade from justice".

² Lamani, Alqiviadh, "Civil Procedure", Tirana: 1961, page 24.

b) All evidence in the civil investigative judicial process taken from the court and the parties are obliged to bring only that evidence that the court deems necessary for the resolution of the case;

c) The parties are not subjects of the civil judicial process, but the "object" of this process and they do not participate in the judicial investigation of the case, which is the sole competence of the court;

ç) The court has the right to take the evidence, and is the only subject who has such a right, while the parties do not have the right to present evidence which has not been taken by the court, but serve as a source for taking evidence by the court. In contrast to the investigative system of civil litigation, the **adversarial civil process** has the following characteristics:

a) The court has a passive role in the adversarial civil trial. This means that the court stands on the parties, and has an arbitrator role, in the civil litigation, resolving the case based on the evidence presented by the parties. The parties and not the court are the main part of the civil litigation, they are free to present any evidence, which are related to the case and they deem useful, in their favour, while the court is limited only to the evaluation of evidence and in the fair resolution of the case on the basis of the evidence and facts examined; **b)** Evidence in adversarial civil litigation is not collected by the court, but is presented by the parties, who are free to present any evidence they deem necessary to prove the facts alleged by them. The role of the court in this case is limited to making a decision to allow the examination of the evidence requested by the parties. The court in this decision allows to examine only those evidences, which are related to the case and are necessary for the examination of the facts claimed by the parties. For the evidence which are not related to the case, or which the court deems that are not necessary to prove the facts claimed by the parties, the court in this case with a decision decides not to allow their examination;

c) Not only the court, but also the parties are subjects of the civil judicial process in the adversarial trial and are the parties who conduct the judicial investigation of the case, presenting evidence and legal claims, while the court as a subject of civil proceedings, and has as its sole duty to direct this judicial inquiry and at its end to settle the dispute;

ç) The court has no right to take evidence in adversarial civil litigation, but only the parties have the right to present evidence. They are the only subject who presents evidence in this civil litigation and the court should decide only on the basis of the evidence presented by the parties which should have full and equal capacity to act in this process¹.

¹ See also: Article1 of Civil Code of the Republic of Albania.

Our Code of Civil Procedure has accepted as a type of judicial process, the adversarial process, therefore, we will focus more specifically on the clarification of this type of judicial process, which has as its main feature the fact that it is based on the adversarial proceedings principle. This principle requires that the civil litigation be conducted in a contradictory manner, which means that the party filing the lawsuit is obliged to present before the court the facts on which he bases his research, as well as the evidence that serves to prove these facts. On the other hand, the party against whom the lawsuit is filed has the right to file claims to oppose the facts raised in the lawsuit, as well as to present the evidence on which he bases his claims.

Despite the fact that in a state of law where the principle of independence and impartiality of the court is applied and where the court stands as arbitrator over the parties in the process, the most acceptable system of civil proceedings is that of adversarial proceedings, we can say that each of these two systems has its advantages and disadvantages. Thus one of the most important disadvantages of the civil investigative process is the fact that the court having an active role in the process, collecting the evidence itself and administering the process, thus it expresses its bias in relation to resolving the case, not fulfilling the criteria of being an impartial court. By acting in this way, the entire trial conducted according to the civil investigative process, risks to violate the principle of a fair legal process, turning the trial into an irregular trial and thus violating the Article 42 of the Constitution of Albania and Article 6, point 1 of the European Convention on Human Rights.

On the other hand, the civil investigation process can be considered as having the advantage that the court is free and has all the possibilities to conduct a full and comprehensive investigation of the case, without being limited to the requests of the parties. This advantage of this process, if it's carefully considered by the court, will make it possible for the issue to be resolved in a complete and fair manner, but the court must in any case be careful that the actions carried out by her in the process, must be impartial and equal to both parties in the process.

The adversarial civil process has a number of advantages over the civil investigative process, as it guarantees the impartiality of the court in the process, as well as it gives the parties the opportunity to administer and control the process. In this process, the court is an arbitrator and stands on the parties, and bases its decision only on the basis of the evidence presented by the parties, not having the right to take evidence itself or to conduct a judicial investigation on its own initiative or mainly.

Although the adversarial civil process has many advantages, it can be said that this type of process has as a disadvantage the fact that the court, not having the right to take evidence mainly and not to conduct a judicial investigation on its own initiative, risks not having a full and comprehensive investigation of the case, which constitutes an obligation for the court, the non-implementation of which also leads to a violation of the right to a fair legal process provided by Article 42 of the Constitution of Albania and Article 6, point 1 of the European Convention on Human Rights. According to the Code of Civil Procedure, the court has the obligation to conduct a regular legal process, by guaranteeing a full and comprehensive investigation of the case according to law¹.

Closely related to the court's obligation to conduct a full and comprehensive investigation of the case, is also its obligation to enforce the law and to resolve the dispute in accordance with the provisions of applicable law. Also, the court must make an accurate determination of the facts and actions related to the dispute, without being influenced by the claims that the parties may make, however, it cannot change the legal basis of the lawsuit without the request of the party.

In order to properly implement the obligation of the court to implement the law or legislation in force, as well as to make an accurate determination of the facts related to the case, regardless of the claims of the parties, sometimes different and wrong positions have been held in court practice. These issues have been finally resolved with the Unifying Decision of the High Court no. 9, dated 9.3.2006, which has unified the case law in this way: **In conclusion, according to the Article 16 of the Code of Civil Procedure, the correct determination of the facts and actions (more precisely the events and actions that constitute legal facts) related to the dispute is made by the court reviewing the case, while the determination of the legal basis of the lawsuit is made by the plaintiff himself upon filing the lawsuit and is in his full disposition to change it until the end of the judicial investigation, making a request to the court in an appropriate procedural form.**

The High Court, in this Unifying Decision, on this issue, among others, argues that: "... Contrary to the above reasoning of the Court of Appeals, the Joint Panels of the High Court consider the decision unfounded in procedural law of the appeal, and express the annulment of this decision, as well as leaving in force the decision of the first instance with the completion of its reasoning. It is true that according to Article 16 of the Code of Civil Procedure, it is the obligation of the court to make an accurate determination of the facts and actions related to the dispute, without relating to the determination that may be proposed by the parties. However, the court of appeal did not make an accurate and complete **citation** of Article 16 of the Code of Civil Procedure, and moreover, and has not correctly interpreted this provision.

¹ Article 14 of the Code of Civil Procedure provides: "The court has a duty to conduct a due process of law, by guaranteeing the conduct of a full and comprehensive investigation of the case, in accordance with the law."

... On the other hand, in accordance with the principle of maintaining impartiality in the trial, the court which has concluded in a legal determination of the facts of the case, different from the qualification made to them by the plaintiff, through reference to the relevant provision of law material, has no right to be imposed by intervening and changing the legal basis of the lawsuit determined by the plaintiff. In the civil trial the court does not and cannot have an active role.

Article 185 of the Code of Civil Procedure stipulates the use of the term "legal cause of action", in addition to the term "object of the lawsuit".

The doctrine of civil procedural law has clearly defined these two main elements of a lawsuit. The cause is the reason of the judicial inquiry, which is divided into law and in a state of fact that is against this right (*causa pretendi*), i.e. that violates, violates or denies the subjective right of the plaintiff. On the other hand, the object is what is required by the lawsuit, i.e. law enforcement and the benefit of what is required and that comes as a result of law enforcement (*petitum*).

... It is clear that the above constituted the cause and object of the lawsuit, which ended with a final decision in the previous trial. This decision, on the basis of which there may be various claims, can not be subject to any kind of revision in this new trial....¹.

2. Elements of the principle of adversarial principle

As stated with in the above case, one of the elements of the adversarial principle is the right of a party to be summoned to trial before he is judged. This right of the party to participate in the trial is not absolute and the party who evade justice cannot benefit from this right.

The non-application of this element by the court makes us face an unfair judicial process, thus violating the Article 42 of the Constitution of Albania and Article 6, point 1 of the "European Convention on Human Rights". Another element of the adversarial principle is that the party against whom the lawsuit has been filed has the right to be acquainted with the lawsuit and the acts that accompany it before the case is considered by the court, as well as to be given sufficient time to prepare the defense, giving her the opportunity to present her objections and claims in the "Statement of Defense". According to the changes made in the Code of Civil Procedure, with law no. 38/2017, the court after evaluating the lawsuit without defects, requires the respondent to issue a statement of defense, within 30 days of notification of the lawsuit. The statement of defense as the act by which the defendant presents his claims and evidence, against the lawsuit filed against him, before the main trial begins, must contain:

¹ See further the Unifying Decision of the High Court, no. 9, dated 9.3.2006.

- i. the court before which it appears; ii. the full generalities of the plaintiff and the defendant, as well as their addresses;
- iii. the concrete content of facts, circumstances, documents and evidence;
- iv. filing allegations, rebuttals and arguments against the lawsuit;
- v. electronic contact details of the respondent or his representative, if the respondent has any;
- vi. the list of witnesses, specifying their exact addresses;
- vii. the evidence required to be obtained from third parties or the plaintiff, specifying the reasons for obtaining it, as well as their location;
- viii. the type of expertise required to be performed during the trial, if one is needed;
- viii. the full generalities of the third persons required to be summoned to trial;
- ix. counterclaim, if the respondent appreciates the exercise of this right ¹.

The submission of the statement of defence by the defendant is one of the most important moments for process development against him, as the civil procedural law has explicitly provided that the defendant cannot present objections and new evidence during the trial related to the lawsuit, if he has not presented them in the statement of defence. This means that for the allegations that the plaintiff has presented in the lawsuit and for the evidence that accompanies the lawsuit, the defendant by presenting his rebuttals and evidence in the statement of defence and is not allowed to present them later in the trial.

¹ Point 3 and 4 of the article 158 of the Code of Civil Procedure, amended by law no. 38/2017, provide: "3. The "Statement of Defense". is drafted in the Albanian language and must contain:

- a) the court before which the statement of defense is submitted;
 - b) the name, paternity, surname, place of residence or domicile of the plaintiff, the defendant and the persons respectively representing them, if any. If the plaintiff or the defendant is a legal entity, its name as it appears in the public registers, indicating the headquarters or head office, where the notification will be made.
 - c) the concrete statement of facts, circumstances, documents and other evidence, as well as the objections and arguments for opposing the lawsuit, if any.
4. In addition to these requirements, the respondent shall state clearly in / or attached to the statement of defense:
- a) his electronic contact details or his representatives, if any, which the court may use to notify him;
 - b) the list of persons who request to be summoned to trial as witnesses, specifying exactly their names, paternity, surname and full address, as well as the facts that he seeks to prove with them;
 - c) the evidence should be taken to third parties or to the applicant, specifying the reasons and the location of evidence;
 - c) the type of expertise required to be performed during the trial;
 - d) counterclaim, when he is required to exercise this right under Article 160 of this Code".

Another element of the principle of adversarial proceedings has to do with the fact that each of the parties during the examination of the case has the right to actively participate in the judicial process, in the judicial investigation of the case. This means that each of the parties has the right to make a debate and litigation, for any evidence presented by making legal submissions, regarding the value and evaluation of evidence, expressing legal opinions on the facts and circumstances proven at trial.

The application of this principle by the court is a basic condition for the development of a regular civil litigation, as this principle is the basis on which a civil litigation is based, ***it is the essence of any civil litigation***. There is no regular civil litigation without the application of this principle. This principle includes the obligation of the court to enable the party to be heard before the trial, and at any level of the civil litigation, with the legitimacy of the parties in the process and their explanations about the object of the lawsuit, with the judicial investigation until in the final discussion of the parties.

Another element of this principle is that it applies at every stage of the trial, that is, every party must be given the opportunity to oppose by presenting its claims and relevant evidence at every stage of the trial. Particularly important is the application of this principle in the judicial investigation phase, which is the phase where the parties should present the evidence and the facts on which they base their allegations, and adversarial means that any evidence is subject to litigation by the parties and each party must give his arguments for the evidence he presents, as well as for the evidence presented by the opposing party.

The law stipulates that it is the duty of the court to seek the application of the principle of adversarial proceedings at every stage of the main trial. This task of the court is defined, explicitly in the Code of Civil Procedure, according to which the court is obliged to apply, at every stage of the process, the principle of adversarial proceedings. For this purpose, the court also orders the performance of various actions or the submission of acts, and documents, by the parties in the process in favour of each other. Such a thing should be done in order for a party to have the opportunity to be defended, as well as to correctly apply the principle of adversarial proceedings, and this principle should be acquainted with the acts, evidence and documents of the other party, so she effectively carry out her defense. Obligations arise for the correct application of the adversarial principle, not only for the court, which must follow and seek the application of this principle, but also for the parties. This also results from the civil procedural law, which in application of the principle of adversarial proceedings, charges the parties with the obligation to inform each other within a certain time, with the facts and evidence, where, they base their claims.¹

¹ Article 19 of the Code of Civil Procedure stipulates: “The parties must inform each other, in a timely manner, the means and facts on which they base their claims, the evidence they will present and the legal provisions to which they will refer, in order to enable each party defending their interests at trial”.

According to the civil procedural law, each litigant must, within a certain time, inform the other party about the means and facts, where it bases its claims, the legal basis of the research, as well as the concrete evidence, where bases its claims. Informing the other party, with the nature of the allegations, with the means and facts, where it bases its claims, as well as with the legal basis of the allegations, is made by the plaintiff by submitting to the defendant a copy of the lawsuit are presented, in summary, the means and facts on which the plaintiff bases his claims, as well as the legal provisions on which he bases these allegations.

The same must be done according to the law by the defendant, who must notify the plaintiff within a certain time of all the means and facts, on which he bases his objections, of all the evidence he will present, as well as of the legal basis, where he refers to his objections, in order to enable the plaintiff to realize the protection of his interests in the trial. Mutual acquaintance of the parties within a specified period of time with the means, facts, evidence on which they base their claims, as well as with the legal basis on which the parties refer their claims, is necessary in order for the parties to defend their interests in trial, as well as to apply the principle of adversarial proceedings in a fair and correct manner. Without prior knowledge of the means, facts, evidence and legal basis on which each party bases its claims, the other party may not submit its means, facts, and evidence, so to that party is not given the effective opportunity to debate any claim of the other party, by not applying in practice, the principle of adversarial proceedings.

An important element of the adversarial principle deals with the fact that when the decision for a party is given in his absence, the law recognizes this party the right to appeal this decision in the higher court. Such a thing is provided in the Code of Civil Procedure, which stipulates that in cases when the law allows the decision for one of the parties to be given in his absence, he has the right to appeal to the highest court, against the above decision..¹

As noted, this provision provides for an exception to the general rule set out in Article 18 of the Code of Civil Procedure, according to which no party may be tried without being heard, or without being summoned to trial. In this case, the law provides as an exception that a party can be tried without being heard or even without being called to trial, but for this, two conditions must be met at the same time:

First: The law should explicitly provide that the trial may take place without notifying the other party;

Second: This judgment must be necessary in the circumstances of the case.

¹ Article 21 of the Code of Civil Procedure stipulates: "When the law allows it and the circumstances of the case require a court decision, regardless of the knowledge of one party, the latter has the right to appeal in court against the decision".

In cases when the law provides that the trial against a party be conducted even without notifying this party, we can mention the cases provided by Article 202 et seq. Of the Code of Civil Procedure, which determine the security of the lawsuit. Specifically, Article 205/2 of this Code provides that: *"2. The request (meaning for securing the lawsuit) is examined in the presence of the parties, but in special or urgent cases, it can be examined in the deliberation room"*. This provision which provides for the civil trial for securing the lawsuit, without notifying the other party, in its very content, provides that the trial without notifying the other party, is an exception, as as a general rule, is done by notifying the other party and this exception occurs only in special or urgent cases, in those cases when the nature of the matter cannot be notified to the other party, because the delay (which is the time required to notify the other party) may cause serious and irreparable harm to the other party.

With the fulfillment of these two conditions, the trial of securing the lawsuit can take place even without hearing the other party, however, the law in order to protect the interests of the party, who was not heard in that trial, as well as to apply the principle of adversarial proceedings, has provided in Article 21 of the Code of Civil Procedure the right of this party to appeal against the decision given. The realization of the appeal by this party, gives the possibility for the case to be tried by another court, higher, since both parties are present, the principle of adversarial application is applied. This provision recognizes, in this way, the party which has been tried in absentia, not through its own fault, to have the opportunity to realize the protection of its interests in the trial in another instance of the judicial system. At this stage, this party has all the possibilities to apply the principle of adversarial proceedings, to present its claims and evidence and thus to realize the constitutional and legal principle according to which, everyone has the right to be heard before being judged.

The application of the principle of adversarial proceedings in any civil litigation has a great legal significance and we can say that this principle constitutes a "sine qua non" condition, i.e a condition without which there can be no fair civil litigation. Based on and in application of this principle, the court decides on the resolution of the dispute between the parties and the court is obliged to base its decision only on the facts and evidence presented by the parties, where they have been able to debate, according to the principle of adversarial proceedings. Such a thing results, explicitly from the content of Article 20/2 of the Code of Civil Procedure which stipulates: *"It (meaning the Court) bases its decision only on the means, explanations, documents and other evidence indicated or brought by the parties, when the latter have been able to debate according to the principle of adversarial proceedings"*.

Regarding the importance of the principle of adversarial proceedings, as one of the basic principles of the civil process, even the Constitutional Court of the Republic of Albania has expressed itself continuously. Thus, in its decision, no. 69, of 2000, this Court, inter alia, has reasoned: “...*The principle of adversarial proceedings, as one of the most important principles that should characterize the judicial process in the sense of Articles 18, 19, and 20 of the Code of Civil Procedure, is related to the right of the litigants to be heard, to inform each other within a certain time with the means and facts on which they base all their claims, the evidences, the correct legal reference, in order to realize as fairly as possible for the protection of their interests in the trial...*”¹

In another decision of the Constitutional Court of Albania, specifically in decision no. 34, of 2011, in relation to this principle, this Court, inter alia, states that: “... *The Court, in its jurisprudence, has made part of the standards for a regular legal process the observance of the principle of contradiction, although not explicitly expressed in constitutional norms. In view of the above, the principle of adversarial proceedings, seen from the point of view of equality of arms in civil proceedings, is a logical evolution of the right of a party to participate in the trial and to be treated fairly and equal by a fair and impartial judge (arbitrator) who guarantees both parties the same opportunities to disclose their evidence and arguments. If there were no equality of arms in the civil trial, then the arguments of one party would prevail over the arguments of the aggrieved party and, consequently, the right to participate in the trial would be stripped of its constitutional function, to guarantee a fair legal process...*”².

In view of the above, since there is a constant and consolidated jurisprudence of the Court on the principle of equality of arms, it can no longer be doubted that this principle is already a constitutional guarantee which appears as an integral part of the guarantee for a regular legal process.

The importance of the principle of adversarial proceedings should also be seen as part of international law, which includes international acts guaranteeing fundamental human rights and freedoms. Of these international acts, an important place is occupied by the European Convention on Human Rights, which in its article 6, point 1 guarantees the right to a fair legal process, even in the adjudication of civil disputes, as well as in the trial of criminal charges against the person.

As the Strasbourg Court has emphasized in some of its decisions, the application by the Court of the principle of adversarial proceedings in civil proceedings is one of the most important elements of the civil judicial process, and its non-enforcement has serious and irreparable consequences for the process, violating the right of the person to a fair legal process. According to the practice of this Court, this principle consists of several elements, among the most important are:

¹ See also: the decision of the Constitutional Court, no. 69, dated 16.10.2000, published in the Official Gazette, no. 33/2000.

² See also: Decision no. 34, of 2011, of the Constitutional Court of the Republic of Albania.

- the right of a party to be summoned to trial and to be heard at the Court;
- the right to be acquainted with the allegations and evidence of the other party;
- the right to debate and to oppose the evidence of the opposing party;
- the right to present any necessary evidence, as well as contradictions and objections in relation to the lawsuit filed;
- the right to have the necessary time to carry out the defense and to present the relevant allegations and evidence;
- the right to be treated impartially and equally by the Court, in relation to the other party, etc.

Specifically, ***the Strasbourg Court in case no. 35289/11 ECHR, Renger vs. The Czech Republic, in paragraph 146 of the Decision of 31 August 2018***, on the principle of adversarial proceedings, states, inter alia, that: "... In the civil process, adversarial proceedings are closely linked to the equality of arms in the process, where each party must be given the necessary time and opportunity to present its claims and evidence, as well as to oppose the arguments and evidence of the other party, as part of a fair legal process". ...¹".

In another of its decisions, ***dated March 8, 2010, in the case Caka v. Albania***, for this important principle of civil proceedings, ***this Court***, among other things, determines that: "...*In any process the court is obliged to apply the principle of adversarial proceedings as part of legal process, recognizing the parties the opportunity to have the necessary time to prepare the defense, to present their claims and rebuttals, as well as to object to the arguments and evidence presented by the other party. ...*²".

Conclusion

At the end of this paper we can draw some conclusions about the matter addressed in this article, where the first conclusion is that the adversarial proceedings principle is one of the basic principles of the civil process. This means that there will be no fair civil litigation if the court does not apply correctly this principle and the violation of this principle constitutes a violation of a fair legal process.

¹ See further: The decision of the Strasbourg Court of 31 August 2018, in case no. 3 5289/11 ECHR, "Renger v. Czech Republic.

² See also: The decision of the Strasbourg Court of 8 March 2010, in the case of Caka v. Albania.

Another conclusion that can be drawn from this paper is that the adversarial principle is applied by the court not only during the proceedings of the main trial, but also before the start of the trial. According to the civil procedural law, the court is obliged that after the defendant has submitted the lawsuit and the relevant evidence, to send them to the plaintiff, giving them the necessary time to present his objections and the evidence he intends to present in trial. This is provided by the legislator in order to conduct the civil litigation as soon as possible and within a reasonable time, which in turn constitutes of a special element of a fair legal process.

Another conclusion that can be drawn from this paper is that seen from a historical point of view, there are two systems of civil process that we know; the investigative process and the adversarial one. In the investigative system the role of the parties is passive, and the court has an active role that collects evidence and orientates the parties, while in the adversarial system the court has a passive role and it is the parties who present all the evidence and the court bases its decision only on evidence presented by the parties.

One of the most important elements of the adversarial principle is the right of a party to be summoned to trial and to be heard in court. The right of a party to participate in the trial is not absolute, this right does not benefit the party hiding from justice. This element constitutes the initial and elementary right of this principle, and if the party is tried without a hearing, the principle of adversarial proceedings will be impossible to be applied due to the absence of the opposing party and such an approach held by the court constitutes a violation of the right to a fair legal process.

The principle of adversarial proceedings is at the core of the entire civil litigation. Pursuant to this principle, the parties have the right to present claims and rebuttals, to present evidence and facts on which they base their claims, to debate and challenge the evidence and claims of the opposing party, to offer their legal opinions on the resolution of the case by the court, as well as to enable the implementation of the principle of equality of equipment in the process. This principle is not only legal but also constitutional, as the Constitution of Albania itself provides for the right of a party to be heard before being tried. Also, this principle is an important part of the process of order of law provided by the Constitution of Albania and the European Convention on Human Rights, sanctioned in several decisions of the Constitutional Court of Albania and the Strasbourg Court.

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Population Stress Reactions in North-East Hungary during the Pandemic

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Abstract

Emergency caused by the SARS-CoV-2 has provoked several difficulties in daily life. On the other hand, it provided an opportunity to produce new attitudes toward our life and community, but also forced us to face our vulnerabilities. Outbreak of the SARS-CoV-2 highlighted that despite our vulnerability, we can manage this crisis, by being able to influence our stress reaction as well as our fears and emotions about the pandemic. Faculty of Healthcare of the University of Miskolc is training such professionals, whose priority task is to preserve the mental health of individuals and communities, reduce stress reactions, increase the available information on the subject, and help the community to adapt adequately to unexpected difficulties, like a pandemic situation. In the present study, we examined the mental state of the population of Northeastern Hungary in the second wave to adapt the above-described education to the ongoing changes caused by the pandemic. During the research, we applied an online questionnaire, that included the Hungarian version of the 10-item Perceived Stress Scale-, the Adult Hope Scale-, the WHO Well-Being, and the Buss Perry aggression questionnaire. Most participants (n=528) live in small towns or villages and their average age is 39.4 ± 13.1 . The aggression level of responders did not reach the threshold, but the level of verbal aggression exceeded it. The participants were more stressed, but they thought they could handle their problems. Consequently, the pandemic harms the mental state and health of the population, therefore the presence of health professionals is needed.

Keywords: pandemic, stress, aggression, subjective well-being, online questionnaire

Introduction

The new coronavirus (SARS-CoV-2) occurred in the Chinese Wuhan in the end of 2019 has reached Europe and Hungary in the spring of 2020. The pandemic has upset our whole previous lifestyle and it has become a strong stress resource. Over the fear from

the viral infection, our daily life management has completely changed, just as our methods for contacting, learning or work. The population has suddenly had to create several new habits and coping methods. Besides the unpleasantness of the loss of the common behavioural routines, numerous people have to face with serious existential difficulties as well. Life could be partly rearranged after the first wave, but the second wave of the pandemic started in the autumn of 2020.

By our research, we would like to contribute to the more precise understanding of the correlations of psychological phenomena experienced in the second wave of the pandemic, such as perceived stress, aggression, psychological well-being and hope. Our research aimed the assessment of the mental health of the population living in one of the seven Hungarian statistical regions, the North-East Hungarian region to, based on the results, help professionals working on health and social fields to react appropriately to the needs developed in this current situation.

II. Literature Review

The World Health Organization (WHO) announced that the coronavirus epidemic has reached the pandemic size on 11 March 2020.

In Hungary, after the first wave of the coronavirus epidemic, the second one became noticeable in the autumn of 2020. On 09 November, the new coronavirus infection (COVID-19) was detected in 5 162 Hungarian citizens, thus the number of detected infected people rose to 114 778 in Hungary, and the number of deaths also increased to 2 493. At this time, the number of active infected people was 86 134; 6 061 of them were hospitalized, and 415 of them were on respirators. By the constant increase of the newly registered case numbers, the government recorded the law about the protection against the second wave of the coronavirus pandemic in a decree on 10 November. By the announcement of the emergency, serious limitations have been introduced such as curfew between 8 p.m. and 5 a.m., changing to on-line education in high schools and universities, compulsory face mask wearing in closed areas and in public areas in settlements counting more than 10 000 persons as well. A general ban on organizing events has been introduced, assemblies have become forbidden. The number of participants on personal and family events became limited; hotels could not receive tourists, accommodation was available only for business, economic or educational purposes. Besides the police, the army also got authorization for monitoring the compliance with the epidemiological rules, and great fines were placed in perspective in case of violation. The second wave of the epidemic reached its peak in the beginning of December when the daily number of new infections reached 6 697, and the number of deaths was 193. However, the government announced the tightening in November 2020 for 30 days, these have been prolonged more times since then, and they are still in force at the time of writing this study (in February 2021), and there are no prospects for their mitigation.

In the last year, several studies and statements have dealt with the effects of COVID-19 on the physical (Cao & Li, 2020, Lvov et al., 2020) and mental well-being (Brooks

et al., 2020, Pfefferbaum & North, 2020, Serafini et al., 2020). The research results have proved it in several cases that the epidemic can be linked to the worsening of the symptoms of depression, anxiety and perceived stress (Cao et al., 2020, Xiong et al., 2020, Li et al., 2021). Social distance, isolation, the fear from the infection and the stigma associated with it, existential uncertainty, the lack of information or its contradictions are associated with such negative psychiatric symptoms as frustration and boredom, post-traumatic stress reactions, panic symptoms, anger and irritability, low self-esteem, and the feeling of loneliness and helplessness (Brooks et al.2020, Hossain et al., 2020). The listed negative internal conditions significantly decrease the level of our mental well-being (Serafini et al., 2020).

According to Lazarus's and Folkman's definition (1984), the psychological condition of stress develops when a person meets a situation which, based on his own judgement, exceeds his available resources. So, the way a person views a certain situation is of central importance. Because the processes start on more planes due to the stressors (events causing stress): on emotional, cognitive, somatic and behavioural level. The creators of cognitive stress theories think that cognitive evaluation has a determining role in the development of the stress reaction, so the stress level can be influenced by its change. Several individual differences can be observed in this mechanism, such as the sensibility for stimuli, but earlier experience and genetic factors also influence the evaluation (Ursin & Eriksen, 2004). The reaction for stress is also influenced by predictability and controllability which are the aspects of cognitive evaluation. If the person thinks that he has only a little or no control above a certain event, and he is unable to judge when it happens, his body will react with a more intensive stress reaction (Kopp, 2011). At the same time, the reality of the evaluation has an important role in the process; if the qualification loses from its reality value due to a factor (for example earlier experience), different cognitive distortions began to work because of which we feel the stress situation to be more negative (Stauder et al, 2010).

The pathogenic effect of stress can be interpreted in a complex, circular causal system in which biological, psychological and social factors play role as well. The fact whether stress will cause a somatic or mental illness greatly depends on the type, duration and severity of stress (Agid et al, 2000). Mild but long-lasting stress has an essential role in the development of somatic and mental disorders, and these affect the subjective health status (Stauder & Konkoly, 2006). But a sequence of events alone is not pathogenic, it becomes so because of the person's reaction for stress. So, it is important to consider the individual differences in the perception of stress; the way how the affected person interprets the stress situation (Felisa et al, 2020).

According to Berkowitz (1989), any negative feelings may cause aggression. In the model, pain, fear and irritation can also be found besides frustration and anger among the negative feelings causing aggression. Life situations caused by the COVID-19 pandemic strengthen the intensity of negative feelings and thus, they cause aggression. On the one hand, the uncertainty coming from the situation (the course of

the disease, the unpredictability of the end of the virus situation, existential threat) increases the level of stress in its own, and long-lasting stress depletes the personal resources which inhibit aggressive behaviour. On the other hand, the long-lasting limitation of free movement, earlier activities and social relationships develops frustration, and frustration is proved to be the focal point of interpersonal aggression (Krahé, 2013). Mazza et al draw the attention to the worsening of domestic abuse due to the isolation and the increase of time spent at home caused by the pandemic, especially to the danger of relationship aggression. However, relationship stress is not separated within the family, it seriously affects children as well. By now, several studies have proved that during the pandemic, parental stress may be accompanied by hostility or neglect towards children, and this further aggravates the adolescents' mental problems associated with the pandemic situation (Brown et al., 2020, Cluver et al., 2020, Spinelli et al., 2020). At the same time, examination results obtained from a Hungarian sample suggest that resilience has been proved to be a protecting factor regarding perceived stress during the pandemic in terms of both parents and children (Csíkos et al, 2020). So, mapping the factors that could moderate aggression associated with stress may be important in this long-lasting, burdening period.

III. Methods

1. Participants

Data recording of this current cross-sectional research was performed in the end of November and in the beginning of December in 2020, the questionnaire was filled by 528 persons. Only age was marked as a criterion to participate in the on-line survey research: only those respondents could be involved who have passed the age of 18. Educational level, relationship status or the settlement type were not criteria in the research. Before filling the questionnaire, the participants received written information about the aim of the research. Although the results are not representative, the sample gives an informative picture about the mental characteristics of people living in North-East Hungary during the second wave of the pandemic.

2. Measures

During data recording, we queried labour market status, relationship status and the size of the residential settlement besides the socio-demographic data (gender, age, education). There was one question about the respondent's evaluation regarding his/her own health status and another about religiousness. There were further questions about COVID-19 infection or its suspicion in terms of the person's own and immediate environment, the severity of the perceived symptoms and the form of the necessary health care.

The Ten-item Perceived Stress Scale (PSS-10) was used to measure the subjects' perception of stress (Cohen et al., 1983). The questionnaire consists of 10 items which should be scored on a 5-point Likert-scale (0-4). At the certain items, the higher scores

indicate the higher frequency of stress situations and more successful coping. The internal consistency of the Hungarian version of the questionnaire is quite good (Cronbach's $\alpha=0.85$) (Stauder et al, 2006).

General well-being was assessed by the five-item version of the WHO Well-Being Index (Bech et al 1996), a widely used questionnaire that measures general psychological well-being (positive mood, relaxation, activity, sleep quality) on a 4-point Likert scale. The Hungarian version had good internal consistency (Cronbach's $\alpha = 0.85$) (Susánszky et al., 2006).

The Aggression questionnaire (Buss & Perry, 1992) uses 29 variables to map the trait aggression of the personality's four different fields: physical and verbal aggression, anger as the affective component of aggression and hostility as the cognitive component of aggression. The variables could be evaluated on a '1 to 5' Likert scale. High score refers to a higher level of aggressiveness (Gerevics & Bácskai, 2012).

To measure the construction of hope, we used the Hungarian version of Hope Scale (Synder et al, 1991) (AHS-H) which had 12 items to measure general (global) hope on an eight-point Likert scale (1-8). The internal consistency of the Hungarian version of the questionnaire is excellent (Cronbach's $\alpha=0.88$) (Martos et al, 2014).

We used SPSS 20.0 program for data analysis, and over descriptive statistical methods, we used correlation analysis, T-probe and chi-squared test.

3. Results

Demographics

The average age of the 528 persons involved in the research is 39.4 ± 13.1 years. Women's responding activity was much higher (89.4%) than men's (10.6%).

44.7% of the respondents live in cities, 28.8% in towns and 26.1% live in villages. Most of them has higher education level (59.3%), 28.2% has high school final graduation, 7.3% has technical qualification, 20.7% are workmen and 2.5% has basic education. Most of the respondents has a regular job (62.1%), the rate of students (15.3%) and women raising infants (11.5%) is high. Pensioners (7.5%) and unemployed people (2.5%) also took part in the research. 45% of the unemployed people have lost their jobs more than a year ago, 27.3% in the last year, and also 27.3% has become unemployed in the last 3 months. The majority has intellectual jobs (31.9%), 23.5% has other kind of intellectual job, and 23.7% works in health care. Most of them work in a subordinate position (69%), but 12.3% is self-employed, 10.9% is a middle manager, 3.9% is the rate of group leaders, and also 3.9% works as a senior manager.

16.7% of the asked people had underwent the COVID-19 infection, 37.9% of them were unsure about undergoing it. Most of the people having been infected (50.4%) had mild symptoms, while 47.8% suffered from medium strength symptoms. When

we asked about the wider environment, they reported essentially more infections: the infection could have been detected in all the respondents' households. 22.7% of those living in one household had at least one infected family member and 77.3% had more than one infected family members. The severity of the course of the infection was different: 32% judged it very mild, 60.9% said it was medium, 3.1% of them needed hospitalization, and the course of the infection was fatal in the environment of 3.5% of the respondents. When examining a much wider environment, we met greater dispersion: 17.5% said that there were not infected people among his/her wider family members or friends, one infected person could be detected in case of 22.4%, and more relatives or friends were COVID-19 infected in the case of 60.1% of the respondents. In this group, mild symptoms were reported only in 21.3%, medium strength symptoms could be detected in 53.5%, 9.8% received hospital treatment, 2.1% received intensive care and 13.1% of the cases were fatal.

Perceived stress and demographics

The global indicator of perceived stress in the examined sample is 17.61±4.6. Its minimal value is 3, the maximum is 40. There is no significant difference in the case of genders (p=0.76), but men suffer from a bit more stress than women (Table 1).

stress total score

gender	mean
male	17.8571
female	17.6547
Total	17.6761

Table 1: Perceived stress score in terms of genders

A significant difference can be experienced examining in terms of age (p=0.004); the older a person is, the more the stress index increases. Although, there is no significant difference in terms of the residence, the size of the settlement shows a trend level correlation with the stress level of people living there in such a way that the stress index of people living in smaller settlements is lower than people's living in bigger settlements (Table 2).

stress total score

Residence	Mean
city	17.825
town	17.776
village	17.579

Table 2: Perceived stress score in terms of residence

¹Maximum score of perceived stress: 40 points.

Stress index was found to be higher, however not significantly ($p=0.053$), in case of respondents who had undergone the infection or there had been a COVID-infected person in the family and in the wider environment.

Aggression and demographics

The participants' aggregated aggression index is 64.3 ± 16.2^1 , which does not reach the threshold index.

A significant difference can be detected in terms of genders ($p=0.008$) and age ($p=0.0002$), the aggression index of younger men is higher than women's index (Table 3).

aggregated aggression

gender	Mean
male	69.7500
female	63.6610

Table 3: Aggregated aggression score in terms of genders

Examining the residence, it can be observed that there is a significant difference between the aggression index and residence ($p=0.05$); the aggression value is the lowest in the case of people living in cities (Table 4).

total aggression

Residence	Mean
city	61.6403
town	65.5724
village	64.5362

Table 4: Aggregated aggression score in terms of residence

The aggression index of people infected by COVID-19 is also significantly higher ($p=0.045$).

Examining the different trait aggressions, it can be stated that only verbal aggression exceeds the threshold value (Table 5), but hostility had the greatest dispersion (SD: 5,94680).

The highest level of physical aggression could be found in towns, the index mean of people living in cities and villages was almost the same (15.5).

¹The maximum score of aggression is 145.

The highest verbal aggression index could be found in villages (13.4), the smallest in cities (12.7).

	<i>physical aggression¹</i>	<i>verbal aggression²</i>	<i>anger³</i>	<i>hostility⁴</i>
<i>Mean</i>	15.9924	13.2311	16.9394	18.1439
<i>Std. Deviation</i>	5.28181	3.71054	4.86791	5.94680

Table 5: Scores and dispersions of different trait aggressions

Fury is a violent standby state which could be experienced in the case of the feeling of growing anger. In the case of fury, the person explodes negative feelings even for minimal provocation, reacts with roughness, and behaves angrily, rudely. In fury, the high level of adrenaline results in that the person becomes able to commit things which seem to be physically impossible in a normal, trivial case. Although, the value of fury does not reach the threshold value in this examination, but it is strongly close to it. The index of fury is the lowest in people living in cities (16.1), people living in villages come next (16.7) and it is the highest in towns (17.41) which is almost on the threshold value.

Hostility is the set of negative attitudes about people, so it is malicious, hostile and angry dissatisfaction. One of the projections of hostility is distrust during which the person supposes that he/she is contempted and hurt by others, and the environment plans something to his/her detriment. According to Kopp's research (1992), hostility is the typical attitude of the Hungarian population. According to Kopp and Prékopa (2011), the attitude of hostility has a significant health risk, because its increased occurrence increases the possibility of losing control, since in human "games" the individual basically supposes its environment to be hostile. The hostility index of the examination participants is close to the threshold value. It was the lowest in people living in cities (17.2), the population of towns is the next (18.46), and it was the highest in the case of village people (18.78).

Well-being

The WHO's General Well-being Scale provides information about people's general well-being on a basis of a two-week period in relation to the questionnaire filling. The highest the mean score is, the more typical the certain feature is (Table 6).

	<i>I have been happy and cheerful in the last 2 weeks.</i>	<i>I have felt myself calm and relaxed in the last 2 weeks.</i>	<i>I have felt myself active and lively in the last 2 weeks.</i>	<i>When waking up, I have felt myself fresh and lively in the last 2 weeks.</i>	<i>His/her days have been full of interesting things in the last 2 weeks.</i>
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¹The threshold value of physical aggression is 22.5

²The threshold value of verbal aggression: 12.5

³Threshold value of anger: 17.5

⁴Threshold value of hostility: 20

<i>Mean</i>	2.3182	1.9280	1.9735	1.4640	1.7273
<i>Std. Deviation</i>	.82713	.97528	.88807	.99077	.93298

Table 6: WHO General Well-being Scale

It can be observed on the scale that happiness and cheerfulness is typical for the respondents, they are active, calm and relaxed, but interesting activities have mostly missed from their lives. A significant difference in terms of age can be detected only in the activity sub-scale of the scale ($p=0.00003$). The score of women belonging to the older age group is higher than the younger persons' score. In the case of well-being, there is no correlation in terms of the settlements ($p=0.035$), but people living in towns feel themselves the best, then the population of the cities comes next, and people living in villages feel themselves the worst. The condition of well-being has significantly deteriorated in case of people who had a family member infected by COVID-19 ($p=0.02$).

Hope, religion and stress

At Hope Scale, we also examine the sub-factors of Agency and Pathways separately (Table 7). The Agency sub-factor of the questionnaire explains the person's motivation strength directed to the goals, while the Pathways part indicates the person's ability that helps him to find the ways leading to the target (Martos et al, 2014).

	<i>agency</i>	<i>pathways</i>	<i>hope</i>
<i>Mean</i>	5.4020	5.5355	5.4688
<i>Std. Deviation</i>	1.85241	1.89828	1.81566

Table 7: The mean scores and dispersions of the components of Hope Scale

Goals are the leaders of the human personality and behaviour which help the person to understand his/her subjective experiences. Finding the ways leading to the personal strength occurs more definitely in the sub-scale. However, the occurrence of the residence is not significant in the Hope Scale ($p=0.078$), but it occurs markedly in the Pathways sub-scale ($p=0.057$). Hope was highest in people living in cities (5.6) and the lowest in people living in villages (5.2). In the case of genders, no significant differences can be experienced ($p=0.4$), but women (5.48) are a little bit more optimistic than men (5.35).

There is not any correlation ($r=0.031$), but religion has a great role in people's optimism. Those reached the highest mean score who practised their religion regularly in a church (5.8), and those who are religious in their own way (5.6). The non-religious respondents reached a significantly lower score (~ 5.2) in this research.

Hope is a quite essential personality trait because it usually provides motivation in seemingly hopeless situations.

IV. Discussion

The second wave of COVID-19 pandemic hit the Hungarian population much more intensively than the first one. The number of infections increased exponentially, and mortality ratios did so. It is becoming harder and harder for the population to bear the limitations aiming curbing the pandemic, which obviously increase the symptoms of depression, anxiety and perceived stress of the population above the age of 18 in the disadvantaged region, and this is also supported by international research (Cao et al., 2020, Xiong et al., 2020, Li et al., 2021).

In our research, the scores of the perceived stress questionnaire did not exceed the critical 50%, but they were strongly close to it, and their dispersion was also high. Men's stress reaction was obviously higher than women's, but mostly men were affected by unemployment in this period, most of them lost their jobs during this pandemic period mostly because of their lower educational level than women. Age and residence did not influence stress index essentially, but it could be obviously seen that the older age group was more stressful what was understandable since they have suffered more due to the epidemic. In terms of the residence, it can be observed that more stress reactions could be detected in bigger settlements. Social distancing, isolation, the fear from the infection and existential uncertainty caused more frustration in bigger settlements than in villages what is understandable, since people living in villages have bigger space for life than in cities.

In the case of the examination of the population's aggression level, we also experienced that the values did not reach the threshold value. Men are significantly more aggressive than women, but aggressive behaviour manifest less in case of people living in cities. There is a negative medium strength correlation ($r=-0.36$) between stress and aggression, so lower stress index goes with higher aggression level. Verbal aggression is more marked in the region, but the fury and the hostility indexes are also more strongly present that often occurs as a socio-cultural behavioural form in disadvantaged settlements and it did not manifest during the pandemic.

The "well-being" of people related to the infection somehow was significantly worse than the others' that was independent from the fact that the respondent had been infected or one of his/her relatives. Examining all scales, people having an intellectual job and living in towns feel themselves the best. The existing stress and the existing negative internal condition significantly decrease mental well-being (Serafini et al, 2020).

Hope is such a dynamic personality trait and internal power that motivates the individual for coping in seemingly hopeless life situations. People living in cities are the most optimistic, and hopelessness is more marked in people living in villages that

is one of the possible causes of the socio-economic condition related to disadvantaged situation. Faith and religion have a great role in people's optimism and hope.

Conclusion

The results of the examination aiming the mental health assessment of the population performed in the north-east region of Hungary during the second wave of the pandemic coincide with those international and national studies which have proved COVID-19's negative effect on mental health. The correlation between the increase of the level of stress caused by the pandemic, the deterioration of well-being and the increase of the level of interpersonal aggression can be determined with high certainty among people living in the examined, socio-economically disadvantaged region. However, the level of perceived stress showed a reverse correlation with the feeling of hope and the fact of religious faith and belonging to a religious community, so with emotional coping. In the examined sample, the correlations between the mental phenomena have been proved mainly in the case of men, older people and people living in bigger settlements. Our results are essential in the case of a possible next pandemic wave for the success of prevention and intervention work, and they have practical importance for professionals working on health and social fields.

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Accounting Data and the Balanced Scorecard - Goals and Indicators

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Abstract

In their study, *Relevance Lost: The Rise and Fall of Management Accounting*, Johnson and Kaplan concluded that management accounting systems since the 1980s have failed to meet the new challenges of a changing environment. Among other things, because managerial accounting has been subordinated to the needs of financial accounting. Financial accounting cannot provide adequate information to management and does not support strategic decision making. The reason for this can be found in the operational logic of financial accounting. Financial accounting is past-oriented, it evaluates (economic) events in money, and thinks in the short term. Would all this mean that financial accounting data cannot be used to support long-term decisions? In our study, we point out the connection between financial accounting data assets and strategic decision support. Our research question focuses on how financial accounting data, including an invoice issued by a company, can be used in Balanced Scorecard perspectives. Based on the content of the Balanced Scorecard, we want to point out where and what kind of relationship can be observed between financial accounting data assets and the BSC. Through a case study, we will present the strategic goals as well as the indicators suitable for measuring the goals. These will be presented for all aspects of the Balanced Scorecard.¹

Keywords: financial accounting, KPI, strategy, balanced scorecard

JEL Classification: M49

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Introduction

1. Literature Review

1.1. Balanced Scorecard

In today's highly competitive environment, financial indicators alone cannot provide a direction for the future, they typically provide a picture of some of the actions of the past, so they are only retrospective indicators. Theoretical research and practical experience also confirm the need for both financial and non-financial indicators in corporate performance evaluation. A balance must be struck between them and they must be combined in a complex system of indicators. This is achieved by the Balanced Scorecard (BSC) indicator system. (Musinszki – Süveges, 2019)

The BSC is a balanced strategic evaluation system based on performance indicators.

- Balanced because:
- it seeks to balance the perspectives within the system,
- it takes into account both objective, easily quantifiable outcome indicators and subjective performance indicators that depend somewhat on individual judgment.
- strikes a balance between short-term and long-term goals.
- Strategic and based on performance indicators, because it translates strategic goals and initiatives into concrete metrics, as a result of which the strategy is implemented.
- Evaluation system: because the set target value is continuously compared with the actual performance, feedback can be implemented based on deviation analysis.

The BSC perspectives (finance, customers, internal processes, learning and growth) seek answers to four questions (or four groups of questions):

- What do the owners expect?
 - How should the company be positioned towards investors?
 - What needs to be achieved for the company to be financially successful according to the owners?
- What performance do customers expect?
 - What do we need to do to satisfy customers?
 - How to present ourselves to customers so that we can successfully implement our strategy?
- In which processes should outstanding performance be provided?

- Which processes do we need to optimize to meet the expectations of our customers?
- In which processes do we need to deliver excellent performance to keep our customers and owners satisfied?
- How can the capacity for change and development be maintained in the future?
 - How does the organization need to evolve to realize its vision?
 - What do we need to do for organizational and individual learning and innovation, to be able to change?

Answers to these questions can be used to set goals, translate goals into indicators, and select tasks and actions to be performed. Each of these criteria is accompanied by a so-called scorecard, which includes

- the strategic goal,
- the indicators,
- the expected values of the indicators, and
- actions required for implementation. (Kaplan – Norton, 1992, 1996)

The four-element system provides a transparent structure and thus makes it possible to filter out actions and goals that deviate from the strategic direction, even at the operational level. By continuously examining the goals and actions formulated within each aspect, the four perspectives can be coordinated. (Kaplan – Norton, 2004)

By designing the BSC, managers need to align financial goals with the company's strategy. The financial goals are at the centre of the goals and indicators of the other three perspectives. Each of the indicators is part of a causal chain that is expressed in the improvement of financial performance. This, of course, is no accident, as financial performance arises as a result of operational performance. (Fenyves et al., 2018, Veresné, 2013)

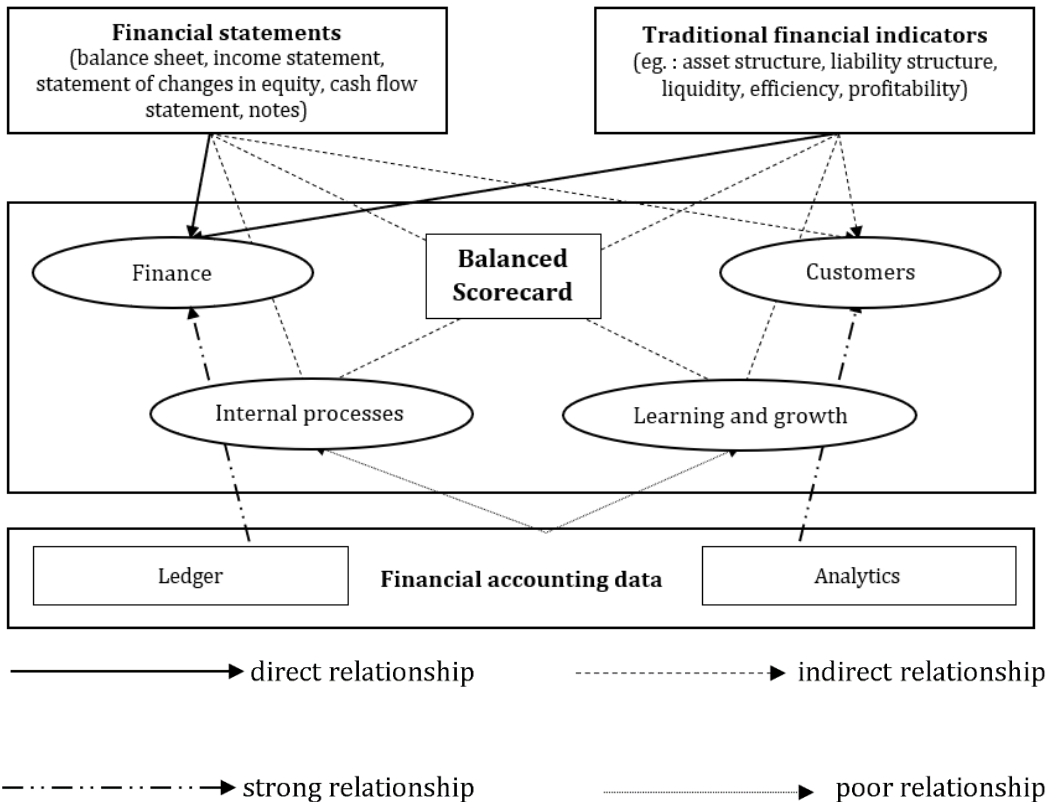


Figure 1: Relationship between financial statements and Balanced Scorecard

Source: Own edition

1.2. Integrating Financial Indicators into Strategic Decision Support Methods

The limitations of financial statements partially affect synthetic and analytical records as well as the usefulness of the supporting basic documents. On one hand, as they are directed at past events, on the other hand, as a result of the accounting (and taxation) system. At the same time, the problem of the value limit and the business year can be solved. All of these come back when we look at the basic document of the invoice as a basic accounting and taxation document.

In order to harmonize the VAT rules applicable in the member states of the European Union, council directive 2006/112 / EC on the common system of value added tax lays down the general principles governing the issue of invoices. The directive sets out the rules for invoicing in a total of six sections. The definitions partly define the concept of "transmission or making available by electronic means" and then define in a separate section which documents are to be considered as invoices. Among other things, this is where the documents or messages in paper or electronic form that can be accepted as invoices are listed. After the sections on the issue of invoices and the

content of invoices, the directive describes the electronic transmission of the invoice and then, among the simplification measures, highlights those aspects of invoicing for which member states have more or less room for manoeuvre, so they can deviate from the directive. This is followed by a description of the specific obligations of invoice preservation and the rules applicable to tax registration in the next chapter (Szente, 2019).

Invoices issued pursuant to Articles 220 and 221 of the Directive shall bear the following particulars:

- the date of issue of the invoice;
- a serial number consisting of one or more lines of numbers that uniquely identifies the invoice
- the value added tax identification number used by the taxable person to supply the goods or services;
- the value-added tax identification number of the customer in cases where he is the one liable to pay the tax,
- full name and address of the taxable person and the customer (customer);
- the quantity and nature of the products sold or the extent and nature of the service provided;
- the date of completion or completion of the supply of goods or services;
- the tax base per tax rate or tax exemption, the unit price excluding value added tax and any deductions, discounts or refunds if these are not included in the unit price;
- the value added tax rate to apply
- the amount of value added tax to pay
- any other indication that the supply of goods or services is subject to a tax-free or reverse taxation procedure, in the case of a tax exemption or when the tax liability is borne by the purchaser of the product or the recipient of the service;
- other data in case of sale of new means of transport, travel agencies, second-hand goods, works of art, collection pieces and antiques
- the value added tax identification number and the full name and address of the tax representative, in case a tax representative is liable to pay the tax (Council Directive 2006/112 / EC of 28 November 2006 on the common system of value added tax, Article 226)

Simplification of the basic possibilities for implementation of Article 238 is possible, but also in these cases the number and the following:

- date of issue of the invoice;
- the name of the taxable person;
- a description of the products or services sold;
- the amount of value added tax due or the information needed to calculate it (Council Directive 2006/112 / EC of 28 November 2006 on the common system of value added tax, Article 238)

Under Article 238, simplification measures may be implemented, but in these cases, the invoice still must contain the following information:

- date of issue of the invoice;
- the name of the taxable person;
- an indication of the type of products sold or services provided;
the amount of value added tax due or the information needed to calculate it (Council Directive 2006/112 / EC of 28 November 2006 on the common system of value added tax, Article 238)

The basic rules of the obligation to issue invoices and receipts are not accidentally influenced by the directives on value added tax, “since the invoice is primarily a receipt for this type of tax. The basic purpose of the rules is to ensure that the invoice properly reflects the actual transactions that take place in reality. Of course, this does not mean that the bill is not relevant in other areas” (Barta, 2017, p.1), but it does determine the nature and possibilities of the use of the data content. That is why it is necessary to combine financial and accounting data with a complex system of indicators.

But how do financial statements and the Balanced Scorecard relate? Let's take a brief look at each point of view. Based on the content of the perspectives, we would like to point out where and what connection can be observed between the financial statements and the BSC.

The key question from a financial perspective is: How do owners determine a company's position? Indicators from a financial perspective indicate the extent to which the strategy and its implementation contribute to an organization's financial position, most often to its profitability. Financial goals are mainly related to profitability, return on assets or increase in sales revenue. Here are the classic financial indicators such as sales revenue, costs, profit, working capital. And all of these appear directly in income statements. However, sales revenue, cost and profit are only the starting points. Based on these, a multitude of indicators can be determined. Including but not limited to:

- Sales Growth Rate,
- Operating Profit Margin,
- Incremental Fixed Capital Investment,
- Incremental Working Capital Investment,
- Earnings Before Depreciation, Interest and Taxes,
- Earnings Before Interest and Taxes,
- Return on Investment,
- Return on Assets,
- Return on Sales,
- Return on Equity.

A common feature of all indicators is that the data needed to calculate them can be found in the financial statements. (Tóth and Zéman, 2018)

The key question from a customer perspective is: How do customers judge an organization's performance? When developing a customer perspective, it is necessary to identify the customers and market segments where the organization wants to compete. Financial goals can only be met by an organization if it produces products or provides services that are valued by customers. We cannot satisfy the needs of all customers, so it is advisable to set target values for each segment. The customer aspect is therefore fundamentally focused on making the relationship with customers fruitful and lasting in the long run. Based on the recommendation of Kaplan and Norton (Kaplan and Norton 1992), indications of market share, product range, customer satisfaction, complaints, returns, profitability of customer groups, number of retained and new customers, etc. are included here. The financial statements (balance sheets) contain the customers and may contain the evaluation of the customers may (eg notes). The analytical records behind the financial statements show, among other things, the number of old and new customers and the profitability of customers/customer groups. At the same time, we do not get an answer to, for example, market share and customer satisfaction. So financial statements and traditional financial indicators appear in the customer perspective of the BSC, but they alone cannot fill the customer perspective with content.

The key question of the internal processes perspective: In what processes does an organization need to deliver outstanding performance? From this perspective, processes need to be identified where the organization needs to deliver outstanding performance in order to meet the objectives set out in the financial and customer perspective. Previous approaches have focused on existing processes rather than those that are relevant to the implementation of the strategy. Another novelty of Norton and Kaplan's approach is the integration of the innovation process into

internal processes. Long-term success requires future orientation, the mapping of future consumer needs, and (new) products and services that can be used to meet the expected needs. (Kaplan and Norton 1992, 1996) These include indicators on supply chain management, organizational innovation, and process regulation. Typical indicators of the internal processes point of view: product/service quality, efficiency, lead times. Financial accounting can only partially track organizational, for example production processes. Accounting is suitable for tracking resource usage (cost accounting). Partly suitable for monitoring quality processes (e.g. scrap, scrapping). However, these capabilities of the accounting system cover only the determination of a few indicators. Thus, financial accounting can typically only support the BSC in an indirect way.

The key question of the learning and growth perspective is: How to preserve the development and change capacity of the organization? The learning and growth perspective provides the background that ensures the success of the previous three perspectives. A short-term financial approach can easily result in the organization not paying enough attention to its employees, the skills of its employees, and its information systems. The organization can only achieve its strategic goals by investing in people (training), systems (information system) and procedures (information technology) and by encouraging its employees to act in accordance with the organizational goals. The three pillars of the perspective are therefore:

- skills of employees,
- information system skills,
- alignment of motivation, authorization, individual and organizational goals.

Measuring the abilities of employees and motivation are not classic accounting tasks. Financial accounting, like the previous point of view, can only support this point of view by relying on a database of analytical records. For example, the simplest, most common indicator of productivity is sales per employee. Or, to measure employee retention, the (key people) turnover rate is the most often quantified.

2. Research Methodology and Results Balanced Scorecard and Accounting Data Assets - Case Study

An additional possibility to use financial indicators is to use them not alone but in addition to and in combination with strategic decision support systems. Today, there are many strategic decision support methods, which can be grouped according to the following aspects: the purpose of use (situation analysis, setting strategic directions and goals, methods of strategy breakdown, strategy monitoring procedures), levels of analyzed and examined environment (micro, industry competition -, macroenvironment) the position of the examined environment in relation to the company, or the possibility of influence (tools for analyzing the external and internal

environment) and the complexity of the methods (simple and comprehensive methods).

The special relationship between financial indicators and strategic decision support methods lies in the fact that financial indicators can not only complement the tools for measuring and analyzing the environment and strategy, but in many cases are essential elements for an accurate and comprehensive assessment of strategy and the corporate environment (excellent examples include tools for measuring and analyzing corporate life cycle, product life cycles, and industry trends, among others). (Ansoff 1957, Levitt 1965, Porter 1979, 1980, 2008)

Let's review the above-mentioned thoughts through a case study!

The company sells children's furniture and is present in the domestic market and neighbouring countries (Austria, Slovakia). It is among the market leaders in terms of sales in Hungary, it has entered the international market in Austria 5 years ago and in Slovakia 6 years ago. He has 30 years of manufacturing experience in Hungary. The centre is located in Győr, where there is also a warehouse and a showroom, and abroad there is a showroom connected to 2 warehouses. One in Vienna, another in Bratislava. Orders from customers can be placed in person at all three locations, and payment methods can be by credit card or cash. Another ordering method is possible through the website, it is in Hungarian, but customers can choose from 3 locations, so they can place their order in German or Slovak, which they can pick up or deliver from the appropriate centre, in case of online ordering the price of the ordered products must be paid in advance. Information about resellers is that the company expects a payment period of up to 60 days.

In order to track and plan for results, company management wants to create a scorecard that can track company performance. The goal for professionals is to help produce metrics that measure a company's performance.

Financial point of view

Target function: Within the company's total revenue ratio, the share of foreign revenue should increase by at least 10% compared to the previous year, increase the share of revenue to corporate customers in domestic revenue by 10% compared to individuals. Another expectation is that the company group should sell 15% more of the key product each year!

Indicator:

1. *Value of an average order for an individual/company broken down by country on an annual basis*

Average order value: Considering a business year, we consider the period from January 1 to December 31. Total order value / total number of orders. The report is prepared on a monthly basis, and the result can be filtered by

country. (Multiple years could be compared in this way, allowing you to keep track of, eg. the average order value for the last 3 years in March.)

2. *Distribution of revenues by country, broken down by year, showing separately the values of individuals and companies*

The order counts for the country from which the delivery takes place! So, if you order from Győr to Slovakia, the place of sale is Hungary. (In this case, it would be useful to examine who are those who order from, eg. Slovakia, because Győr is closer to them, they get the product faster, and the same is the case in Austria. If there is a solution here, we can further increase revenue with the right business decision, this idea is not specifically related to the indicator -just a comment- could it be a problem with the employees or the foreign branch itself?)

3. *Top10 Revenue from sales of key products / total revenue*

Top10 Key Product: Most sold products. Here we examine products that we have been selling for at least 5 years.

Customer perspective

Target function: increase sales from top customers by at least 15%. Increase sales of key products by top customers by 20% and increase the ratio of payments via credit card and bank transfer by 20%. (TOP10 buyer: Companies that order in the highest value in their country within a year, those belong here who order for at least 20 million HUF in a year. (Individuals will not belong here because the purchase of 1-2 furniture in a year is typical there)

Indicator:

1. *Top10 customer indicator*

The ratio of Top10 customer purchases to total company value and total annual revenue, broken down by year and country.

2. *Individual ratio*

The ratio of the value of purchases made by all individuals to total sales. Annually broken down by country.

3. *Top10 key product buyers indicator*

The proportion of sales of top10 key products sold in a given year among customers by country. (it is worth examining the results of the last 5 years at most, due to entering a foreign market)

Internal processes point of view

Target function: To increase sales of products launched in the last 3 years by 20%. (New product: product introduced within 3 years.)

Indicator:

1. *Sales indicator*

The ratio of revenue from new products to total revenue. (by country, broken down by month)

2. *Number of products sold indicator*

How many pieces of the examined products have the company sold in the last 3 years. (by country, broken down by month)

3. *Product defect indicator*

The proportion of new products taken back from the customer because of some manufacturing defect compared to all new products sold. (packaging defect, damaged product, missing parts - broken down by country per month).

It shows how good the manufacturing technique is for the new products we produce. How do we want to grow if we produce it incorrectly? As a result, the value of other orders may fall, and the confidence of customers and buyers may decline.

Learning and growth perspective

Target function: To reduce the proportion of cancellation invoices issued by 20%. Improve the error rates of correct invoices by 30%.

Indicator:

1. *Cancellation invoice indicator*

What percentage of all invoices issued by billing clerks were cancelled. The report is prepared on a weekly, monthly, annual basis, and includes the name and ratio of the employee. The report is prepared by region.

2. *Top billing indicator*

In addition to the number of invoices issued by employees, the error rate is also indicated. (Assuming the billing program records the data of the creator as well.)

The report is prepared in daily, weekly, monthly, annual breakdown, it contains the name of the given employee, the number of issued pieces, and the error rate. The report is prepared by region. Employees are reported in descending order. The one who issued the most invoices during the given period will be listed above.

Conclusions

As financial accounting cannot provide adequate information to management, it does not support strategic decision-making, so managers need complex systems that can be used to plan for the future using data based on the past. Our research question focused on how financial accounting data can be used to support long-term decisions. In our study, we pointed out the link between financial accounting data assets and strategic decision support and used the case study methodology to show the connections between financial accounting data assets and the BSC, and also provided examples of the Balanced Scorecard, strategic goals and indicators suitable for measuring the goals.

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