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# Editor’s note

We are delighted to present Vallis Aurea (Journal of Sustainable Development and Innovation) due to successful cooperation between the School of Industrial Fisheries, Cochin University of Science and Technology and the Faculty of Tourism and Rural Development. The Journal **Vallis Aurea** (*Journal of Sustainable Development and Innovation*) is devoted to multidisciplinary research in the fields of management, economics, entrepreneurship, tourism, sustainable development, gastronomy, food safety, quality control and innovation, addressing complex issues that are closely intertwined with other disciplines such as information and communication sciences, law, sociology, psychology, and other relevant fields.

The journal aims to foster an integrative approach to understanding the dynamic and interconnected nature of economic and entrepreneurial activities, the evolving trends in tourism, the principles and practices of sustainable development, and the role of innovation in driving societal progress.

The journal focuses on a wide range of topics, including but not limited to economic theories and models, entrepreneurship and its impact on society, sustainable and responsible tourism development, innovative practices in business and management, the role of technology and information systems in economic and social development, the legal and regulatory environment of business, societal and psychological aspects of entrepreneurship and economic behaviour, the impact of innovation on competitiveness and growth, sustainable business practices, and the integration of environmental and social considerations into economic and business strategies.

By emphasising a multidisciplinary perspective, the journal aims to contribute to the development of knowledge and understanding that supports the advancement of sustainable and innovative economic and business practices, the promotion of entrepreneurship, the enhancement of tourism, and the achievement of a more sustainable and prosperous society.

Vallis Aurea (Journal of Sustainable Development and Innovation) is a biannual journal that affirms an integral, holistic view of interdisciplinary research. It aims to unite academic methodology and sincerity with professional focus and practices.

We are dedicated to achieving and maintaining this journal’s high standards. All articles submitted for publication in this journal are subjected to a double-blind review process performed by at least two academics from the Editor‘s Board. Reviewers stay anonymous.

With all our hearts and sincerity, we express our deepest gratitude to all the authors, reviewers, and editorial board members for their valuable contribution to this journal. We look forward to successful cooperation.

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**CONTACT:**
Faculty of Tourism and Rural Development Pozega,
Vukovarska 17,
HR 34000 Požega,
e-mail: vallisaurea@ftrr.hr,
homepage: https://hrcak.srce.hr/ojs/index.php/vallisaurea/index

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# FINANCIAL INCLUSION AND HOUSEHOLD WELLBEING IN SUB SAHARAN AFRICA

Kyokunda, Harriet, *Uganda Revenue Authority*, *hkyokunda@gmail.com*

Mafabi, Samuel, Department of Human Resource Management, Makerere University Business School, Kampala, Uganda smafabi@mubs.ac.ug

Ntayi, Joseph Mpeera, *Faculty of Economics, Energy and Management Science, Makerere University Business School, Kampala, Uganda*, *ntayius@gmail.com*

Kigozi, Munene J. C., *Faculty of Graduate Studies & Research, Makerere University Business School, Kampala, Uganda, kigozimunene@gmail.com*

***Abstract:*** *Despite the growing literature on household wellbeing, little is known about the role of financial inclusion in explaining household wellbeing. Through the lenses of minority influence theory, this paper tested the power of financial inclusion (in terms of access, quality and usage) on household wellbeing using data from teachers in primary schools of central and western Uganda. By means of a questionnaire approach to collect data, the study adopted a cross-sectional research approach. 326 respondents were responsive from a sample of 377 which yielded 86.5% response rate. Quantitative data were analyzed using Statistical Program for Social Sciences (SPSS) and Analysis of Moment Structures (AMOS). Drawing on the survey results, the paper clearly demonstrates that financial inclusion underpinned informs household wellbeing significantly in Uganda.*

***Keywords:*** *Financial inclusion, Household, Minority, Wellbeing*

## 1. Introduction

Wellbeing has been tied to particular individual circumstances and conditions. It is not a product of wealth, though a chance mix of wealth, good health and decent environment may contribute to this state (Manderson, 2010). In Sub Saharan Africa, access and usage of financial services is seen as a medium through which welfare can be enhanced. Access to financial resources is predicted as critical to almost every economy (Sakyi et al., 2019). This is largely because it enables the attainment of eight (Goals 1, 2, 3, 5, 8, 9, 10 and 17) out of the seventeen sustainable development goals (SDGs). These eight goals are no poverty, zero hunger, good health and wellbeing, gender equality, decent work and economic growth, industry, innovation and infrastructure, reduced inequalities.

In Uganda, according to Uganda Bureau of Statistics (2021), the total population is presently 41 million people of which 8.3 million are in poverty, 4% of this access health insurance coverage leaving over 40 out 41 million people lacking medicine and health staff to attend to them. Majority of the citizens go for medication in public hospitals where beds are always full, while many other patients wait in line. Patients and their family members bring mats and sleep on government hospital ward floors, in the corridors and courtyards as they lack medical insurance to get treatment from private modern equipped hospitals. The households in subsistence economy are 39 million, Ugandans working out of the working population age is 79% and 31% households are operating a business (UBOS, 2021). This makes a number of Ugandans fail to access quality basics of life. For example, parents take their children to public schools where it is estimated that 68% of children who enrol in primary school drop out before completing primary education (UNESCO, 2020). The same report also shows that pupils in Universal Primary Education schools cannot compete with those in private schools. Many pupils in government funded schools study under trees when they are hungry, and, in most cases, are taught by equally hungry teachers, the cost of pens, exercise books and uniforms is beyond the reach of many Ugandans (World Bank Development Report, 2019).

These cases demonstrate questionable wellness in different households in Sub Saharan Africa where access to financial services still low. Despite the proliferation of bank and nonbank financial institutions in the past decade, a huge proportion of the population does not have access to formal financial services such as basic savings accounts. The estimates from UBOS (2021) indicate that just about 0.4% households have loans from commercial banks which is much below the African average of 34% (Demirgüç-Kunt, Klapper, Singer, & Van Oudheusden, 2015). Lack of availability of financial service providers in areas predominantly occupied by the poor still remains a challenge. This even attracts a lot of interest which frustrates access to finance that is vital for enhancing household welfare. Yet, when Ugandans have access to and use of formal financial services such as savings, deposits, payments, loans, insurance, financial intermediation and financial advisory services at affordable price. This promotes positive welfare thereby supporting economic growth and development (Aliero, 2020; Kouki, 2013). The ultimate goal of development is to raise the well-being of a society especially reducing income inequality through improvements in social, political and economic conditions. Specifically, it is seen as increasing formal financial services such as savings, access to credit and bank account to large segment of people in the society (Ofori-Abebrese, Baidoo & Essaiam, 2020).

In an effort to curb the threat of poverty, financial access is at the forefront among the main government interventions used to underpin a push towards economic development of the populace (Chongvilairan, Taniguchi & Rabanal, 2016). In conformity with this ideal, over the years the Ugandan government rolled out a number of programmes such as; Rural Farmers Scheme, Modernisation of Agriculture, Poverty Eradication Plan, Prosperity for All, The Presidential Initiative on Poverty and Hunger, Bona Bagagawale among others. However, the challenge of lacking wellbeing continues to prevail. Household poverty is experienced as 38.5 per cent of the population will not survive beyond the age of 40; about 23 per cent of children are under weight (UNDP, 2018). This is inconsistent with the G-20 Financial Inclusion Action Plan which reaffirms the G20 Leaders' commitment to advance financial inclusion benefiting all countries and all people, including vulnerable (such as elderly people, migrants and forcibly displaced persons) and underserved groups (including the poor, women, youth, and people living in remote rural areas).

Empirically, Ibrahim and Olasunkanmi (2019); Nanziri (2016); Jalilian and Kirkpatrick (2005) argued that high level of financial inclusion is closely related with high rate of investment, employment, high-income and low-poverty rate. Demirguc-Kunt and Klapper (2012b) assert that less than a quarter of the adult population in sub-Saharan Africa owns bank account which fosters their household incomes. Woolard and Klasen (2005) discuss the transitions into and out of poverty using different approaches and country cases. Justino, Litchield and Pham (2008) identified the characteristics of a household, the private and public assets a household possesses, changes in macroeconomic condition such as trade reform, inflation, and economic crisis on the dynamics and influence on household wellness. In addition, data from the Global Financial Index dataset of the World Bank (2019) reveals that not more than a quarter of adults in Africa have an account with formal financial institutions and also many adults in Africa use informal means to save. These researches tend to pay less attention to the power of financial inclusion in explaining household wellbeing.

Theoretically, previous studies have largely focused on subjective well-being theory (e.g., Headey, 1993), the classic positions of telic need theory (Maslow, 1970; Murray, 1938) and autotelic activity theory (Csikszentmihalyi, 1975, 1982; Schachtel, 1959) to explain household wellbeing. But a strong limitation persists, namely, that trade-offs between satisfactions of diverse needs are not considered. Because of this, no heuristic exists to systematically examine how resources and constraints are utilized by humans to achieve well-being. This study contributes to the body of knowledge by using the minority influence theory to inform wellness at household level. The present study is among the very first attempts at empirically examining the association between financial inclusion (in terms of: access, quality and usage) and household wellbeing using data from teachers in primary schools of central and western Uganda. Specifically, this study is guided by these three specific objectives: i) to examine the relationship between access and household wellbeing ii) to access the relationship between quality of finance and household wellbeing iii) and to test the relationship between and household wellbeing. Therefore, this paper is divided into nine sections. The first section sets the stage by presenting the introduction to the study. Then, the theoretical orientation follows. The third episode focuses on literature review then the approach adopted in this study follows, which is followed by sample characteristics, then exploratory factor analysis and confirmatory factor analysis. The seventh section presents hypotheses testing and then discussion chapter comes. The concluding section provides conclusions for this study stemming from findings and discussion of this research.

## 2. Theoretical Underpinning

Minorities are a source of influence in group situations. Social change particularly household poverty reduction can be a result of minorities' questioning of the norms and confronting what has been taken for granted (Moscovici, 1976; 1980; 1985). Minorities are mainly groups of people that think and act differently, outside the norm; their voices are always not heard. They are individuals or a small group, or even few people who attempt through their ideas and actions, to produce innovation and social change (Gardikiotis, 2011). They are usually numerically small groups that question social norms. Minorities influence people's thinking, attitudes and behavior by being consistent and flexible in their negotiation with majority members. Their influence is more often hidden (i.e., evident on delayed, indirect and private measures) than manifest. They affect the amount and the quality of cognitive processing of their messages (triggered by the different elaboration demands of the influence situation). Minority influence interacts with various situational factors such as social identity (in-group or out-group) and the task employed (e.g., objective or opinion) leading to different kinds of influence outcomes (Gardikiotis, 2011).

Minority influence refers to a small group's influence on majority attitude change on indirect or related issues. Moscovici (1976) viewed minority dissenters as frequent, perhaps major catalysts of social change and assumed that if minority dissenters successfully influenced the majority's attitude toward the minority's position, they potentially could change group norms and by extension, an entire society. However, indirect minority influence's role in social change has remained hypothetical, because the primary methodology in social psychology cannot adequately deal with this cross-level causal link. Whereas attitude change is an intra- and inter-individual phenomenon, social change is a global-level, societal process whereby a group adopts a new attitude or idea that eventually becomes accepted as normative (Jung, Bramson & Crano, 2018).

Moscovici found that minority opinions were particularly influential on indirect attitudes (Moscovici et al., 1969; see also Clark, 1990; Wood et al., 1994). For minority positions to be considered carefully, they must be consistent. In Moscovici, Lage and Naffrechoux (1969)'s blue-green study, participants were shown a series of identical blue slides and asked to report the color of each. When two minority confederates consistently stated green (vs. inconsistently stating both blue and green), more participants answered that the slide was green. We often find that people do not immediately see the validity of a minority's views even when their view is correct (e.g., Copernican heliocentrism). However, if the minority's view is coherent and presented consistently, it may capture the majority's attention.

Consistency is identified by Moscovici as the most important behavioral style for a minority to be influential (other behavioral styles include investment, autonomy, fairness and rigidity). It concerns intrapersonal (or diachronic) consistency across time and situations and interpersonal (or synchronic) consistency across individuals. Most importantly, it is not consistency per se that is influential but more essentially the interpretation and the attributions of it made by the target of influence (Nemeth et al., 1974). Consistency conveys perceptions of certainty and commitment to a coherent stance and thus is assumed to enhance influence (Maass & Clark, 1984; Moscovici & Lage, 1976). However, Levine and Russo (1987) suggest that consistency does not always work in a simple manner and that, on attitudinal issues, it is not a crucial determinant of minority influence (e.g., Levine & Ranelli, 1978; see also Maass & Clark, 1984) and is often constrained by other variables such as the size of the minority (Nemeth, Wachtler, & Endicott, 1977), the extremity of minority opinion (Levine & Ranelli, 1978), the normative context ('Zeitgeist') of the influence setting (Paicheler, 1976), or the amount of social support available to the majority (Doms, 1984).

The theory of minority influence argues that social change takes place when a member of a minority group influences the majority to accept the minority's beliefs or behavior (Moscovici, 1976; Nameth, 1974). It is founded on the notion that a small group or an individual acts as an agent of social change by questioning established societal perceptions and proposing alternative, original ideas which oppose the existing social norms. Related to the case of Mr. R., as a poor person, he influenced social change with his innovative and pro activeness actions. Minorities propose new and original ideas that bring in innovation that creates household wellbeing. However, poor people are marginalized and the levels of minority differ from society to society which this theory is silent about.

## 3. Literature review

### *3.1 Financial inclusion*

Financial inclusion, describes the access to and effective use of appropriate financial services (Demirguc-Kunt, Klapper, and Singer 2017) and has become a subject of growing interest for policymakers, and other financial sector stakeholders. The G20 leaders expressed a commitment to expanding financial inclusion and supporting efforts to meet the challenge of promoting financial inclusion around the world ("2017 Financial Inclusion Action Plan" 2017). The G20 accepts there are beneficial effects for individuals, providing both an economic and a political rationale for government policies to promote financial inclusion. The trend to broaden the initial World Bank framing of financial inclusion in the context of bank account, now embraces digital financial services (Wilson and Krystalli 2017; Payment aspects of financial inclusion 2016).

The G20 financial inclusion indicators (2016) suggests that the main indicators to consider when measuring financial inclusion are Access, Usage and Quality. The appropriateness of these forms of financial inclusion indicators for households, given their limited access to formal financial services, may introduce a bias as an informal sector and other formal sector services provide financial inclusiveness. Access, usage and quality of financial service measurement when broadened provide a wider understanding (Wellalage & Locke, 2029). The revised G20 Financial Inclusion Indicators (2016) propose that having an account, (individually or jointly) with a formal financial institution or a mobile money provider are the main usage indicators for financial inclusion.

### *3.2 Household*

A household is a collective of individuals who usually sleep in the same house, eat meals together, and share the same kitchen and food expenses. Persons who live in the same house but do not eat meals together and do not share food expenses are not included in the same household (Oda, 2008). Household members are seen as persons who normally live and eat in the household. Those who are temporarily absent for reasons such as travelling, attending school, being hospitalized, etc., are treated as household members. Absent household members such as migrant workers are also considered to be part of the household. Households are constantly exposed to economic shocks that alter their incomes and consequently, their consumption. These fluctuations can generate severe consequences for families, as they do not always have good coping measures to protect themselves (Urrea & Maldonado, 2011).

### *3.3 Wellbeing*

If one defines economic wellbeing as the ratio of economic resources to need, then a household is "poor" if its available economic resources do not meet its needs at some minimum level. The household's economic resources are assumed to be determined by its total disposable income, which is equal to the gross weekly income of all household members from all sources minus National Insurance contributions, taxes and housing costs. The household's needs are assumed to be a function of the number and age of its members. It is further assumed that there is equal sharing of resources among household members (Morduch, 1994)

### *3.4 Education*

As far as education is concerned the UNDP considers adult literacy rate and combined enrolment ratio as the two indicators of educational attainment. Das (2007) considers adult literacy rate together with school attendance rate in computing combined educational attainment. The enrolment of children in schools depicts the current flow or the spread of education. There are alternative measures to capture the flow aspect of education. Among the more commonly used measures, gross enrolment ratio, age-specific enrolment ratio, net enrolment ratio, dropout rates and school attendance rates are relevant.

### *3.5 Empiricism and Hypotheses Development*

Financial inclusion involves the ability by financial intuitions to on-board all categories of people in extending financial services and systems to the people (Jan, 2021). It pays attention to situations where financial institutions educate all people to be involved in financial literacy and accessibility (Bonin, 2021). This construct is credited for reducing the gender gaps in financial services by offering adequate and formal access to financial products and services. Inclusion guarantees training and advice to improve financial capabilities, gain financial autonomy. Society members are educated on financial services which help in reducing on financial literacy and wastage of financial resources (Mader, 2018). Scholars have demonstrated how fiscal attachment promotes economic development since it encourages the user to save, provide financing for consumption and investment of households and companies manage risks, and face economic crises. When people save money, it can be used to start-up income generating activities that can sustain their livelihoods. Therefore, financial inclusion is a vital tool for reducing poverty and impacting the quality of life (Ouma, 2017).

Monetary inclusion increases investment and growth of production and economic growth. With economic insertion, all categories of people become financial literate, get to know means of financial accessibility to invest in income generating activities. This creates financial opportunities and new technologies that integrate coordinated and articulated actions to reverse and exclusive financial system that expands coverage and promotes the integration of women in the financial sector (Folarin, 2019). Financial inclusion increases the opening of companies, increases the number of entrepreneurs, increase the number of entrepreneurs, increases employment and changes consumption patterns (Pradrian, 2021). With financial inclusion, people are able to invest in projects that bring in income daily, and in the process of investing, youths are given jobs which reduce on the unemployment rates among the people especially the youth.

Financial access is about all people getting access to financial services from financial institutions (Feng, 2021). With financial access, women and other vulnerable groups are able to invest a greater part of their money in education, health and well-being of their children. Access to financial services contribute to the economic empowerment by providing vulnerable groups with the essential tools to generate income, accurate assets and have greater participation in household decision making, reinforcing family and social well-being (Luther, 2019). It leads to economic development and economic growth in the country. With financial access, citizens are able to approach financial institutions for credit to set up income generating activities and become entrepreneurs (Zuhra, 2020). This then enhances empowerment of women, youth by providing employment opportunities for youths, which improves on their quality of life of vulnerable groups. This variable encourages creativity and innovation among the vulnerable groups. With financial access, women and youths become innovative by engaging in income generating activities to earn a living. They engage in production and craft ship that increases on their financial ability to improve the quality of their livelihoods. This reduces on the dependency levels hence leading to economic independence (Nhamo, 2021).

Through financial access, government enlarges its tax base by levying taxes on income generating projects started by the citizens. The revenue generated is used to provide social services to the people in hospitals and schools which improve on the quality of life of people. Hospitals provide treatment medical services to the households hence improving on their well-being (Nhamo, 2021). Financial inclusion has a more direct effect in improving households' welfare by facilitating consumption smoothing in the face of anticipated negative shocks which is done through two main channels. One is through enhancing risks, sharing with family and through their social networks. People who are financially included are more likely to send and receive remittances from family and friends than those who are not (Jack, 2014). This helps them to withstand negative shocks. Financially included individuals can easily avail themselves of their networks to obtain short –term support.

Financial usage involves use of financial resources in a financially literacy manner (Morduch, 2021). People that are financially literate access resources and use them or invest in projects that benefit them and their households. This greatly improves the quality of life and well-being of the households. Financial resources are used to start up projects that help sustain livelihoods and improve the well-being of the family. This is done through providing medical care, education and other essentials needed in the day-to-day life. Therefore, financial usage improves the quality of life and house-hold well-being (Hegazy, 2020).

Financial usage increases money circulation in the economy. People borrow money from banks, micro-finance institutions to start-up businesses and projects that increase money circulation in the economy. Through businesses, government generates revenue that is further used to provide social amenities to its population. Financial usage encourages the establishment of more banks and micro-financial institutions. With financial usage, more banks and micro financial institutions are open up to increase financial access to the population and encouraging financial literacy (Blum, 2020).

Financial quality refers to maintaining the value of money that is circulated in the economy. This helps to avoid currency devaluation. Financial quality enables foreign exchange to take place. With financial quality, business men and proprietors are able to import goods from other countries. Such goods are used / help in improving the livelihood and well-being of the people. Financial quality enables international trade and relations to take place. Through financial quality, meaningful international businesses are established and they are assured financial stability in terms of currency value which increases remittances from abroad that boost the economy through economic growth and economic development (Baker, 2020).

The following hypotheses are thus put forward:

$H_1$: *There is a positive significant relationship between financial inclusion and household wellbeing*

$H_{1(a)}$: *There is a significant relationship between financial access and household wellbeing*

$H_{1(b)}$: *There is a significant relationship between financial usage and household wellbeing*

$H_{1(c)}$: *There is a significant relationship between financial quality and household wellbeing*

## 4. Approach

### *4.1 Research Design and Study area*

This study used cross-sectional data obtained from primary school teachers in central and western Uganda. This approach is the most appropriate method of data collection because cross sectional studies are perceived to be relatively inexpensive, faster and easier to conduct, useful for generating and clarifying hypotheses and can lay the groundwork for decisions about follow-up studies (Sekaran 2000). The researchers incorporated standardized measures and statistical techniques associated with the positivism paradigm to obtain in depth responses on the three study variables. Previous research supports the reliability and validity of the self-report measures (Lechner et al. 2006). The researcher distributed questionnaires to 377 respondents and 326 were returned. This survey was conducted from 20 March 2022 to 13 April 2022 amongst teachers working in primary schools founded in central and western Uganda. Cross-sectional survey designs allow a researcher to prove or disprove a hypothesis using large sums of data collected in the shortest possible time (Echambadi, Campbell Argarwal, 2006). The quantitative design was used to construct the structural equation model to be able to test the study hypotheses through multi-variant analysis (Sekaran, 2000).

### *4.2 Study Population*

The study was conducted amongst primary teachers based in central and western Uganda. These teachers in these two zones were chosen as respondents because these regions are seen to be better off than other regions in regard to household wellbeing. The two regions are known for the better wellbeing of teachers at a household level in Uganda compared to other regions (UBOS, 2022). The population census figure for Uganda Bureau of Statistics 2018 shows that 6776 primary schools exist in Uganda with a population of 27,641 teachers based in primary schools in central and western Uganda (World Bank Collection of Department Indicators, 2020). The choice of this study population is based on its predominant rural characterization and development in comparison to other regions in Uganda. The study's unit of analysis is a household while the units of inquiries are teachers who provided information in regard to the constructs under study predicting household wellbeing.

### *4.3 Unit of analysis and Unit of inquiry*

The unit of analysis relates to the concept being studied (Bryman & Bell, 2003). In this study unit of analysis is a teacher from a public primary school. On the hand, the Unit of inquiry (participants) are the respondents who provide information relating to the study variables. The unit of inquiry was a teacher based in primary schools in central or western Uganda.

### *4.4 Questionnaire design and administration*

In this study, the data was collected through self-administrated surveys which were sent through house visits by the lead researcher and two research assistants. Prior to going into the field, the researchers designed a questionnaire to measure financial inclusion (in terms of access, quality and usage) and household wellbeing. Data on household demographics included; gender, date of birth, qualification, marital status, employment, location (urban or rural) among others as seen in the background traits. Using a six-point scale, respondents evaluated different items that were anchored on this scale (Chomeya, 2010). The questionnaire was refined through discussions with experts and professors in the area of house wellbeing before piloting. Minor revisions were made before going to the field to execute the study. Appointments were made in advance before going to primary schools to distribute the questionnaires for data collection. Free prior informed consent was always acquired and anonymity was guaranteed.

### *4.5 Data analysis*

Raw data from the field was captured into SPSS and checked for entry errors, out of range values, missing values, presence of outliers and normality. Outliers and missing values were not a threat to the data. The "missing values analysis" was used to statistically test whether missing values were random or non-random. Missing values were found to be at 0.4% which is within the rule of thumb of being less than 5%, hence were replaced using linear interpolation (Field, 2009; Little & Rubin, 2002). The data was tested for normality assumption and found to exhibit a normal distribution pattern. Additionally, tests included stem and leaf, the PP and QQ plots which confirmed normality of the data.

The study tested the validity and reliability of the research instruments. The content validity index (CVI) for financial inclusion and household wellbeing were 0.86 and 0.84 respectively. These were above the recommended 0.70, hence appropriate for the study (Amin, 2005). Reliability of the research instrument was found to be 0.892 and 0.892 for financial inclusion (usage and quality of finance) and household wellbeing respectively (Cronbach, 1951). These exceeded the minimum acceptance value of 0.70 as recommended by Nunnally (1978). This signified a high reliability of the instrument to be based on in the testing of our research hypotheses (Sarantako, 2012).

## 5. Sample characteristics

A response rate of 86.5 percent was obtained, corresponding to 326 respondents from the 377 questionnaires that were distributed to teachers in central ad wester Uganda. The descriptive statistics show that majority (51.4%) were males while females constituted 48.6%. Most of the respondents were born 1981–2000 and constituted 39.9%. 1965–1980 had 35.7%, 20.0% were born 1946 to 1964 and the least respondents were born between 2001 to date with 4.3%. The majority of the respondents were Diploma holders comprising 39.4% of the respondents. This was followed by Certificates holders (32.4%), Degree holders (15.4%). Those below Certificates constituted 9.1%. Masters 2.6% and the least respondents had PhDs with 1.2%. Most of the respondents were married comprising of (52.9%), this was followed by the singles comprising of 35.5%, divorced comprising of 5.5%, widow comprising of 4.4% and the least category of respondents were widower comprising of 1.9%. Most of the respondents were public servants (employed in government schools) as evidenced by 52.0%, the self-employed are at 40.3% and corporate 7.7% of the respondents.

## 6. Exploratory factor analysis and Confirmatory factor analysis

To assess construct validity, exploratory factor analysis (EFA) was applied prior to conducting CFA. All the items loaded onto their intended factors with factor loadings greater than 0.50 and eigen value greater than 1.0 for each factor. In conducting exploratory factor analyses, principal axis factor analysis with varimax rotation was used to assess the factor loadings and dimensionality of our scales as well as to refine the measures. Considerations for data reduction strategy included the size of the sample in respect to the model being tested. In the end, EFA was used to estimate principal components. The goal of EFA was to find the smallest number of interpretable factors that can adequately explain the correlations among a set of variables. Items that are grouped together are presumed to be measuring the same underlying construct (Kerlinger, 1986). All items that were cross loading on other components with values exceeding 0.5 and items that had loadings below 0.5 were not included in the analysis (Guttman-Kaiser rule). The KMO for our study, variables ranged between 0.878 and 0.810 implying that they were oscillating around only meritorious ranges (Kulcsar, 2010).

**Table 1: EFA for financial inclusion**

| | **Quality of Finance** | **Usage** | **Access** |
|---|---|---|---|
| ICQUA5 | .550 | | |
| ICQUA7 | .758 | | |
| ICQUA8 | .706 | | |
| ICQUA9 | .591 | | |
| ICQUA10 | .512 | | |
| ICQUA11 | .546 | | |
| ICQUA12 | .716 | | |
| ICQUA15 | .598 | | |
| ICUSA9 | | .657 | |
| ICUSA10 | | .594 | |
| ICUSA13 | | .779 | |
| ICUSA15 | | .785 | |
| ICUSA16 | | .555 | |
| ICACC3 | | | .688 |
| ICACC4 | | | .689 |
| ICACC5 | | | .727 |
| ICACC6 | | | .709 |
| ICACC7 | | | .721 |
| **Eigen Values** | **4.184** | **2.405** | **1.684** |
| **Variance %** | **34.922** | **18.559** | **15.728** |
| **Cumulative %** | **34.922** | **53.481** | **69.209** |

**KMO and Bartlett's Test of Sphericity Results**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .878 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 4099.105 |
| | df | 378 |
| | Sig. | .000 |

**Table 2: EFA For Household wellbeing**

| | *Assets* | *Income* | *Education* | *Food* | *Health* |
|---|---|---|---|---|---|
| HWASS1 | .583 | | | | |
| HWASS2 | .561 | | | | |
| HWASS3 | .686 | | | | |
| HWASS4 | .692 | | | | |
| HWASS5 | .786 | | | | |
| HWINC3 | | .663 | | | |
| HWINC4 | | .640 | | | |
| HWINC6 | | .522 | | | |
| HWINC7 | | .540 | | | |
| HWEDU1 | | | .555 | | |
| HWEDU2 | | | .755 | | |
| HWEDU3 | | | .736 | | |
| HWEDU4 | | | .571 | | |
| HWEDU5 | | | .581 | | |
| HWFOD1 | | | | .584 | |
| HWFOD6 | | | | .591 | |
| HWFOD7 | | | | .571 | |
| HWHTH2 | | | | | .765 |
| HWHTH3 | | | | | .699 |
| | **5.393** | **3.921** | **3.179** | **2.633** | **2.329** |
| | **35.951** | **8.713** | **7.064** | **5.851** | **5.174** |
| | **35.951** | **44.664** | **51.729** | **57.580** | **62.754** |

**KMO and Bartlett's Test of Sphericity Results**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.810 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 6975.687 |
| | df | 990 |
| | Sig. | 0.000 |

## 7. Confirmatory factor analysis (CFA)

According to Hair et al. (2010; 2014) and Henseler et al. (2009), in assessing measurement model, researchers need to determine individual item reliability and internal consistency, content validity, convergent validity and discriminant validity. This was examined and confirmed prior to conducting

CFA models. CFA was conducted to assess model fit. Only those dimensions and respective items that were retained at EFA for each variable were used to carry out a CFA model using Analysis of Moment Structures (AMOS). A confirmatory factor analysis using structural equation modelling (SEM) allowed us to determine whether the shared variance-covariance of these variables define our latent construct and provided a more precise way to account for the error variances associated with our variables which, if untested, could lead to biased parameter estimates (Schumacker & Lomax, 2010).

Several goodness-of-fit indices were also evaluated to assess model fit. These indices are of two types: absolute and incremental. As an absolute index, the standardized root mean square residual (SRMR) ranges from 0 to 1. Kline (1998) suggests that values less than 0.10 indicate good model fit. Another absolute fit index, the root mean square error of approximation (RMSEA), was used here to assess lack of fit based upon model misspecification and to provide a measure of this discrepancy per degree of freedom. This fit index ranges from 0 to 1 and values less than 0.08 indicate good fit (Browne & Cudeck, 1993). Incremental fit indices are also recommended (Hoyle & Panter, 1995; Hu & Bentler, 1998, 1999) to assess model fit. The comparative fit index (CFI) developed by Bentler (1990) is one such index and assesses the improvement to fit of the hypothesized model to the null model. The CFI ranges from 0 to 1 and values greater than 0.90 indicate good fit (Kline, 1998). In this study, the researchers considered indices with values greater than 0.95. Kline’s (1998) cut offs for the supplementary fit indices should not be interpreted too rigidly.

*The study notes that the dimension of financial access was eliminated at CFA and thus was not subjected to hypothesis testing.*

The fit indices indicate that the measurement models of financial inclusion and household wellbeing present acceptable fit with the data as indicated in the respective figures below with their fit indices.

**Fig. 1: Measurement model for financial inclusion**

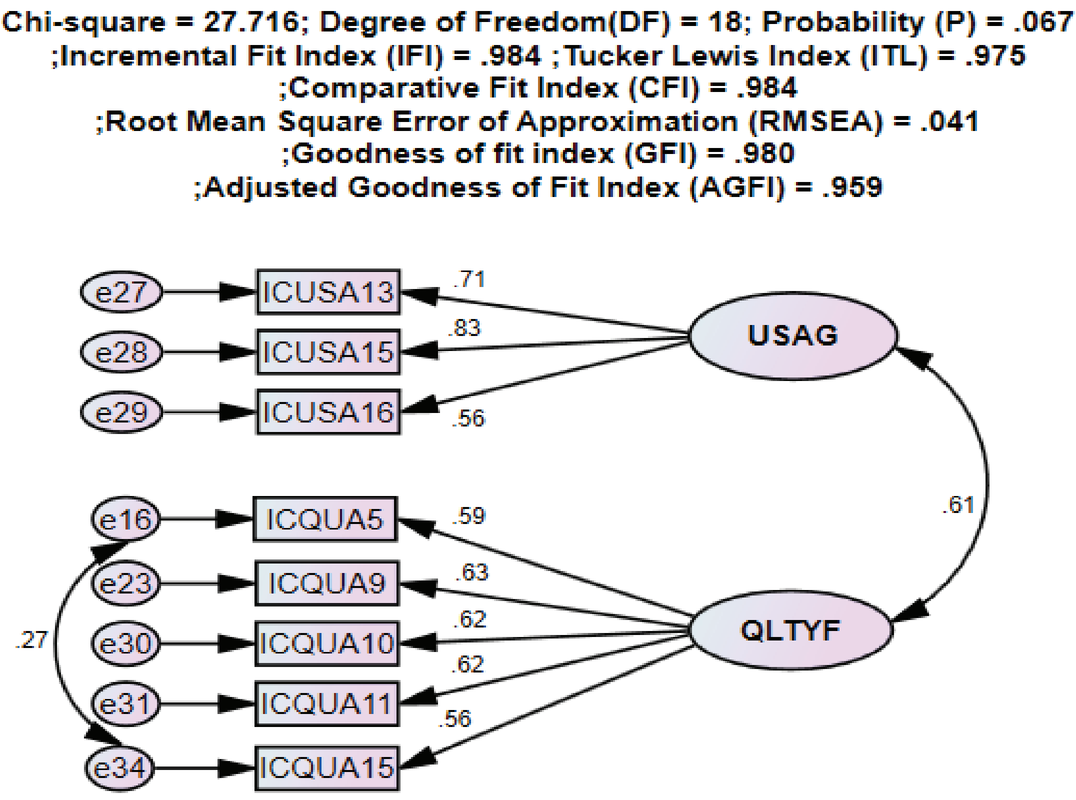

**Fig. 2: Measurement model for household wellbeing**

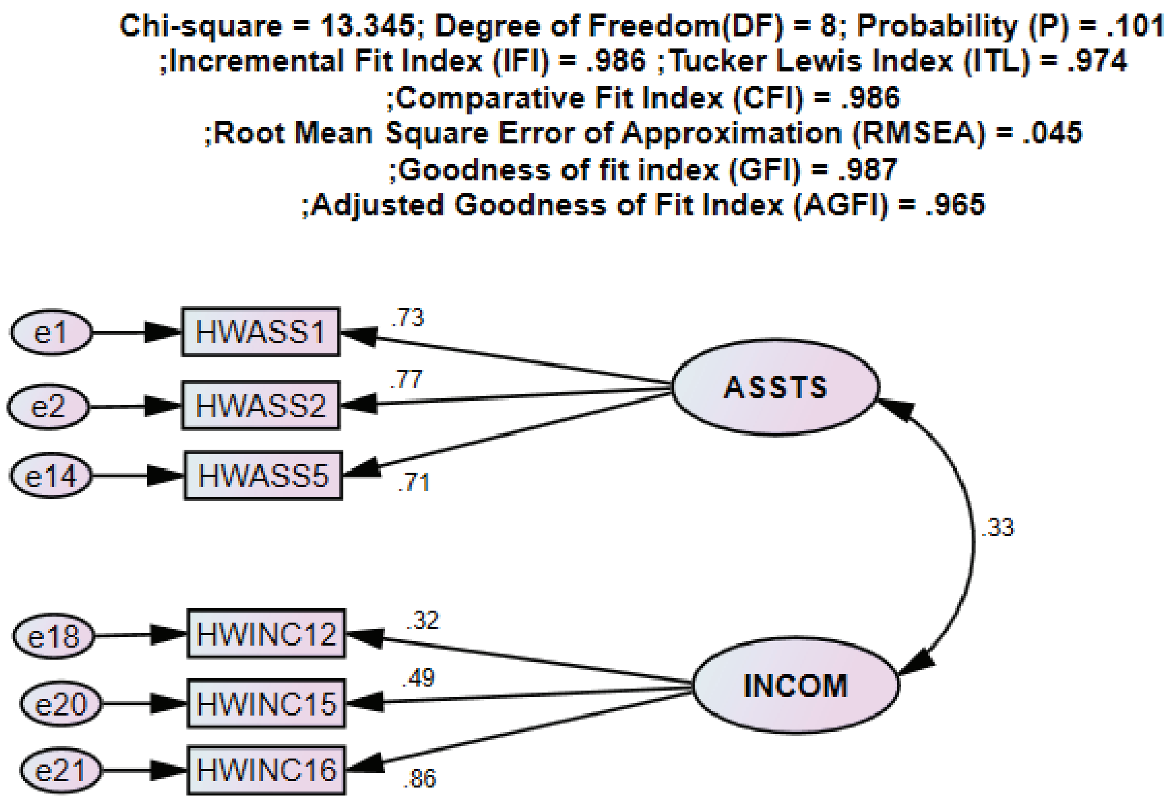


**Fig. 3: Structural Model for Financial Inclusion and Household Wellbeing**

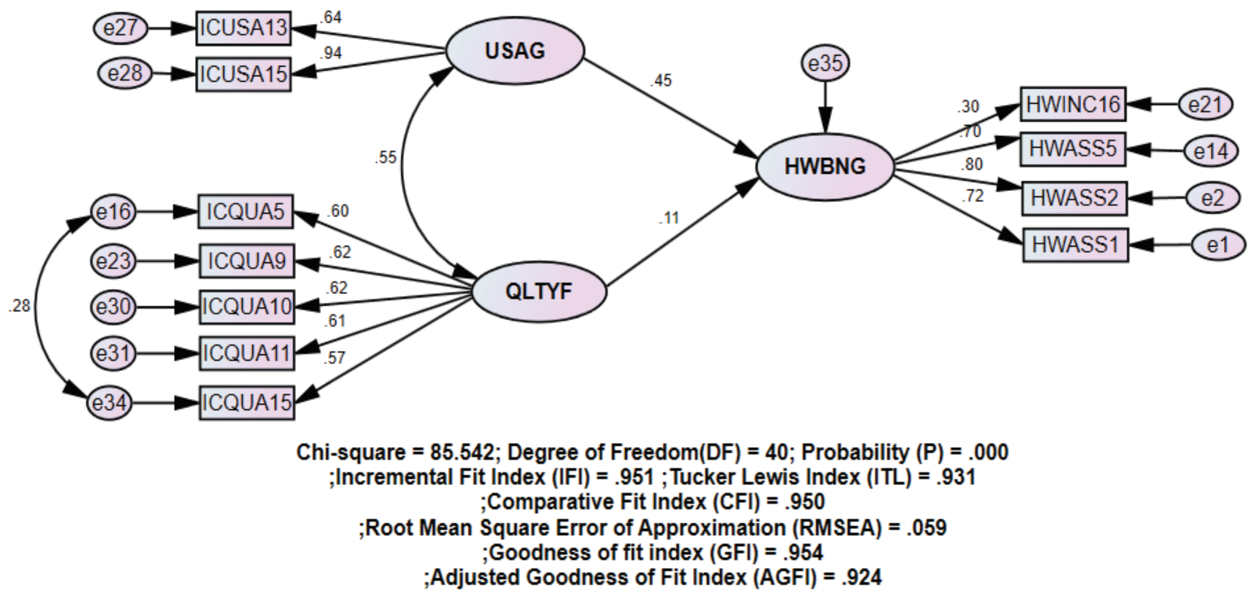

**Table 3: Structural Model Estimates for Financial Inclusion and Household Wellbeing**

| | | | B | S.E. | β | C.R. | *Sig.* | Verdict |
|---|---|---|---|---|---|---|---|---|
| HWBNG | ◄▬ | QLTYF | .057 | .048 | .350 | 4.191 | *** | Supported |
| HWBNG | ◄▬ | USAG | .213 | .057 | .449 | 3.729 | *** | Supported |
| | ****p* < .01 | | | | | | | |

## 8. Empirical results

### *8.1 Hypothesis Testing on Relationships*

The research results above show a significant positive relationship between quality of finance and household wellbeing (β = .350, t-value = 4.191, p < .05). Furthermore, results confirm that there is a significant positive association between financial usage and household wellbeing (β = .449, t-value = 3.729, p < .05). These findings are discussed below.

### *8.2 Discussion*

### *8.3 Financial inclusion and household wellbeing*

The holistic development of an economy requires it to have an inclusive financial services system that facilitates the social uplifting of the underprivileged in a country by giving them access to financial products and services and extending credit facilities. Financial inclusion facilitates everyday living, and, when people can use the available financial products and services, such as savings, credit, and insurance, they can pursue long-term goals, such as starting and expanding a business, investing in education and health, and saving money to deal with any emergencies, thereby improving the overall quality of their lives (Sharma, 2022). Financial inclusion is the sustainable provision of affordable financial services that bring the poor into the formal economy (United Nations, 2018).

Financial inclusion as a process that ensures the ease of access, availability, and usage of the formal financial system for all members of society. An inclusive financial system has several merits, which include facilitating the efficient allocation of productive resources that can reduce the cost of capital, access to appropriate financial services that can significantly improve the day-to-day management of finances and reduction in the growth of informal sources of credit (e.g., money lenders), which are often found to be exploitative. Thus, an all-inclusive financial system enhances efficiency and household well-being by providing avenues for secure and safe saving practices and by facilitating a full range of efficient financial services (Sarma & Pais, 2008).

***$H_{1(b)}$: There is a significant relationship between financial usage and household wellbeing***

The results tested and confirmed that *"There is a significant relationship between financial usage and household wellbeing"*. This implies that a positive change in financial usage promotes household wellbeing. Financial usage includes the ability to perform transaction, use credit, and investment products and services from formal financial institutions. Financial usage is a necessary component of strong household financial well-being. Wellness in terms of quality of life, living standards and empowerment are all aspects of the multifaceted concept of wellbeing. According to these factors, wellbeing can be considered as both an objective (economic and social components) and a subjective (psychological aspects) concept (Dolan et al., 2008). A number of researchers have concentrated on the measurable aspect of wellbeing in terms of education, assets, food, health and income. Financial access is a necessary component of household financial well-being focusing on having control over finances, capacity to absorb financial shocks, meeting financial goals, and having financial freedom to make life-enhancing choices (Consumer Financial Protection Bureau, 2015). That is, if households have and use safe, affordable, convenient financial products, particularly a bank account, they have financial access to the financial system.

Usage of financial services is considered essential for the economic well-being of households in low-income circumstances. Savings, payments, and credit services facilitates household -level consumption smoothing, help secure against risk, allow investment in education and other forms of capital. A study on an empirical foundation of financial inclusion by Honohan & King (2012), demonstrate that income and education are the key demand – side determinants of access to formal banking. In their study they note that, in the short term its evident financial literacy programs may be effective interventions for greater financial inclusion and thus enhanced house hold well-being.

Financial inclusion through its dimension of access to finances positively demonstrates a positive association with household well-being. This is evident in the study of (Sakyi-Nyarko et al., (2022) on financial inclusion household well being conducted in Ghana, the study notes that the other plausible channel through which financial inclusion directly affects well-being is through the access and provision of loan and saving products. The study further contends that being highly financially included increases one's chances of accessing the credit, thus increasing the availability of cash at one's disposal. In addition, the loan and/or saving product could be invested in income-generating activities, so that it becomes hard for a financially included individual to go without cash income at any point in time. Additionally, a study by Baye, (2014) in Cameroon on household well-being and access to credit, evaluated the determinants of borrowing, effects of borrowing on economic well-being, and potential disparity in responses by sources of well-being, location and gender. The survey adopted a range of survey-based econometric methods that purge parameter estimates of potential intra-cluster correlation, endogeneity and sample selection biases. In his study, he notes that access to credit/borrowing is strongly associated with household economic well-being irrespective of source of well-being.

In other words, rural well-being is significantly more contingent on credit access than urban well-being. The study further indicates that male-headed households rely more significantly on credit access to enhance well-being than their female counterparts. Also, higher levels of education associate more significantly with well-being enhancement than lower levels, more so for female-headed households than their male counterparts. Thus, to sustain the impact of credit on well-being, accompanying measures availability of sufficient funds, quality services by lenders, physical infrastructures, healthcare and training are required.

***$H_{1(c)}$: There is a significant relationship between financial quality and household wellbeing***

The findings upheld the hypothesis and confirm that financial quality relates with household wellbeing. The quality dimension of financial inclusion relates to the relevance of the financial service or product to the lifestyle needs of the consumer (Siqueira & Hans, 2012). In the present research context, "quality" rotates around the extent to which available formal financial services and instruments are relevant to the lifestyle needs of the individuals (Maheswari, 2016; Ghosh, 2019). The quality dimension is described by one strand of literature in terms of the quality of the products and services offered by financial service providers whereas another strand defines it in terms of barriers to financial inclusion.

In line with this study, Kumari, (2021) conducted research that focused on dimensions of financial inclusion based on the world bank financial inclusion index developed by Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess (2012). The study was designed based on deductive approach in positivist research paradigm. The Research findings revealed that quality made significant impact to determine the financial inclusion and the impact is reconnoitered as the most significant dimension among all the four dimensions. Those measures are access, usage, quality and impact. Additionally, in the study that investigated financial inclusion and household well-being in Ghana among the low-income earners and disadvantaged groups, revealed that, quality dimension of financial inclusion shows a strong marginal effect on food consumption, in that Individuals who are satisfied with their financial products and services are 22.3% more likely to never go without food. The study results further indicated that, among the dimensions of financial inclusion, quality dimension received the highest weight clarifing that it is the most important financial inclusion dimension; therefore, its strong marginal effect on food consumption is expected. Also, they note that the quality dimension has the strongest effect on household wellbeing, that's increasing one's chances of never going without medicine or medical treatment by approximately 20% (Sakyi-Nyarko et al., 2022).

## 9. Conclusions and implications of the study

The study was based on minority influence theoretical review that provides the conceptualization of the construct of financial inclusion as a predictor of household wellbeing. The first notable theoretical implication of this study is that it contributes to the ongoing wellness debate. One of the key gaps in the minority influence theory is that the theory ignores the fact that poor people are marginalized and the levels of minority differ from society to society which the theory tends to ignore. Therefore, future studies should examine other theories (like resource-based view, network and personal initiative theories) that influence household wellbeing. The quantitative approach was adopted, neglecting qualitative methodology. The views of respondents, which would have informed us of the reasons why respondents held certain views about financial inclusion and wellbeing were neglected. In addition, the study adopted a cross-sectional approach. This implies that the views of individuals that change over time were not considered. The same study should be conducted using the longitudinal approach.

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# IMPORTANCE OF ORGANISATIONAL CULTURE FOR EFFECTIVE KNOWLEDGE MANAGEMENT IN LIBRARIES: EXAMPLE OF THE CITY LIBRARY OF POŽEGA

Feldvari, Kristina, *associate professor, orcid: https://orcid.org/0000-0003-2128-3612, Faculty of Humanities and Social Sciences, Croatia, kfeldvari@ffos.hr*

Petr Balog, Kornelija, *proffesor, orcid: 0000-0002-4970-9446 , Faculty of Humanities and Social Sciences, Croatia, kpetr@ffos.hr*

Bošnjak, Bernarda, *student, Faculty of Humanities and Social Sciences, Croatia, bbosnjak@ffos.hr*

***Abstract:***

***Purpose:***

*This research aimed to explore and assess the organizational culture of the City Library of Požega using Goffee and Jones' Double S Cube Model.*

*Design/Methodology/Approach:*

*A quantitative approach was adopted, utilizing a structured questionnaire to measure sociability and solidarity within the library. All 18 employees participated in the study, with their responses analyzed to classify the profile of organizational culture and determine whether it was perceived as positive or negative.*

*Findings:*

*The study revealed that 17 respondents identified the library's organizational culture as communal, while one respondent assessed it as mercenary. Among those who perceived the culture as communal, there were mixed evaluations regarding its positivity. No significant differences were found between managerial and non-managerial staff or between older and younger employees in how the culture was assessed.*

*Originality:*

*This research offers a novel analysis of organizational culture in a public library. The results can help the library leadership better understand the cultural dynamics within the organization, enabling them to create strategies that enhance teamwork, communication, and employee relations, while guiding organizational changes that support both employee well-being and institutional success.*

***Keywords:*** *organizational culture, Goffee and Jones, sociability, solidarity, knowledge management, The City Library of Požega.*

## 1. Introduction

Libraries are institutions whose mission is to collect, organize, provide access to, and preserve valuable human knowledge that has been published on some material carrier. However, what libraries often forget to do is manage the knowledge about the work and business they themselves generate. In the business world, the importance of knowledge management (KM) activities is recognized as one of the key factors for their competitiveness in the market (Dalkir, 2011). Knowledge has been identified as an extremely important component embedded in the products and services of every organization, as well as being an integral part of the tacit knowledge of their employees (Dalkir, 2011). Institutions that successfully manage their knowledge have success in various areas such as customer services, cost reduction for employees and infrastructure, making better decisions, business innovation, quick and efficient conflict resolution, and efficient transfer of best practices (Davenport and Klahr, 1998; Hansen and Oetinger, 2001; Skyrme and Amidon, 1998).

However, KM also brings a number of challenges that organizations must overcome. One of the major challenges is creating a positive organizational culture that promotes the sharing of existing and the creation of new knowledge within the organization. According to Schein (1999, p. 385), organizational culture is defined as a set of organizational assumptions that a certain group (employees) has invented, discovered, or developed in order to solve certain business problems. Successful solutions that are considered valid are passed on to new members of the collective as the correct way of thinking, feeling, and seeing things. Organizational culture is important because of its influence on beliefs, values, and work systems, and it can either encourage or hinder the creation and sharing of new organizational knowledge (Janz and Prasarnphanich, 2003).

In Croatian librarianship, there are several papers on the subject of organizational culture in libraries, but there are no papers that address KM, especially from the context of organizational culture. The aim of this study is therefore to explore what type of organizational culture exists in the City Library of Požega and whether the existing culture has positive effects on the creation and sharing of organizational knowledge in the institution.

## 2. Organisational culture and KM

Organizational culture is considered to be a key factor for successfully managing the knowledge of any institution. However, very often, culture is a set of behaviours and operating principles that nearly everyone knows, but which are not written down (Wellman, 2007).

According to Schein (1992), there are three levels that define an organizational culture. At the lowest level are the so-called artifacts - these are visible characteristics of organizational culture such as uniforms, seating arrangements, or employee jargon. At the middle level are values - strategies, goals, and the philosophy of the work organization. And, finally, at the highest level are assumptions and beliefs - a set of unspoken beliefs that employees often haven't even consciously realized, beliefs that are unquestioned and taken for granted. In case the organisational culture needs to be changed, changes must start at the highest level (which is also the most difficult to change) and then trickle down to lower levels. If changes are limited only to the lowest level, level of artefacts, the change in organizational culture generally won't be successful.

Pettigrew (1979) uses the term 'cultural artefacts' for symbols, language, ideology, belief, rituals, and myths and believes that employees use those cultural artefacts to explain their working environment to themselves.

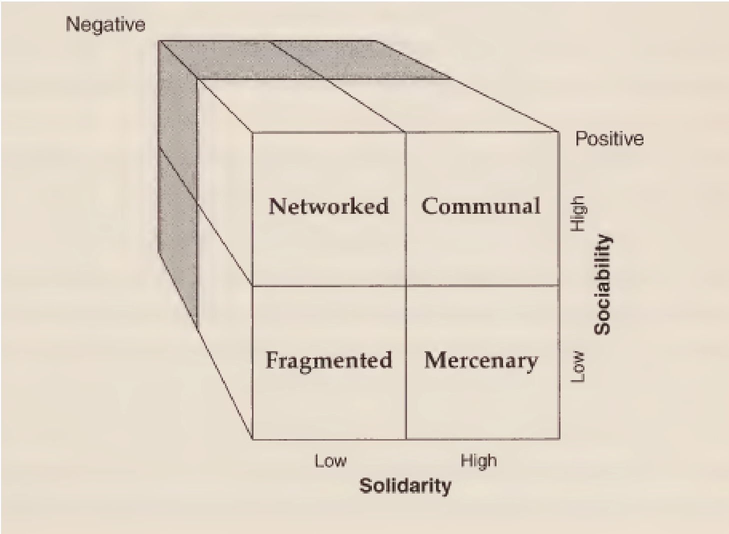
Organisational knowledge can be captured in various ways. Wellman (2007) suggests to use organisational *culture*, which usually captures lessons repeatedly learned by the organisation. *Older and experienced employees* are valuable in the sense that they have accumulated a great deal of experience about the organisation and its procedures. Organisations that have lost valuable knowledge set out to construct archives in which they store and retrieve their organisational knowledge. And finally, (formal) *processes* can serve as both repositories and disseminators of lessons learned.

As it was already established, positive organisational culture is very important for organisational success, but it is necessary to be able to measure the present organisational culture in order to manage it and correct possible problems and threaths. One way of exploring organisational cultures is to classify them into types (Dalkir, 2011). Goffee and Jones (1998) identified four types of organisational culture in their Double S Cube model (Fig. 1). Their classification is based on two dimensions: sociability and solidarity. *Sociability* refers to the friendliness among members of the organization. It reflects the extent to which relationships are based on mutual respect, care, and social interactions. High sociability means people get along well, are supportive, and maintain personal friendships within the organization. However, high sociability can also be problematic, as it may lead to tolerating poor performance or avoiding difficult conversations, such as terminations, due to personal friendships. *Solidarity* refers to the community's ability to pursue shared objectives efficiently and effectively. It measures the degree to which members are united by common goals and are willing to cooperate to achieve organizational success. High solidarity indicates a focus on performance, shared goals, and a strong sense of purpose. The downside is that excessive focus on goals can lead to neglecting the individual needs or interests of employees.

Based on these dimensions, Goffee and Jones (1998) classified organisational culture into the four types. *Networked culture* (high sociability, low solidarity) is characterized by a friendly and relaxed environment where personal relationships and social interactions are highly valued. However, there might be less emphasis on performance and achieving common goals. *Communal culture* (high sociability, high solidarity) combines a strong sense of camaraderie with a shared commitment to organizational objectives. Members feel like part of a family and work together cohesively towards common goals. In *Fragmented culture* (low sociability, low solidarity) employees are more isolated, with few personal connections and a lack of collective purpose. There is minimal interaction and cooperation among members, which leads to a more disjointed and segmented environment. And, finally, *Mercenary culture* (low sociability, high solidarity), which focuses on achieving goals and high performance with less emphasis on personal relationships. The environment is competitive, and members are driven by results, often at the expense of social bonds.

In the Double S Cube Model, the vertical axis represens sociability, while the horizontal axis represents solidarity. The shaded section on the back of the cube represens negative forms of culture, while the front section represented positive forms of culture. Using this model, it was possible to determine whether the organizational culture was networked, communal, fragmented, or mercenary and whether the culture was positive or negative (Goffee and Jones, 1998: 25-43).

**Fig. 1. Classification of organisational culture (Double S Cube Model) by Goffee and Jones**




*Source: Goffee, R. and Jones, G. (1998)*

Goffee and Jones' taxonomy of organizational culture was used in other studies, such as a study on a state-owned Greek organization (Malagas, Gritzalis, Nikitakos, and Fragoudaki, 2017), the assessment of the organizational culture of a medical school's family medicine department (Calzada and Shaw, 2011), or the examination of the impact of organizational culture on attitudes toward organizational change (Rashid, Sambasivan, and Rahman, 2004). However, this is the first time that this approach was used to measure the effect of organisational culture on the effective KM within a library setting.

## 3. KM in libraries

Library and information science has twofold approach to KM, which results from the complex nature of knowledge. The first approach support authors such as Gorman (2004) and Koenig (1997) who believe that it is just a new name for what librarians have been doing for years or Wilson (2002) who states that KM is nothing more than information management (IM) in libraries. Another set of authors (e.g. Middleton, 1999; Davenport, 2004; Gandhi, 2004), however, regards KM as broader in scope and different to library and IM. Those authors accept that IM is an important component of KM, but the latter is also concerned with management and with organizational issues, including an emphasis on less tangible and elusive resources like human expertise. KM, in contrast to IM, deals with **unstructured, tacit knowledge** (Schwarzwalder, 1999; Koenig, 1997), emphasizes **organisational learning** (Gandhi, 2004), collects information both from external and **internal** sources (Gorman, 2004; Koenig, 1997). And finally, wheras both knowledge and IM are greatly interested in information sharing, only KM is also concerned with information **creation** (Davenport, 2004).

Having in mind those differences, KM in libraries offers various benefits – (1) it facilitates better communication between staff and management and fosters a collaborative culture centered on knowledge sharing; (2) it enables the development of user-centric solutions and streamlines operations by identifying and eliminating redundant processes; (3) and, reduces response times to user inquiries and service requests. All these benefits lead to reduced costs, increased performance and a more satisfied library staff, as well as the user (Islam, Agarwal and Ikeda, 2015).

KM was mostly explored in academic libraries. Similarly, organisational culture and its role for effective KM was also primarily studied within the framework of those type of libraries (Porumbeanu, 2010; Ugwu and Ejikeme, 2023).
The few studies on KM in public libraries were either general in nature (Teng and Hawamdeh, 2002), or focused on topics such as the maturity of KM (Shafee, Moradi and Jafari, 2019; Kianrad, Andayesh and Mahboub, 2024), knowledge sharing (Biranvand, Seif, and Khasseh, 2015; Kaffashan Kakhki, Rajabi, Naji, AsemanDoreh and Harati, 2019), the role of social media (Forcier, Rathi and Given, 2013) or service innovation (Ghavami, Kazemi and Ghasemizad, 2015), among other topics. This is the first paper which examines the relationship between KM, organisational culture in a public library in Croatia.

## 3. Context of the study

The City Library of Požega is the central public library and the regional library for the Požega-Slavonia County. Founded in 1845 as *Lectoria societas*, the City Library of Požega has a long history of supporting cultural and educational progress. A major renovation project, running from 2006 to 2020, culminated in the reopening of the expanded library in 2021, marking its 175th anniversary. The library's mission is to provide citizens with access to reading, learning, and the development of personal cultural, spiritual, and democratic potential. It also aims to familiarize the public with the benefits of modern technology and facilitate its use, while offering opportunities for creative and quality leisure activities, regardless of age, gender, social status, nationality, religion, or race. Through its programs and services the library supports the social inclusion of marginalized groups, promotes Croatian literature and heritage, and strengthens the values of a multicultural society. The City Library of Požega consists of several departments, including the Literature Department, Children's Department, Scientific and Study Department, and Youth and Multimedia Department. In addition, it operates various services, such as General affairs, County library development, Acquisition and cataloging, Program development, User information and lending, and Technical Services. The library also maintains three satellite branches (Gradska knjižnica Požega, n.d.).

## 4. Study

### *4.1. Research methodology, instrument, and sample*

The purpose of this research was to assess the organizational culture of the City Library of Požega using a questionnaire based on the Double S Cube model (Fig. 1) by Goffee and Jones (1998) described earlier in this paper. They argued that the character of an organization could be determined by identifying its sociability and solidarity.
Measurement of organisational culture according to Goffee and Jones consists of the application of four methods - observational checklist, a questionnaire, analysis of the questionnaire findings and critical incident analysis. Observational checklist categorizes the four main cultural types by examining physical space, communication, time management, and personal identity expression. Physical space reveals clues about status and hierarchy, such as open-plan offices versus private rooms, who has larger spaces, or how shared areas like coffee rooms are used.
Communication patterns offer insight into hierarchy and openness. Frequent, informal chats may suggest a collaborative culture, while formal, hierarchical communication points to a more structured environment. Time usage is another key indicator. Whether long hours are expected or flexibility is encouraged reflects organizational values. Finally, personal identity expression, such as dress codes, indicates loyalty and engagement. Employees may identify strongly with their department or the

broader organization, visibly expressing this connection through branded clothing or other markers. The second tool is the questionnaire. This questionnaire asks respondents to consider twenty-three statements about their organization and indicate how strongly they agree with each statement. The third tool builds upon the results of the questionnaire, identifying the organizational culture type and then determining whether it manifests in a positive or negative form. Finally, the fourth tool involves critical incident analysis, which presents ten scenarios for each cultural type. Respondents are required to identify how individuals in the organization would react in each situation. The results of this exercise further validate the identified culture and assess its balance of positive and negative behaviors (Goffee and Jones, 1998: 41-71).

For this research, methods two and three were used, while the observational study and critical incident analysis were not utilized. The questionnaire was translated into Croatian and adapted for use in cultural institutions such as libraries and for the purposes of our study. It consisted of six sections. In the first section of the questionnaire (the first four questions), respondents were asked about demographic data (age, job responsibilities and position within the library)

The second section contained twenty-three statements which helped determine the type of organizational culture present in the library. A five-point Likert scale (1 - strongly disagree, 5 - strongly agree) was used to measure agreement. To determine the library's culture, the Scoring key (Fig. 2) provided by Goffee and Jones (1998) was applied. According to Goffee and Jones' model, organizational culture is defined by sociability and solidarity. Sociability is assessed through statements 2, 4, 6, 8, 10, 12, 13, 15, 17, 19, 21, and 23, while solidarity is measured through statements 1, 3, 5, 7, 9, 11, 14, 16, 18, 20, 22, and 23. The level of agreement on these statements is summed, resulting in two scores: one for sociability and one for solidarity (Fig. 2), and the results are plotted on a coordinate system to determine the library's culture type[1].

After identifying the organizational culture, the next step (third section) was to determine whether it was positive or negative. This was done by analyzing a set of twenty-four statements (statements 1-6 relate to networked culture, 7-12 to mercenary culture, 13-18 to fragmented culture, and 19-24 to communal culture) with respondents indicating their level of agreement on a five-point Likert scale (1 - strongly disagree, 5 - strongly agree)[2]. For example, if the results obtained from the second section in the questionnaire indicated that the library had a networked organizational culture, statements 1 to 6 in the third section of the questionnaire were examined. If respondents rated statements 1, 3, and 5 higher than 2, 4, and 6, the culture was negative; if 2, 4, and 6 were rated higher, the culture was positive (Fig. 3).

Our research was guided by the following research questions:

1. Which organisational culture type prevails in the City Library of Požega?

1a. Is the prevailant organisational culture type dominantly positive or dominantly negative?

2. Are there differences in perception of organisational culture between employees with and without managerial function?
3. Is the perception of the type of organisational culture affected by the age of the respondent?

    3a. Do younger employees view the organisational culture as more positive than their older colleagues?

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[1] For example, Respondent 3 (R3) gave the following level of agreements for sociability: 3+4+2+4+5+3+3+5+4+1+5+3=42, and for solidarity: 5+4+3+3+4+4+3+4+5+5+5+3=48. When we plot these results on the coordinate system, we can see that R3 determined the organizational culture in the library as communal.

[2] For example, R3, who determined that the organizational culture in the library was communal, gave the following level of agreement for statements 19, 21, and 23: 4+2+5=11, while for statements 20, 22, and 24, the level of agreement was 3+3+3=9. The total is therefore higher for statements 19, 21, and 23 than for statements 20, 22, and 24, indicating that R3 assessed the communal organizational culture as positive.

**Fig. 2. Scoring key for questionnaire**

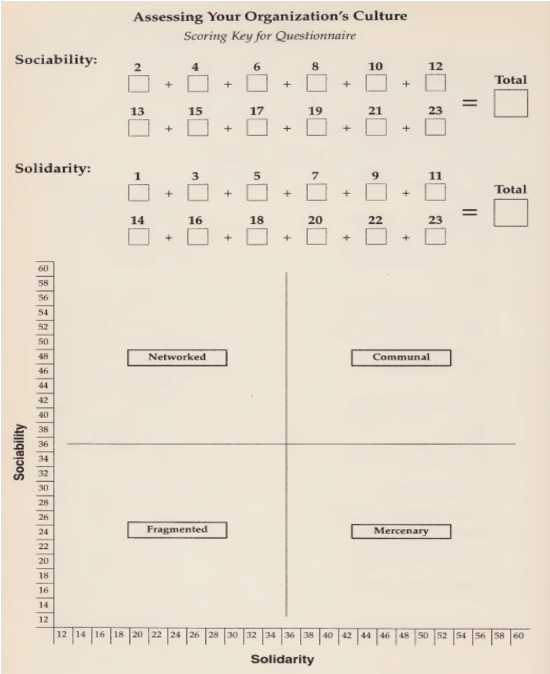
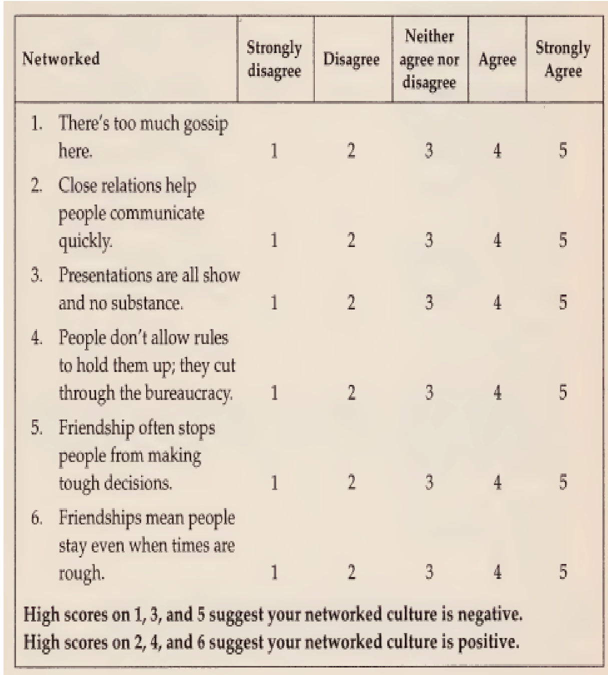



**Fig. 3. Is culture positive or negative - example statements for networked culture**



| Networked | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| 1. There's too much gossip here. | 1 | 2 | 3 | 4 | 5 |
| 2. Close relations help people communicate quickly. | 1 | 2 | 3 | 4 | 5 |
| 3. Presentations are all show and no substance. | 1 | 2 | 3 | 4 | 5 |
| 4. People don't allow rules to hold them up; they cut through the bureaucracy. | 1 | 2 | 3 | 4 | 5 |
| 5. Friendship often stops people from making tough decisions. | 1 | 2 | 3 | 4 | 5 |
| 6. Friendships mean people stay even when times are rough. | 1 | 2 | 3 | 4 | 5 |

**High scores on 1, 3, and 5 suggest your networked culture is negative.**
**High scores on 2, 4, and 6 suggest your networked culture is positive.**

Source of Fig.3 and Fig. 4: Goffee, R. and Jones, G. (1998)

The research sample included all employees of the City Library of Požega (18 employees), specifically staff from all departments: the Children's Department, Youth and Multimedia Department, Scientific and Study Department, Literature Department, Central Lending and Information Desk, Acquisition, Cataloging, and Conservation Services, County Library Development Department, Administrative Office, Director, and Cleaning Staff. The research sample consisted of seven department managers, two cleaning staff, a secretary, and the remaining eight employees were librarians without managerial roles.
The research was conducted on December 8, 2023, at the premises of the City Library of Požega. The respondents were coded as Respondent (R1) to Respondent (R18) to ensure anonymity. Furthermore, for the sake of anonymity, the head of the library's responses were grouped and analysed together with the responses of other library departments' heads.

## 5. Results

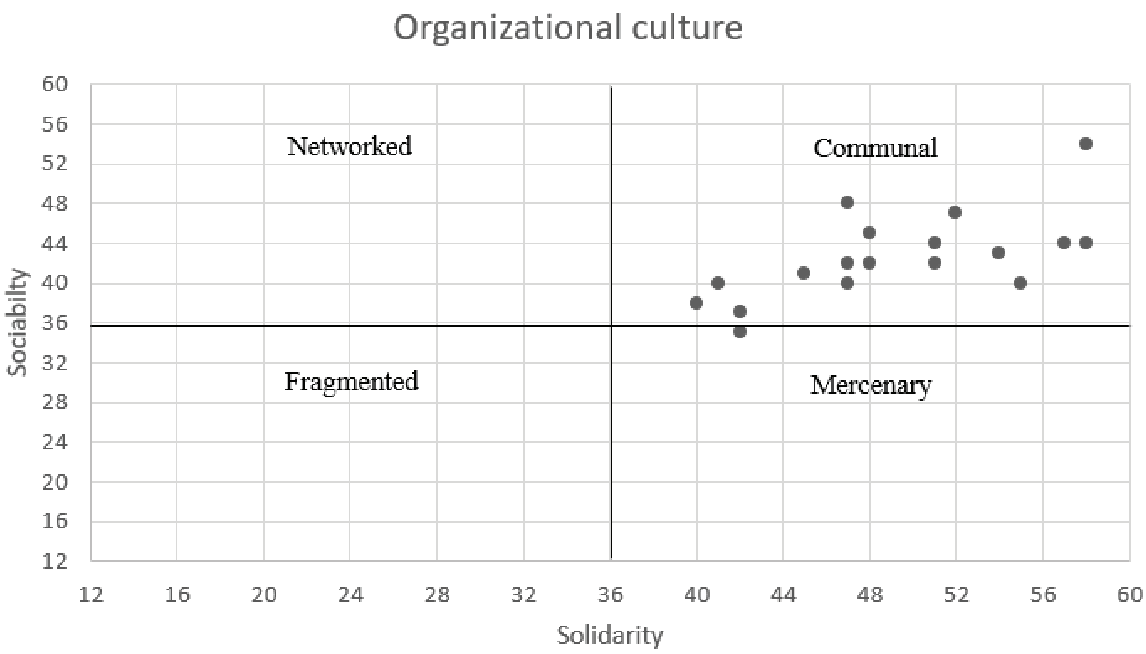
The results, as shown in Table 1, indicate that 17 respondents (R1-R17) identified the organizational culture of the library as communal, while one respondent - R18 classified the culture as mercenary. Regarding the assessment of whether the communal culture is positive or negative, eight respondents (R1, R6, R8, R9, R11, R13, R14, R16) evaluated the communal culture as positive, while five respondents (R2-R5, R12) evaluated the culture as negative. For four respondents (R7, R10, R15, R17), it was not possible to determine whether the communal culture was positive or negative, as their scores for both positive and negative statements were equally
high. Respondent R18 who identified the organizational culture as mercenary, evaluated this culture as positive. Table 1 also presents the individual responses of each participant regarding their managerial role (head of a department and/or head of the library), sociability and solidarity scores, the identified organizational cultural profile, and the evaluation of whether the organizational culture was perceived as positive or negative.

**Table 1. Overview of respondents' managerial role, sociability and solidarity scores, organizational cultural profile, and positive/negative evaluation of organizational culture**

| RESPONDENTS | MANAGERIAL ROLE | SOCIABILITY | SOLIDARITY | ORGANIZATIONAL CULTURE PROFILE | POSITIVE/ NEGATIVE |
|---|---|---|---|---|---|
| R1 | No | 40 | 55 | communal | 12/10 - positive |
| R2 | No | 47 | 52 | communal | 12/13 - negative |
| R3 | Yes | 42 | 48 | communal | 9/11 - negative |
| R4 | No | 41 | 45 | communal | 7/11 - negativna |
| R5 | No | 45 | 48 | communal | 12/13 - negative |
| R6 | No | 38 | 40 | communal | 9/6 - positive |
| R7 | No | 42 | 51 | communal | 12/12 – positive and negative |
| R8 | No | 40 | 41 | communal | 11/10 - positive |
| R9 | No | 37 | 42 | communal | 11/10 – positive |
| R10 | Yes | 43 | 54 | communal | 12/12 – positive and negative |
| R11 | Yes | 54 | 58 | communal | 15/11 – positive |
| R12 | No | 44 | 57 | communal | 9/10 – negative |
| R13 | Yes | 44 | 51 | communal | 9/7 – positive |
| R14 | Yes | 48 | 47 | communal | 14/11 – positive |
| R15 | Yes | 42 | 47 | communal | 10/10 – positive and negative |
| R16 | Yes | 44 | 58 | communal | 13/12 – positive |
| R17 | No | 40 | 47 | communal | 10/10 – positive and negative |
| R18 | No | 35 | 42 | mercenary | 8/4 - positive |

Figure 4. presents the results in a coordinate system, which also shows that only one repondent (R18) assessed the culture as mercenary, while the rest of the respondents (R1-R17) identified it as communal.

**Figure 4. Organizational culture profile of the City Library of Požega based on sociability and solidarity scores**



Respondents were also asked whether they held a managerial role. The results show that seven respondents (R3, R10, R11, R13, R14, R15, R16) hold a managerial position. These include the head of the library and heads of the library departments (the Literature department, the Acquisition department, the Scientific and study department, the Children's department, the User information and Lending services for fund distribution, and the Acquisition, cataloging, and conservation services). Respondents were not required to specify which department they manage to maintain anonymity, and one respondent chose to remain anonymous. All seven employees with managerial roles assessed the organizational culture as communal, while of the remaining eleven employees without managerial roles, ten of them (R1, R2, R4-R9, R12, R17) also assessed the organizational culture as communal, and only one employee (R18) assessed it as mercenary (Fig. 5).

**Fig. 5. Organizational culture profile according to employees with and without managerial role**

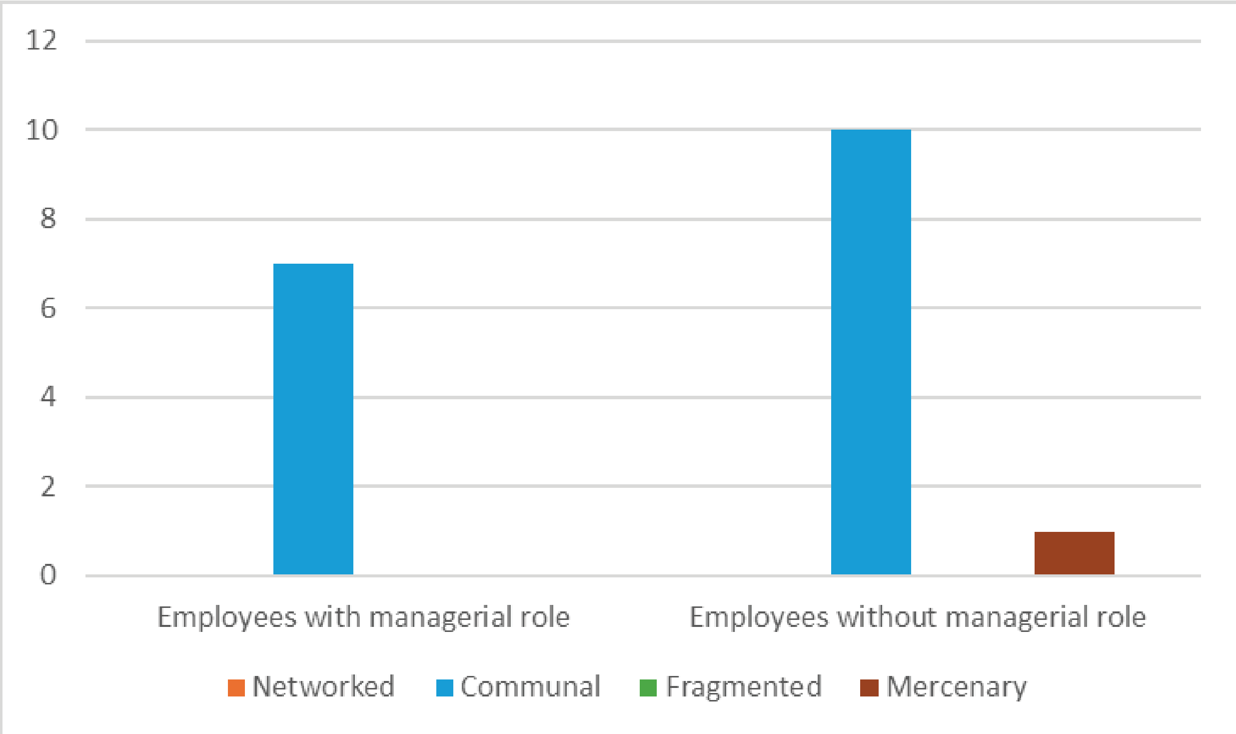
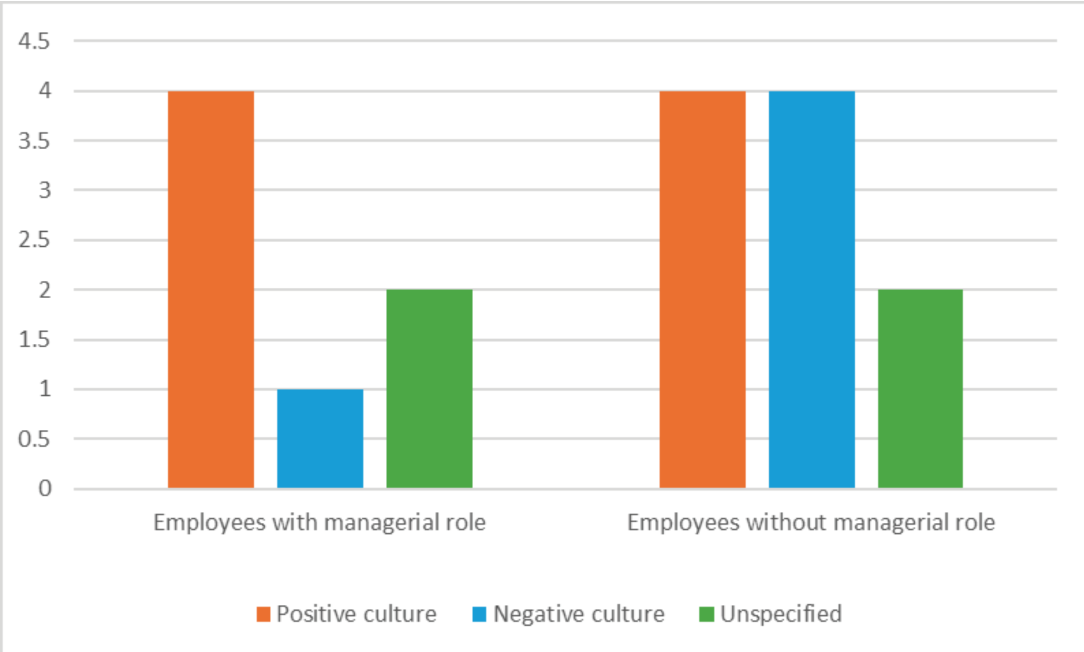



Figure 6 shows how respondents with and without managerial roles evaluated the communal organizational culture. Of the seven respondents with managerial roles, four (R11, R13, R14, R16) evaluated the communal organizational culture as positive, one respondent (R3) evaluated it as negative, and the remaining two respondents (R10, R15) gave equally high ratings for both positive and negative statements, making it impossible to determine whether the culture is positive or negative. Of the other ten employees without managerial roles (R1, R2, R4-R9, R12, R17), four (R1, R6, R8, R9) evaluated the communal organizational culture as positive, four (R2, R4, R5, R12) as negative, and the remaining two respondents (R7, R17) gave equally high ratings for both positive and negative statements, making it impossible to determine whether the culture is positive or negative (Fig.7). Respondent R18, who assessed the organizational culture as mercenary, evaluated this culture as positive (Table 1).

**Fig. 6. Evaluation of communal organizational culture by employees with and without managerial roles**




Furthermore, the goal was to determine whether younger employees assessed the organizational culture of the library more positively than older employees. Employees born after 1978 were considered younger employees. Eight respondents (R4, R5, R7, R9, R13, R14, R15, R18) were born after 1978 (younger than 46), nine respondents (R1, R2, R3, R6, R8, R10, R11, R12, R17) were born before 1978 (46+), while one respondent (R16) did not disclose their birth year. All nine respondents born before 1978 assessed the organizational culture as communal, while of the eight respondents born after 1978, only one - R18 assessed the organizational culture as mercenary (Fig. 7).

**Fig. 7. Organizational culture by age**

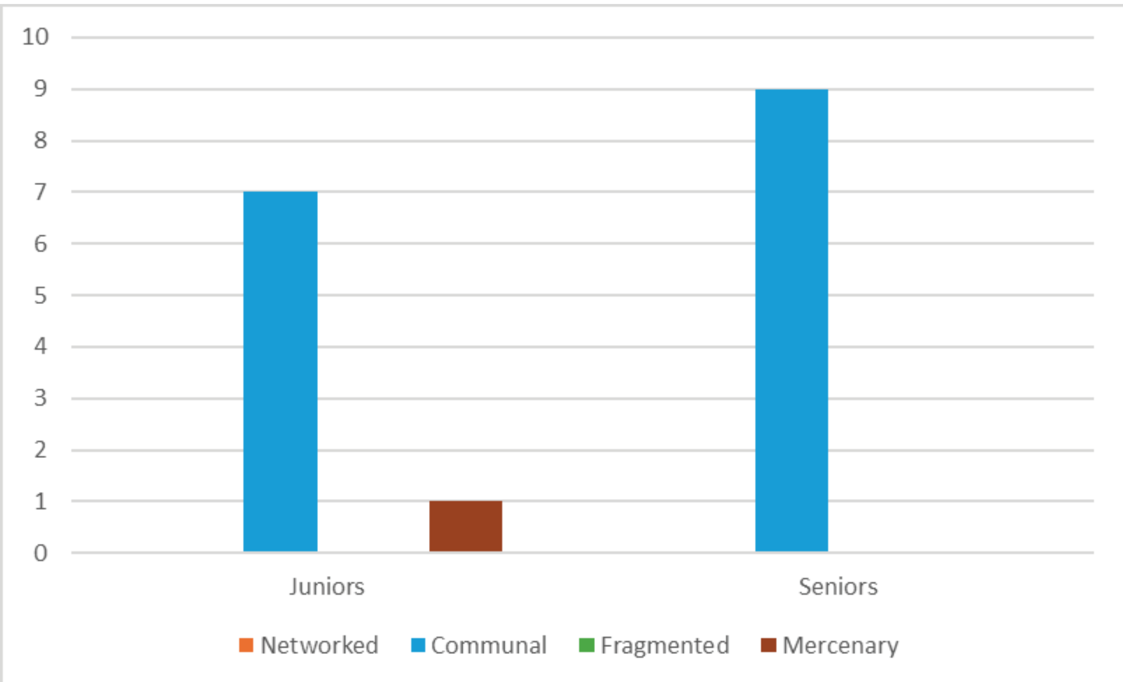
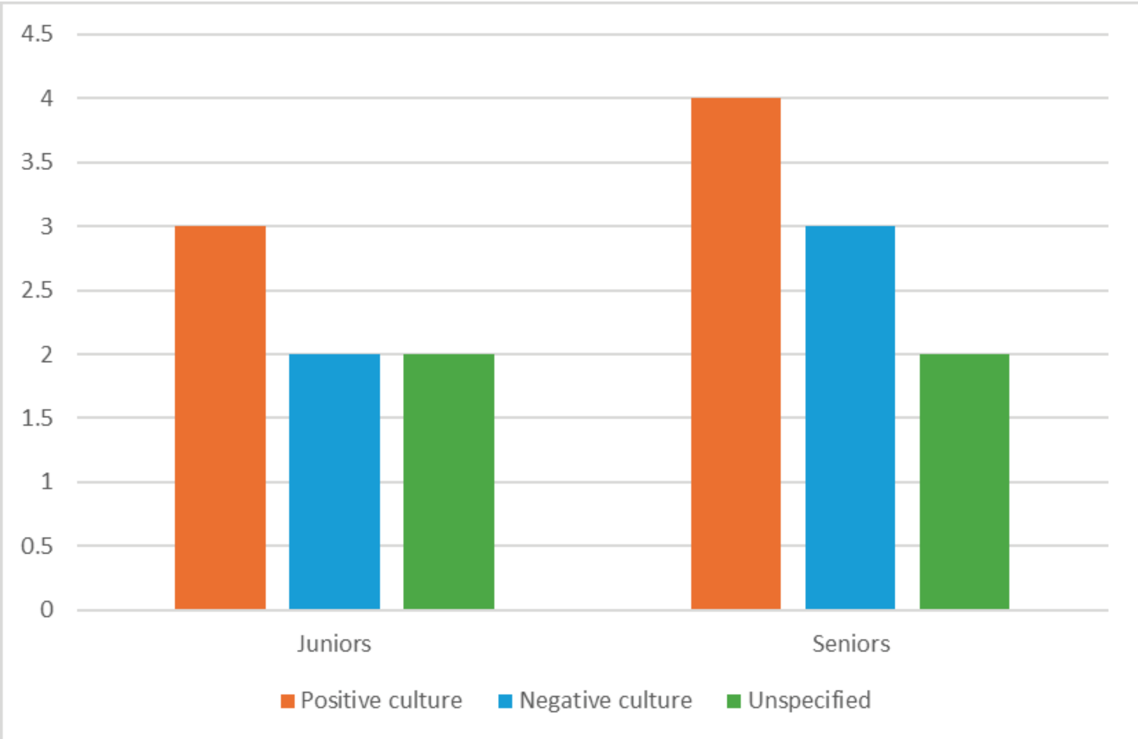


Figure 8 shows how respondents, depending on whether they are younger or older, assessed the communal organizational culture- either positively or negatively. Senior group (aged 46+) consisted of the seven respondents (R4, R5, R7, R9, R13, R14, R15) where three respondents (R9, R13, R14) assessed the communal organizational culture as positive, two assessed (R4, R5) it as negative, and for the remaining two respondents (R7, R15), it was not possible to determine as their scores for both positive and negative statements were equally high. Junior group (younger than 46) contained nine respondents (R1, R2, R3, R6, R8, R10, R11, R12, R17) where four assessed the communal culture as positive (R1, R6, R8, R11), three as negative (R2, R3, R12), and for two respondents (R10, R17), it was not possible to determine the nature of the communal organizational culture (Fig. 8).
Respondent R18 (junior group), who assessed the organizational culture as mercenary, evaluated this culture as positive (Table 1).

**Figure 8. Evaluation of communal organizational culture by age**




## 6. Discussion

The results indicate that the majority of respondents perceive the organizational culture of the City Library of Požega as communal (RQ 1). Communal culture is characterized by strong collaboration, teamwork, and a sense of shared purpose, which aligns with the nature of library work and its focus on serving the community. This type of culture fosters a sense of belonging and solidarity among employees, potentially enhancing job satisfaction and commitment to the organization. A significant number of respondents viewed this communal culture as positive, suggesting that the environment within the library is one of support and mutual trust (RQ 1a). Employees who evaluated the culture positively are more likely to believe that cooperation within the library contributes to operational success and improves service delivery to users, which is benefitial for KM processes of the library. However, a portion of the respondents assessed the communal culture as negative (RQ1a). This divergence in perception could reflect potential challenges in balancing collective goals with individual needs or differences in how collaboration is experienced by different staff members. In some cases, a negative communal culture may result in excessive sociability, where informal networks, subgroups, or favoritism emerge. Such dynamics can undermine professional responsibilities and lead to the tolerance of poor performance, as maintaining personal relationships is prioritized over organizational objectives. This could explain why certain respondents may experience the communal culture in a less favorable light. It is also worth noting that for several respondents, the results did not clearly indicate whether the culture was perceived as positive or negative, pointing to a degree of ambivalence or mixed experiences within the organizational framework. The one respondent who identified the organizational culture as mercenary, and viewed it positively (RQ 1; RQ 1a), may reflect an outlier perspective that values competition or individual achievement within the organization. This highlights the complexity of organizational culture, where different individuals may experience and interpret the same environment in varying ways. The fact that one respondent identified the culture as mercenary supports research (Goffee and Jones, 1998; Schein, 1992) that suggests organizations often exhibit more than one organizational culture simultaneously.

The results highlight that both employees with managerial roles and those without primarily perceive the organizational culture of the City Library of Požega as communal (RQ 2). This uniform perception across hierarchical levels suggests a shared understanding of the library's organizational dynamics, emphasizing collaboration and teamwork, regardless of the position held. The communal culture appears to pervade all levels of the organization, reinforcing a collective sense of belonging and shared purpose. However, there are notable differences in how this communal culture is evaluated between employees with and without managerial roles (RQ 2). Among the seven employees with managerial responsibilities, the majority assessed the communal culture positively, indicating that the leadership perceives the collaborative environment as beneficial for achieving organizational goals. Positive evaluations from employee with managerial roles suggest that they view the communal culture as supportive of effective leadership and operational success, where cooperation and teamwork help facilitate decision-making and daily operations. Only one respondent with managerial role assessed the communal culture as negative. This may point to challenges that leaders face in balancing communal expectations with the need for authority and decision-making. As Goffee and Jones (1998) suggest, in negative communal cultures, maintaining harmony can come at the cost of productivity, leading to frustrations among managers who may struggle to enforce accountability within a cohesive team dynamic. Additionally, two respondents with managerial roles were unable to clearly determine whether the culture was positive or negative, possibly reflecting ambivalence or conflicting experiences in balancing leadership responsibilities with the expectations of a communal culture. Among employees without managerial roles, the evaluations were more evenly split between positive and negative assessments of the communal culture. This suggests that non-managerial staff may experience the communal culture differently, with some appreciating the sense of friendship, while others might feel constrained by the collective approach, possibly perceiving it as limiting individual initiative or fostering favoritism. As Goffee and Jones (1998) note, negative communal cultures can sometimes create informal networks that undermine formal structures, leading to frustration among those who may feel excluded or marginalized. Interestingly, the one respondent without managerial role who assessed the culture as mercenary, and viewed it positively, may reflect a unique perspective that values individual performance and competitive drive within the organization, further underscoring the complexity of how organizational culture is experienced across different roles.

The results also sought to determine whether younger employees assessed the organizational culture of the City Library of Požega more positively than older employees (RQ 3). Interestingly, both younger (younger than 46) and older (46+) employees predominantly identified the culture as communal. This consistency suggests that the communal nature of the library's culture is recognized across generations, emphasizing the organization's emphasis on collaboration, shared goals, and collective engagement. However, the evaluation of whether this communal culture was positive or negative varied between the two age groups (RQ 3a). Among younger employees, there was a more diverse range of opinions, with some perceiving the communal culture as supportive and others viewing it as less favorable. Younger employees who evaluated the culture positively may appreciate the teamwork and inclusive environment, viewing it as conducive to professional development and collaboration. On the other hand, those who assessed the communal culture as negative may feel constrained by the collective approach, perhaps perceiving it as limiting individual autonomy or career advancement opportunities, as Goffee and Jones (1998) suggest in their analysis of negative communal cultures. Among older employees, a similar pattern of mixed perceptions emerged. While some valued the communal culture for its focus on collaboration and unity, others found it less appealing, possibly due to frustrations with the potential downsides of a cohesive organizational structure. As Goffee and Jones (1998) note, in negative communal cultures, maintaining harmony can sometimes result in the suppression of critical feedback or innovation, leading to dissatisfaction among employees who may feel that individual contributions are undervalued. Notably, for both younger and older employees, a subset of respondents provided equally high ratings for both positive and negative aspects of the communal culture, indicating a degree of ambivalence. This suggests that while the communal culture is pervasive, its impact may be experienced differently by individuals depending on personal expectations and workplace dynamics. From this analysis, it cannot be conclusively determined that younger employees assessed the organizational culture more positively than older employees, as the variations in perception appear to be influenced by individual experiences rather than generational differences.

## 7. Conclusion

Libraries are institutions that serve a fundamental role in the collection, organization, preservation, and dissemination of knowledge. However, in their pursuit of these goals, libraries often overlook the importance of managing the knowledge they themselves generate through their internal operations. KM, which is recognized as a key factor for organizational success in the business world, is equally critical for institutions like libraries. Effective KM not only enhances internal processes but also directly impacts service quality, innovation, and decision-making. A critical component of KM is the organizational culture within which it operates. Organizational culture influences how knowledge is created, shared, and preserved. It shapes employee behaviors, work systems, and attitudes toward change. A positive and supportive culture can encourage collaboration and knowledge sharing, while a dysfunctional culture may hinder these processes. This underscores the importance of understanding and managing the prevailing organizational culture within institutions such as libraries. In the context of public libraries, particularly those that have not systematically addressed KM, organizational culture plays an even more crucial role. Without a clear understanding of the underlying cultural dynamics, libraries may struggle to optimize their internal knowledge processes or foster an environment conducive to innovation and learning.

Our study aimed to explore the type of organizational culture present in the City Library of Požega and to determine whether that culture is positive or negative. This study confirmed that the organizational culture in the City Library of Požega is predominantly communal, as identified by both employees with and without managerial roles. This strong sense of social cohesion and collective engagement reflects the communal nature of the library. However, the identification of a mercenary culture by one respondent supports the idea that multiple cultures can coexist within a single organization. The split between positive and negative perceptions of the communal culture reveals the complexity of working in such an environment. While many viewed the culture as supportive, others raised concerns that a strong emphasis on community could limit individual growth or stifle constructive feedback. This suggests that communal cultures, while fostering loyalty and collaboration, can also pose challenges in balancing collective and personal needs. No significant differences were found between how employees with or without managerial roles assessed the culture. Both groups recognized the communal nature, though their views on its positivity varied. The analysis also showed no clear generational divide in cultural perceptions, suggesting that other factors, such as individual experiences, may play a more significant role.

These findings are essential for library management in fostering a more inclusive environment that acknowledges the diverse needs of its staff. The results can help the library leadership better understand the cultural dynamics within the organization, enabling them to create strategies that enhance teamwork and communication. Additionally, they provide a foundation for addressing potential areas of tension or dissatisfaction, helping to promote a more balanced approach between collective goals and individual growth. Ultimately, these insights can guide future organizational changes, ensuring that the library's culture supports both employee well-being and institutional success.

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# INTERNAL AUDITING AND SUSTAINABILITY OF SMALL AND MEDIUM ENTERPRISES IN UGANDA

Apon, Linda Ismene, *College of Business and Management Sciences, School of Business Makerere University, Kampala, Uganda,* lindaismene@yahoo.com

Kintu, Ismail, *College of Business and Management Sciences, School of Business Makerere University, Kampala, Uganda,* kintuisma@gmail.com

Nuwagaba, Geofrey, *College of Business and Management Sciences, School of Business Makerere University, Kampala, Uganda, geofreynuwagaba@yahoo.co.uk*

***Abstract:*** *This study investigates the relationship between internal auditing and sustainability of small and medium enterprises in Uganda using the institutional theory. The research is a cross sectional and perception-based on a sample of data collected from 361 SMEs based in Northern Uganda. Data were analyzed using Statistical Package for Social Scientists and Structural Equation Modelling. The results reveal that there is a significant positive relationship between internal auditing (in terms of controls, procedures and practices) and sustainability of small and medium enterprises in Uganda using data from SMEs based in Northern Uganda. The current study contributes to the literature relating to the dimensions and predictors of sustainability of small and medium enterprises. The study is vital to policy makers and managers in using these findings to promote strict standard operating procedures that do not allow businesses to incur losses. Therefore, basing on the findings, managers should stick to strict design operational work plans and procedures that possess minimum chances of incurring financial losses so as to ensure SMEs survival in the current competitive business environment.*

***Keywords:*** *Internal auditing; SMEs; Sustainability; Uganda*

## 1. Introduction

This paper intends to examine the relationship between internal auditing (in terms of controls, procedures and practices) and sustainability of small and medium enterprises using data from SMEs based in Northern Uganda. In trying to attain the goal of this study, the current research specifically aims to answer these three specific objectives; i) What is the relationship between controls and SMEs sustainability? ii) What is the relationship between procedures and SMEs sustainability? iii) What is the relationship between practices and SMEs sustainability?

This study stems from the fact that SMEs dominate the business environments of most countries and contribute a high proportion of total employment and gross domestic product (GDP) (Mayr, Mitter & Aichmayr, 2016; Ayyagari, Beck & Demirguc-Kunt, 2007). In Africa, these businesses contribute about 50 % of GDP and at approximately 60% of total employment (Benzing & Chu 2019). In Sub Saharan Africa particularly Uganda, the SMEs sector transcends all the sector boundaries in the production, distribution and marketing channel (Mayanja, Ntayi & Munene, 2019). Recent empiricism in Uganda have dubbed SMEs as the backbone, key drivers and primary catalysts of economic development in Uganda. The main argument for favoring SMEs in Uganda is that they are increasingly playing a strategic role in economic development through creation of jobs, innovation and subsistence incomes (Kasekende & Opondo 2004). According to Common Wealth Secretariat Report findings (2018) SMEs account for 90 percent of the private sector in Uganda and similar findings by UBOS report on the Census of Business Establishments 2019/2020 illustrated that the sector employed over two million people.

Statistics from Ministry of Finance, Planning and Economic Development of Uganda (2019) indicates that SMEs employ 2.5 million people where they account for approximately 90 percent of the entire private sector, generating more than 80 percent of manufactured outputs that contribute 20 percent of the Gross Domestic Product (GDP) (Ninsiima, 2019). This makes the study of SMEs sustainability vital especially given the fact that they contribute to about 70% of total employment and the major contribute to value creation, generating between 50% and 60% of value added on average. In developing economies, SMEs contribute up to 45% of total employment and 33% of GDP (World Bank Report, 2020).

Despite their important contributions to economic vitality, SMEs continue to face failure challenges (BOU, 2021). They only survive for a short time and less than 30 percent of them do not make it past their third birthday (Mweheire, 2018). A large number of businesses fail as they ignore paying attention to the broad area of finance which involves the collection, handling, usage of cash and investments. This is geared towards the active management of an SME’s short-term resources to sustain its ongoing activities, mobilize funds where needed and optimize liquidity (Alala, Deya & Busaha, 2013). This necessitates a need to attain counsel, analysis, appraisals and information concerning the activities cash in and out flows amongst SMES that comes inform of internal auditing (Ali et al., 2007). Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve a business’ operations (Chintha & Prasand, 2020). According to Chartered Institute of Internal Auditors, the role of internal audit is to provide independent assurance that an organisation’s risk management, governance and internal control processes are operating effectively. It helps protect assets and reduce the possibility of fraud, improves efficiency in operations, increases financial reliability and integrity, ensures compliance with laws and statutory regulations. Again, it helps an enterprise accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (Ruppel, 2006).

In the SMEs’ context, internal auditing is conducted by persons outside the business though at times ethical professionals with in the business are tasked to conduct the auditing function (Suuna, 2008). Internal auditing “helps an SME in its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and control processes” (Institute of Internal Auditors (IIA), 2004). This promotes proper use of the available resources (cash) and compliance to timely availing of financial reports that are vital for the survival SMEs. This is consistent with the objective of internal auditing that is to assist members of the business in the effective discharge of their responsibilities especially the effective monitoring of cash in and out flows (IIA, 2008).

Relatedly, Eton (2019), conducted a study and found out that that, 67.7% of the business owners in Uganda were facing survival challenges yet limited efforts have been invested by scholars on examining sustainability of SMEs (Kusi, Optu & Norah, 2015). Specifically, existing studies on SMEs’ survival have concentrated on commitment to achieve greater heights, acts of financial indiscipline, irresponsibility, laxity, laziness and questionable poor education system which prepare students for office jobs and gives little attention to skills that are vital for small business continuity (Nangoli et al., 2013). These prior researches on sustainability of businesses seem to have ignored the role of internal auditing in explaining SMEs sustainability in a Sub-Saharan Africa setting. Therefore, the present study contributes to the body of knowledge by examining the power of internal auditing (in terms of controls, procedures and practices) in informing SMEs sustainability using data from Northern Uganda's SMEs.

The next section of this research presents theoretical review, empirical literature review, research design, empirical findings, discussion and conclusion.

## 2. Theoretical review

In this paper, the researchers adopted the institutional theory to explain SMEs sustainability. The institutional theory centres on the deeper and more resilient aspect of special structure (Scott, 2004). This theory examines the processes by which structure scheme rules, norms and routines become authoritative guideline for social behaviour. The theory emphasizes that institutions exist because structures matter and that structures persist while individuals phase out. On this ground, structures or institutions create greater regularity in human behaviour than would otherwise exist. Scott (1995) argues that the survival of institutions must conform to the rules and beliefs of the systems prevailing in the environment.

Institutional theorists (DiMaggio & Powell, 1983) assert that the organized environment can strongly influence the development of formal structures in an organization, often more profoundly than market pressures. Innovative structures that improve technical efficiency in early-adopting businesses are legitimized in the environment. Relatedly, every business exists in a specific physical, technological, cultural and social environment to which it must adapt (Barber et al., 2013). Institutional theory emphasizes that enterprises are open systems, strongly influenced by their surrounding environment. At the center of institutional theories is the idea that SMEs need a societal mandate or legitimacy to operate, which is obtained by conforming to societal expectations of different types. Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed systems of norms, values, beliefs, and definitions (Suchman, 1995).

## 3. Literature review and hypotheses development

### *3.1 Internal auditing and sustainability*

It empowers employees to identify problems and take corrective action to fix these issues. Ultimately, well- implemented and maintained controls enable companies to achieve their established objectives and goals more efficiently (Izedonmi, Adeparubi & Olateru, 2021). Internal auditing institutes checks and balances for all departments to ensure compliance, within and out of the company. Through regular audits carried out, management is able to identify areas of improvement to be worked on so as to remain competitive in the market. Therefore, internal auditing improves the image of the company on the market by advising on areas that need improvement so as to remain competitive.

Internal auditing also helps in reducing risks to acceptable levels. It helps in assisting management of the organization in achieving the strategic objectives of the organization while meeting the expectations of stakeholders (Jawad, Tayseer & Ahmed, 2020). Through audit, reports and recommendations, management uses such reports to make sound financial and investment decisions with less risks and economic bottlenecks. Therefore, internal auditing plays an advisory role to management on where to invest, when to invest and in ventures that have fewer risks. This helps such businesses to sustain themselves in the market because they do not make risky financial decisions that will cost the company.

Internal avoiding is essential as a management tool to ensure the functioning of the economic unit because it is not only finds errors in the process of applying the laws that govern public activities but also reveals errors in the laws themselves (Kashona & Sarafina, 2022). Internal auditing strengthens the compliance levels of every department by giving recommendations on where to improve so that it complies with the laws that govern public activities. This helps the company to increase its competitive leverage in the market hence minimizing costs that would have been incurred as a result of non-compliance.

With internal audit controls, management can understand if the company's financial information and accounting records are accurate and authentic (Kashona & Sarafina, 2022). They can also assess whether the organization is meeting its compliance objectives if any gaps in operations exist, and if there are any costly liabilities. Internal audit controls help reveal whether employees are engaging in potentially fraudulent or unethical behaviors that would demean the minimum acceptable set standards.

The corporate governance of SME's is underpinned by effective internal systems in which the internal audit plays a role in raising the reliability of the internal control system, improving the process of risk management and above all, satisfying the needs of internal users (Izedonmi, Adeparubi & Olateru, 2021). The internal audit support enhances the system of responsibility that the executive directors and employees have forwards the owners and other stakeholders. Taken together, the internal audit departments provide a reliable, objective, and neutral service to the management while stakeholders are interested in return on investments, sustainable growth strong leadership, and reliable reporting on the financial performance and business practices of a company.

Internal auditing is an independent evaluation function created within the company to examine and evaluate its activities. Its goal is to assist stakeholders in carrying out their responsibility effectively to enhance the organization's internal controls (Wahhab, 2022). Internal auditing operates as an essential activity within the company and adds value in the modern business environment (Rahma, 2020). It plays an advisory role as it creates value for the company by improving opportunities and plans functionality. Subsequently internal audit institutes checks and balances for all departments to ensure compliance, within and out of the company. Through regular audits carried out, management can identify areas of improvement to remain competitive in the market. Therefore, internal auditing improves the image of the company on the market by advising on areas that need improvement so as to remain competitive (Okello, 2020). Additionally, it also helps in reducing risks to acceptable levels. this aids in management of the organization in order to achieving the strategic objectives of the organization while meeting the expectations of stakeholders. Through audit, reports and recommendations, management uses such reports to make sound financial and investment decisions with less risks and economic bottlenecks. Therefore, it plays an advisory role to management on where to invest, when to invest and in ventures that have fewer risks. This helps such businesses to sustain themselves in the market because they do not make risky financial decisions that will cost the company (Mandalawi, 2022).

Internal auditing strengthens the compliance levels of every department by giving recommendations on where to improve so that it complies with the laws that govern public activities. This helps the company to increase its competitive leverage in the market hence minimizing costs that would have been incurred as a result of non-compliance (Assad, 2020). It thus enables companies achieve goals by setting unique guidelines for dealing with crises and assisting management in ensuring that employees have the experience and skills necessary to perform their duties. Nappi & Rozenfield, (2018) notes that internal auditing increases commitment levels of economic units to implement sustainable standards. Through regular audits carried out, economic units are able to operate within acceptable minimum standards that are recognized by law hence improving on the company competitiveness and public recognition (Hegazy & Eldeed, 2020). Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve on organizations' operations (Choo, 2023).

Control systems create a good business environment, monitor irregular activities, balance legitimate rights and interests among stakeholders and achieve sustainable development. These aim at ensuring that their systems if implements can help achieve efficiency and effectiveness and ensure that resources channeled are not misused. Businesses with internal control systems are assured of utilization of resources as pre-planned hence achieving sustainability (Su, 2022). Effective internal controls can improve the accuracy of forecast information and the quality characteristics of accounting information and reduce information asymmetry and agency costs between enterprises and investors and thus contribute to the long-term synergy between enterprises and investors. With forecast information, business managers are able to identify gaps that may lead mismanagement of cash flows and are fixed immediately (Kashat, 2020). Internal control is a process affected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting and compliance (Alam, 2019).

These controls improve the quality of accounting information and enhances enterprise sustainability through investor protection. When resources are invested, controls help to ensure that the aim of investing resources is achieved or fulfilled by putting in place control mechanisms that monitor and regulate resources invested by the investor. Besides, internal controls help improve the accrual quality and prevent and correct misstatements and omissions that are intentional or unintentional. In any business environment, risky ventures are taken that may cost the business if not properly monitored and regulated. Therefore, internal controls help mitigate such costs by putting in place control mechanisms that can be implemented to avoid any possible risks (Huda, 2019). Control help provide reasonable assurance of the efficiency and effectiveness of enterprise operations and compliance with laws and regulations. Effectiveness of internal control first acts directly on the information environment for financial reporting. Changes in the financial reporting information environment further generate factors that affect the achievement of other enterprise objectives such as operational and compliance objectives hence contributing to the business sustainability in an improved external environment (Huda, 2019).

Procedures are guidelines set and followed while executing tasks. Procedures help in regulating and guiding the methods of work and its outcome (Weng, 2021). Procedures help in reducing on risks and deviations in business. In the situation where resources are channeled in ventures without carrying out the feasibility, losses are incurred. Consequently, if procedures are followed, chances of investing with minimal risk are high, and hence a business stands high chances of continuity (Bashir et al., 2024). This helps to bring order and sanity in businesses. Its paramount to note that, businesses without proper procedures in place encounter resource misallocation, investment objectives are not achieved. Therefore, procedures help to ensure that resources that would be used to sustain businesses are utilized efficiently to gain profits (Zhong, 2020).

Practices are a set of dos' that are normally adopted by the business and all its stakeholders. It is these practices that set ethical standards that should be followed in the business operations. These eliminate performance deviations in the business. Once they are adopted in the systems, it means whatever is done is in line with acceptable standards of the business. They enhance sustainability in that whatever is done should follow the norm of business that aim at ensuring continuity of the business (Zhong, 2020). Additionally, these practices enable succession planning to take place for the continuity of the business. Once they are adopted, proprietors can identify the potential candidates

that will run the business after their demise. Guidelines of mentorship, coaching and equipping would be successors with skills of running businesses are laid out in the best practices of the business (Masocha, 2018).
Procedures describes the steps that are supposed to be taken while accomplishing a certain task. These also involves a set of standards followed while executing an activity (Lai, 2018). They promote education standards and recognized practices. For example, parents and guardians can appreciate on what is to be done at certain levels of education and appreciate its outcome. They come to understand that psychological development of the child's mind is in certain stages and therefore become patient with the learning stages of the child. At every stage of childhood, they become mentors and inculcate in them virtues and values that are relevant and take them to the next stage in life (Lai, 2018). It is through procedures that people can identify what to plant and when to plant it. While planning to plant a crop during a season, farmers follow steps of planting as guided by agricultural experts. These procedures help to avoid wastage of resources and investing in projects where a person does not have thorough knowledge about. It is through procedures that people take health instructions from their medical doctors while administering treatment. When people visit hospitals for medical check-ups, they are given treatment to take and medics explain to them procedures to be used while taking treatment. Without following procedures, the treatment administered may not work and the process of healing may take longer than what is expected by the medics.

Therefore, the following hypotheses are set forth;
$H_{1:}$ *There is a relationship between internal auditing and SMEs sustainability*
$H_{1(a):}$ *There is a relationship between controls and SMEs sustainability*
$H_{1(b):}$ *There is an association between procedures and SMEs sustainability*
$H_{1(c):}$ *There is a relationship between practices and SMEs sustainability*

## 4. Methodology

### *4.1 Research design, population and study sample*

This study was limited to small and medium enterprises from Northern Uganda dealing in general merchandise, carpentry, pottery, hardware, restaurants, welding, manufacturing among other businesses. In Northern Uganda, SMEs are viewed as seedbeds for growth of new firms and vehicles for poverty reduction. Deterioration in growth and failures in SMEs is the basis for the researcher to conduct research in this area. SMEs in Acholi and Lango sub regions of Uganda continue to experience significant problems which affect their survival, thus the need for further investigation. There is also scanty literature on different ways to enhance the sustainability of SMEs in Uganda. The scope of the current study was restricted in SMEs based in Northern Uganda only. This is largely because a considerable research gap exists in SMEs found in this area. Most of the research in the field of sustainability is coming from big companies in developed countries (Das & Rangarjan, 2019; Goyal et al., 2015). This study was conducted in Northern Uganda 360 KM North of the capital city of Uganda.
This study adopted a cross-sectional survey that utilized a positivistic view of sustainability of small and medium enterprises (SMEs) in Uganda. From 364 small and medium enterprises, a sample of 186 was utilized. This sample was arrived at by utilizing Krejcie and Morgan's (1970) sample size determination method. This sample size is also considered to be statistically significant based on the recommendations of Cohen (1988), Kock and Hadaya (2018) and Hair et al. (2019a, b). In keeping with Abrahantes et al. (2004) proposal, the unit of analysis was an SME as this was deemed to fit into

the provision of a detailed understanding of SMEs sustainability in a Sub-Saharan setting. The unit of enquiry was constituted by owners and employees in these SMEs.

### *4.2 Sampling design and procedure*

The population of study comprised **SMEs** from Northern Uganda. Respondents (SMEs owners and employees) were randomly selected from these SMEs in this geographical scope so as to give divergent views on the construct under study and its predictors. The researcher picked two respondents per SME. Stratified random sampling was utilised to select 281 respondents that responded from 141 SMEs and validated using database provided by the Uganda Bureau of Statistics. To collect data, the researcher handed a close-ended questionnaire to various SMEs owners and employees together with the cover letter explaining the purpose of the research study to the respondents. Also, the e-mail and telephone contacts of respondents were requested for purposes of subsequent follow-up. After 5 days in the field, 281 questionnaires were retrieved representing a response rate of 75.5%. Based on survey length, such a response rate is rated as very good (Brtnikova et al., 2018).

### *4.3 Measurement of Variables*

A self-administered questionnaire was the main instrument to elicit responses. All item scales were adopted from previous research studies, Okafor and Osuagwu (2006), recommend adapting item scales used in previous studies because of their wide item scale reliability and validity. In this study, **Internal auditing** was measured using items developed by Baugher & Weisbord, (2006), Ayres et al., (1992). This questionnaire captured the dimensions of this construct in terms of; internal controls, procedures and practices. **Sustainability** was measured using items developed by Ferro et al., (2019). The measurement items for these two global constructs were anchored on a six-point Likert scale ranging from Since these studies were conducted in other countries, the researchers adopted, modified and localized these items to suit the context of this study. The six-point Likert scale is supported by Chomeya (2007) who argues that it avoids the mid-point of no sure that many respondents tend to tick under a three or five- or seven-point likert scale.

### *4.4 Instrument Validity and Reliability*

In order to test for the validity and reliability of the constructs, Rossiter's (2002) procedure for scale development was followed. First, the evaluation of reliability of the scale items, content validity, convergent validity and discriminate validity were determined. Validity concerns with the evaluation of the degree to which a measure correctly measures what it is supposed to measure (Chen & Paulraj, 2004). However, for it to be achieved, some conditions were satisfied first (O'Leary-Kelly & Vokurka, 1998). The loadings for all the indicators should exceed the minimum recommended threshold value of .708 to conclude that the selected items reliably estimate the construct (Hair, *et al.,* 2010). Composite reliability measure and Cronbach's alpha coefficients for all the constructs were assessed and both measures were found above the threshold 0.6 (Bagozzi *et al.,* 2009) and 0.7 (Hair *et al.,* 2010) respectively. This portrays that the indicators adequately measure their associated constructs. As recommended by Fornell and Larcker (1981), three measures were respectively used to examine convergent validity: loading of items (>0.70), composite reliability (>0.60) and average variance extracted (AVE) (> .50) to give the conclusion that convergent validity was met, as shown in Table 1 and Fig. 1, 2 &3.

**Table 1: Reliability and Validity Results**

| Study Variables | Cronbach's Alpha | Composite Reliability | Average Variance Extracted (AVE) |
|---|---|---|---|
| Sustainability | 0.881 | 0.891 | 0.659 |
| Internal controls | 0.842 | 0.925 | 0.764 |
| Procedures | 0.863 | 0.830 | 0.664 |
| Practices | 0.870 | 0.804 | 0.743 |

## 5. Confirmatory Factor Analysis (CFA)

CFA was conducted to assess model fit. Only those dimensions and respective items that were retained at EFA for each variable were used to carry out a CFA model using Analysis of Moment Structures (AMOS). A confirmatory factor analysis using structural equation modelling (SEM) was used to determine whether the shared variance-covariance of these variables define the latent construct and provided a more precise way to account for the error variances associated with our variables which, if untested, could lead to biased parameter estimates (Schumacker & Lomax, 2010). Several goodness-of-fit indices were also evaluated to assess the model fit. These indices were of two types: absolute and incremental. As an absolute index, the standardized root mean square residual (SRMR) ranges from 0 to 1. Kline (1998) suggests that values less than 0.10 indicate good model fit. Another absolute fit index, the root mean square error of approximation (RMSEA) was used here to assess fit based upon model misspecification and to provide a measure of this discrepancy per degree of freedom. This fit index ranged from 0 to 1 and values less than 0.08 indicated good fit (Browne & Cudeck, 1993). Incremental fit indices were also used (Hu & Bentler, 1998, 1999) to assess model fit. The comparative fit index (CFI) developed by Bentler (1990) is one such index that assesses the fit of the model. The CFI ranges from 0 to 1 and values greater than 0.90 indicate good fit (Kline, 1998). In our study we considered indices with values greater than 0.95 (Kline, 1998). The fit indices indicate that the measurement models of internal auditing and SMEs sustainability present acceptable fit with the data as indicated in the respective figures below with their fit indices.

**Fig. 1: Confirmatory Factor Analysis for Internal Auditing**

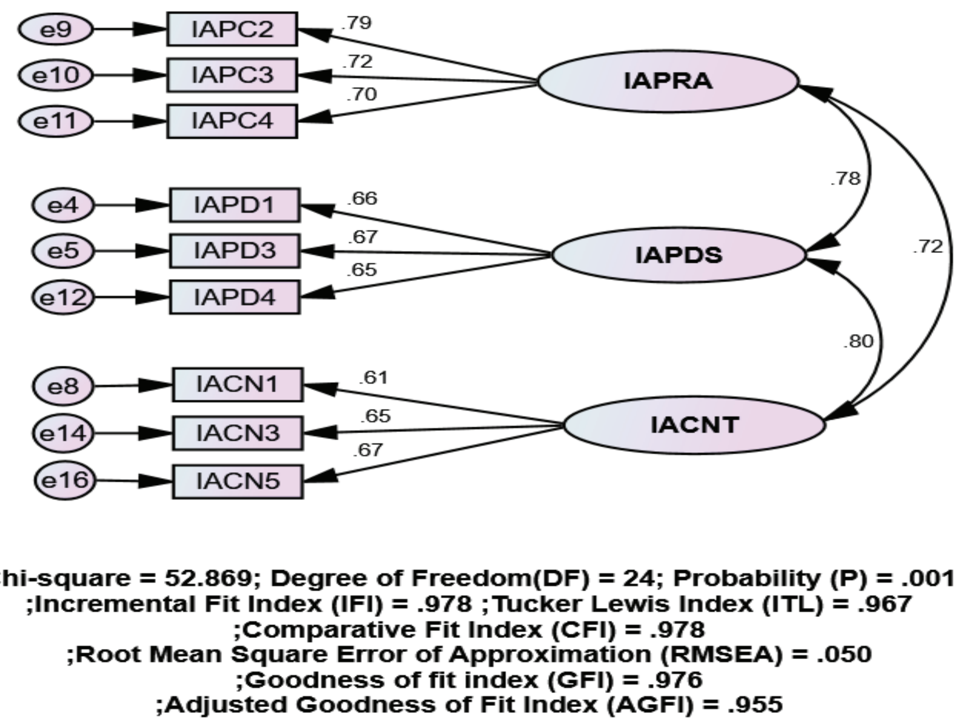


**Fig.2: Confirmatory Factor Analysis for Sustainability**

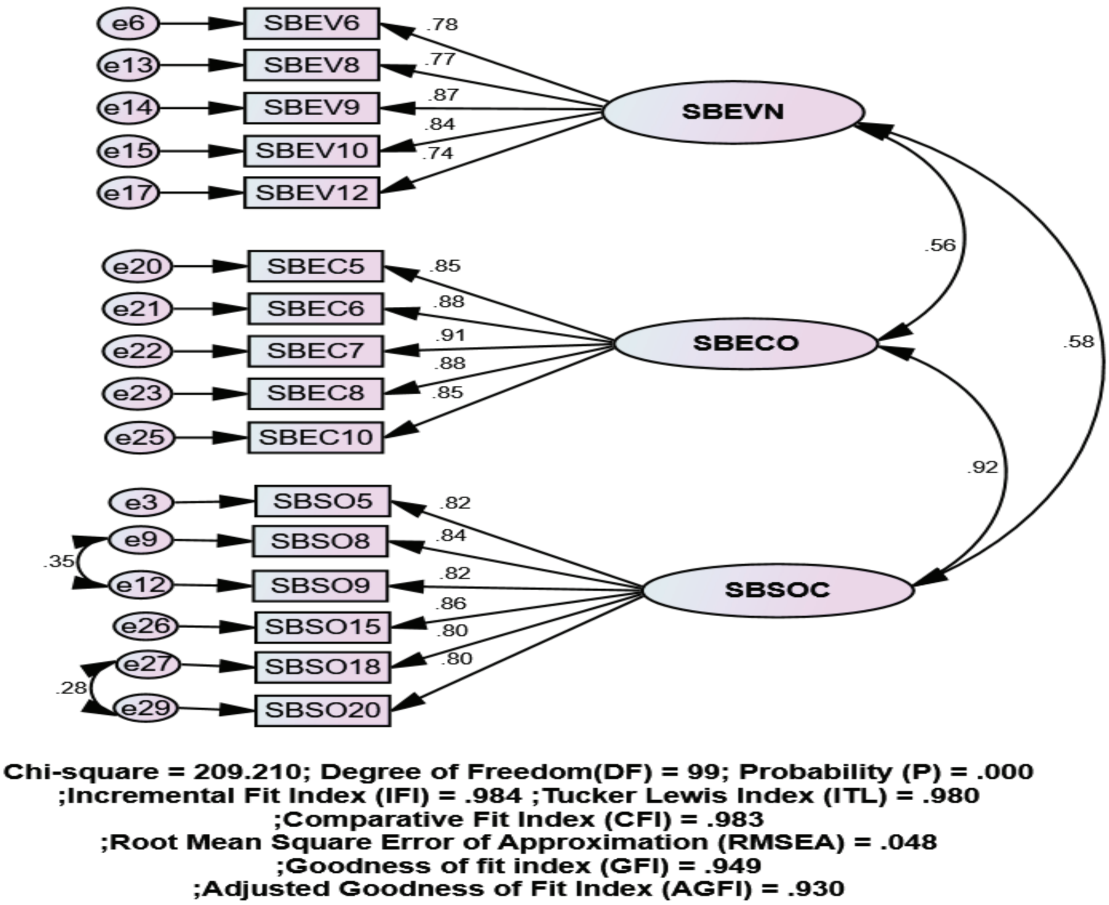
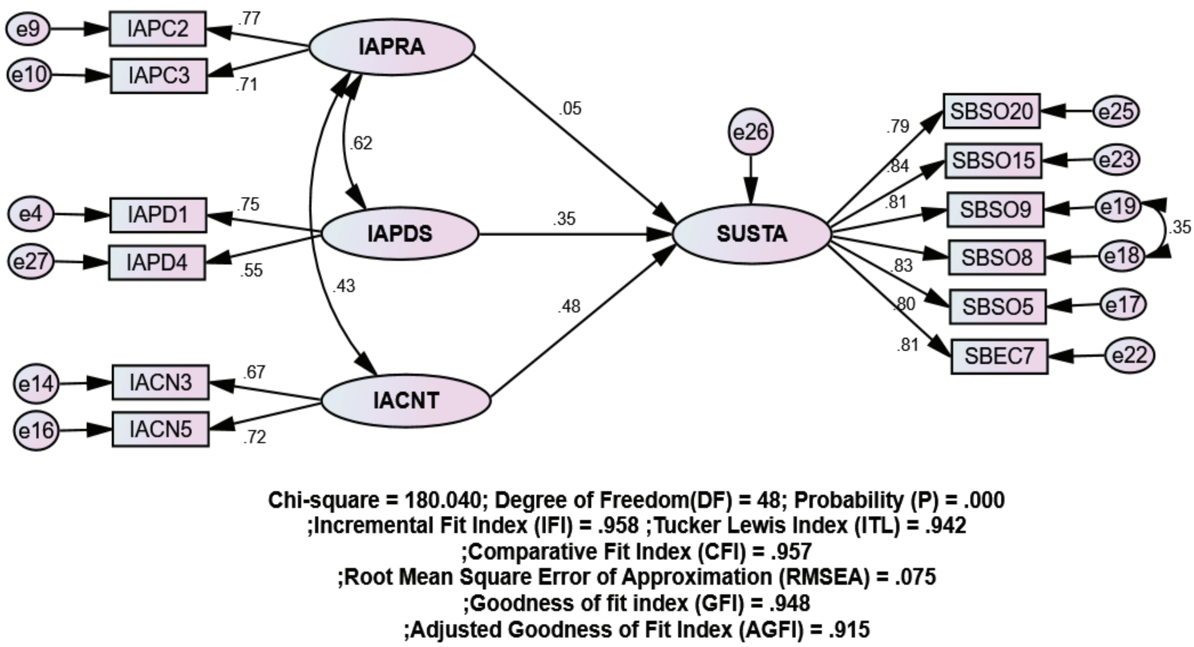



**Fig.3: Structural model estimates for predictors of SMEs sustainability**



## 6. Findings

### *6.1 Individual characteristics*

The results reveal that out of the 281 respondents, most of them were male (54.4%), while female accounted for 45.6% of the respondents. The results revealed that the majority of respondents were born between 1981 and 2000 (52.9%) and had worked with in with the SMEs setting for 5-10 years (33.5%). The highest level of education amongst the respondents was a tertiary diploma, at 38.8%.

### *6.2 SMEs traits*

Most SMEs had been in existence for the period 11-20 years with 39.5%. This was followed by those SMEs that had been in operation for 21-30 with 26.7% years. It is clear from the results that the selected SMEs were suitable for understanding sustainability issues since majority of them had been in operation for more than 10 years and above. This period was considered long enough for the SMEs to have tested survival challenges and developed sustainability initiatives. Additionally, this contradicts the popular assumption that a number of SMEs do not celebrate their 5th birth days. Most of the SMEs examined were involved in hardware businesses (22.0%). Restaurants SMEs (20.4%) followed by General merchandise business 18.5% and welding hold the fourth position. Hardware business does not have many barriers and hence this explains their big dominance in the above table. The hardware business is doing well largely because of the prevailing stability and security that is giving people to go into building and construction projects. People earn and can afford to purchase hard ware equipments. Similarly, the general merchandised does not need a lot of education to run it and the capital requirements are not so high. The least of the category (8.4%) were dealing in other SMEs. These cannot exclusively be analyzed because they fall into various industries which need further and special analysis. These include health facilities, Telecom companies, Banks and Insurance plus others that were not specifically indicated in the study instrument.

### *6.3 Empirical results*

Table 2 Hypotheses Testing

| | | | Unstandardised Coefficient | S.E. | C.R. | Standardised Coefficient | p | Verdict |
|---|---|---|---|---|---|---|---|---|
| SUSTA | ◀━ | IAPRA | .087 | .208 | 2.416 | .048 | *** | Confirmed |
| SUSTA | ◀━ | IAPDS | .527 | .169 | 3.116 | .351 | .002 | Approved |
| SUSTA | ◀━ | IACNT | .826 | .149 | 5.543 | .484 | *** | Supported |
| *** $p < .01$ | | | | | | | | |
| **IAPRA:** ***Practices*** | | | | | | | | |
| **IAPDS:** ***Procedures*** | | | | | | | | |
| **IACNT:** ***Controls*** | | | | | | | | |
| **SUSTA:** ***Sustainability*** | | | | | | | | |

The research results above show a significant positive relationship between controls and sustainability ($\beta$=.149, t-value=5.543, p<.05). Furthermore, results approve the hypothesis that there is a significant relationship between procedures and sustainability ($\beta$=.169, t-value=3.116, p<.05). The results also confirm the relationship between practices and sustainability of small and medium enterprises (SMEs) in Uganda ($\beta$=.208, t-value=2.416, p<.05). These findings are discussed based on logic, practice, empiricism and theoretical perspectives as illustrated below;

## 7. Discussion

### *7.1 There is a positive relationship between internal auditing and sustainability of small and medium enterprises*

The results from the empirical analysis have been considerably satisfactory, since hypothesis one formulated found considerable support. From the research results, hypothesis one ($H_1$) revealed a significant positive relationship between internal auditing and SMEs sustainability, lending support to hypothesis 1. These findings mean that improving internal auditing in form of following set standards, complying with professional procedures, having books of accounts and writing audit reports is likely to improve SMEs sustainability in terms of enhancing profits while minimizing losses by offering competitive advantage through addressing customers' compliances and promoting trustworthy as a result of using audits in the SMEs' setting. To achieve the aim of this study, the researchers discuss the research findings based on three view points below;

- Controls
- Procedures
- Practices

$H_{1(a):}$ Started that there is a significant positive relationship between controls and SMEs sustainability, which was tested and confirmed. This indicates that controls as a factor of internal auditing promotes SMEs sustainability in terms of small enterprises aiming at competitive advantage, providing quality services/products, focusing on minimizing costs while maximizing profits thereby avoiding struggling in this competitive business environment. Internal controls, in general, are procedures used to safeguard assets and implement financial and operational objectives. Creating internal cash controls for small businesses involves setting policies for handling physical cash and checking accounts and delegating responsibilities in keeping it. Cash controls are a crucial component of cash management indicators because cash, being the most liquid of all assets, is highly susceptible to theft and misappropriation.

In the Ugandan context, there is no doubt that SMEs play crucial role in value chain supply for sustainable economic growth with their GDP contribution standing at 18% and their employment and job creation rising to 90%, irrespective of age and gender. However, this sector has grappled with wide ranging challenges, some cash controls others institutional which impede the growth and survival of SMEs in Uganda. Additionally, Small and Medium Enterprises (SMEs) are the engine of growth for the economic development of Uganda and indeed the world at large. They are spread across all sectors with 49% in service sector, 33% in commerce and trade, 10% in manufacturing and 8% in others. They are key drivers in fostering innovation, wealth creation and job creation in Uganda. Over 2.5 million people are employed in this sector, where they account for approximately 90% of the entire Private Sector, generating over 80% of manufactured output that contributes 20% of the gross domestic product (GDP). In line with Vision 2040, the NDPI (2010/11-2014/15) and NDPII (2015/6 -2019/20) both identify and emphasize the role of the private sector in engendering private led economy development. SMEs are the major source of technological innovation and new products. They constitute an important sector in manufacturing, services and agriculture/agro-businesses engaged in local, regional and international businesses. Evidence from UBOS (2020) statistical abstracts pronounce the contribution of SMEs as significant and having potential to change the economy of Uganda for the better. However, there is inadequate cash controls to enable effective realization of the full growth potential of SMEs to economic development.

Government, development partners and private sector have come up with a number of initiatives to promote and develop SMEs sector, but the efforts have been largely scattered, uncoordinated, conflicting and isolated. This brings in the critical theme of cash controls where SMEs' managers are encouraged to send invoices without delay to their respective clients. Those handling customers should not waste time when it comes to sending out invoices to clients that buy your products/ services, offer different transaction payment options that are consistent with modern times which encourage flexibility, keeping detailed records to truck transactions and even be a basis to benchmark. It is imperative to schedule payments effectively while aiming at cost cutting. SMEs ought to have cash flow at all times. All these critical incidents promote the survival of small businesses which are consistent with the theme of Government National Development Plan II which is consistent with strengthening Uganda's competitiveness for sustainable wealth creation, inclusive growth and employment.

Cash flow controls reduces on un-necessary payments, theft and fraud (Wright, 2019). With cash controls measures in place, expenditure on un-necessary items are reduced and any attempts to divert resources by employees of the business are easily detected. This eliminates the wastage of resources which money is re-invested in productive ventures aimed at generating more revenue / profits for the business. Cash controls minimize financing and borrowing costs (Miller,2019). With cash controls measures in place, business owners avoid spending on things without making thorough analysis / investigations on where spending on that item is worth. Borrowing costs will also be minimized because the business will have cash to meet its operational costs and investment in other productive ventures will also be met (Mohamed, 2020). In the long-run, the business will start enjoying the economies of scale due to various expansions made.

This foregoing view point is consistent with Uwonda, Okello and Okello (2013) who argues that cash flow management is the nucleus of a business entity for short and long-term survival. For Munusamy (2010) was concerned with both the short term and long- term financial objectives while Evans (2012) the power of the cash flow statement on influencing SMEs survival. Relatedly, Aminu, (2012) cash flow management brings together actions concerned with cash payment, collection management and liquidity management, which involves acquisition and disposal of treasury assets and their subsequent monitoring, a strategy for investing surpluses of cash for maximum profitability and financing deficits at minimum costs.

The study makes a link with the works Percat, (2012) who asserts that around 90% of SMEs failures in Saudi Arabia are due to inadequate management cash flow. Relatedly, Muller (2018) noted that in order for SMEs to manage their cash flow, they must understand cash flow and be able to project how and when cash would be received and spent, take steps to optimize revenue and expenditure timing and amounts. Similarly, Yaqub and Husain (2020); Surridge and Gillespie (2008) argue that for SMEs to grow, they must address failure factors by identifying potential cash problems and deciding on how to control them to improve the business cash position so as to enhance business survival.

### *7.2 Procedures and SMEs sustainability*

The study further reveals that procedures as a factor of internal auditing influences SMEs sustainability positively in Uganda. The researcher notes that by creating a cash flow forecast, monitoring and managing accounts receivable and payable, controlling inventory levels, and implementing cash flow best practices, small and medium businesses can optimize their cash flow and ensure long-term survival in the Ugandan business setting. A procedure is a detailed instruction that explains all the tasks that need to be completed in a workplace. These tasks may be stand alone or may be a part of a process. For example: instructions for how to pack and send a customer sales order within the sales and shipping process manual. It is important to note that a number of SMEs conduct criminal background checks before hiring, have zero tolerance against drugs, alcohol, bullying and cyberbullying. Small businesses use daily attendance books which registers all workers present on that day and visitors' books are used at the entrance/receptionist of different SMEs. SMEs do routine monitoring and evaluation through managers/administrators who are accountable to the output of the each and every worker regularly. The procedures require every manager to hire the best employees to work within the business who include; people who are skilled in their operations, competent salesmen that ought to understand the dynamic business setting.

The results of this study are related to the works of Yadav (2018) argues that formal SMEs contribute up to 60% of total employment and up to 40% of GDP in emerging economies (World Bank, 2018). Globalization council (2017) study reveals that SMEs have more flexibility than MNCs to easily adapt and change to meet important environmental & social targets. Thus, with the right strategy, is to use procedures can offer both economic prosperity and environmental protection. When applied to the corporate world, sustainable development implies the adoption of stratagems and actions that fulfil both the business needs and the current and future societal expectations (Ayuso & Navarrete-Báez, 2017). The corporate sustainability is a multi-faceted perception having three dimensions: environmental, social, and economic. The economic dimension of sustainability implies that a company having appropriate cash-flow particularly procedures that must guarantee liquidity along with a substantial return to stockholders, whereas environmental dimension necessitates the company to have a positive environmental impact by preserving the stability of the environmental system and protecting natural resources. Social dimension encompasses contribution to the community to have a positive social influence through ways of incrementing value to the human capital. SMEs should implement an all-inclusive purview of sustainability in approaches, as an accomplishment in a single of these dimensions will not help in long term sustainability (Günerergin et al., 2012).

### *7.3 Practices and SMEs sustainability*

In the Ugandan setting, the definition of micro, small and medium enterprises include all types of enterprises irrespective of their legal form (such as family enterprises, sole proprietorships or cooperatives) or whether they are formal or informal enterprises to ensure inclusiveness. Uganda Bureau of Statistics has adopted categorisation of enterprises basing the fulfilment of the minimum requirements of any two of the criteria of; number of employees, capital investment and annual sales turnover. In quantitative terms, micro enterprises are those businesses employing not more than 5 and have total assets not exceeding UGX: 10million. On the other hand, small enterprises employ between 5 and 49 and have total assets between UGX: 10 million but not exceeding 100 million. The medium enterprise therefore, employs between 50 and 100 with total assets more than 100 million but not exceeding 360 million.

To attain SMEs sustainability, practices are paramount. By creating a cash flow forecast, monitoring and managing accounts receivable and payable, controlling inventory levels, and implementing cash flow best practices, businesses can optimize their cash flow and ensure long-term financial success. Cash practices helps small businesses plan for the future by providing insights into the company's financial health. With this information, the business owner can make informed decisions about future investments, expansion plans, and other financial decisions. These findings are consistent with previous researchers that emphasized specific aspects of cash management particularly practices in informing sustainability of SMEs. Cooley and Pullen (1999), examined cash management as the process of planning and controlling cash flows. This study consisted of three basic components: cash forecasting practices, cash surplus investment practices and cash control practices which are pillars of SMEs sustainability.

## 8. Conclusions

The research findings revealed that internal auditing (in terms of controls, procedures and practices) enhances sustainability of SMEs amidst the survival battle of these businesses. SMEs failures can be averted through strengthening controls, procedures and practices amongst owners/directors and employees who run these SMEs. Most SMEs face the challenge of inability to utilize cash management in fostering sustainability. This is evident by different actors including government, managers or owners of SMEs, government agencies and private sectors that are stakeholders failing on the indicators of business sustainability thereby resulting to low levels of long-term survival of SMEs.

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# REEVALUATING THE ROLE OF FOREIGN DIRECT INVESTMENT IN ALBANIA'S ECONOMIC GROWTH: POLICY IMPLICATIONS FOR GROWTH AND OPENNESS

Miti, Florian, *University "Ismail Qemali" Vlore, Albania, florian.miti@univlora.edu.al*

***Abstract:*** *Based on the standard vector error correction model with quarterly data, this study focuses on the relationship between inflows of exports, foreign investments together with Gross Domestic Product, of the last two decades (2004-2024) in Albania to research in both the short-run dynamics and the long-run trends. A drawback of using diverse secondary data with differing methods of data collection and especially dealing with the economic transition period, is that it presents a challenge in terms of data reliability which may result in controversial conclusions even for studies on the same country.*

*By applying the impulse analysis, it reveals that foreign direct investment inflows cause an almost negligible (positive) fluctuation in exports and a (negative) fluctuation in GDP in the long run. Conversely, exports, after a short-term negative impact, lead to an increase in FDI inflows in the long run and a slight increase in the GDP level. Finally, GDP has a positive effect on both variables. The result, therefore, is very important as it suggests that the government policy should focus more on openness, growth and exports—devaluating thus the role of FDI inflows for the economy, at least in the short term.*

***Keywords:*** *Impulse analysis; FDI; Economic transition; GDP; Short-run dynamics; Long-run*

## 1. Introduction

Foreign direct investment (FDI) is considered a significant determinant of the economy of any host country, and therefore, many studies have focused on the role of foreign direct investment in these economies. Of particular interest have been the economies in transition, which, although in different stages of development, all these countries have been characterized by similar economic situations and similar mechanisms of post-communist economic recovery. FDI plays a very important role in these countries since the foreign investments add knowledge and capital that the host country lacks, and they also by creating new jobs. Regading to the albanian economy, foreign investors have shown an ever-increasing interest in foreign direct investments, mainly because of its potentials in terms of natural resources, geographical position, climate, labor force, etc. In this context, Albania is constantly trying to establish development policies and other important measures to create the most suitable business environment and the most favorable investment climate.

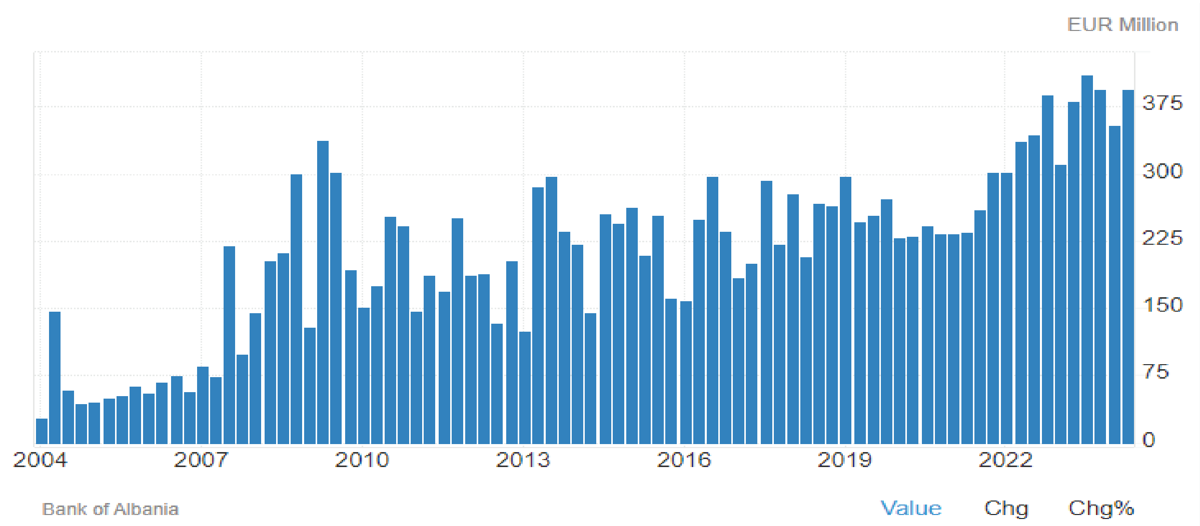
The aim of the study is to empirically assess the short-term and long-term relationship among the variables taken into consideration to arrive at some causal conclusions regarding the impact that foreign direct investments may have on domestic exports and vice versa.

In the case of Albania, particularly, the decisive role played by FDI in the economies of countries in transition, thte empirical data, made available by institutions like Bank of Albania, Albanian Investment Development Agency (AIDA), INSTAT, etc., are fragmented and not sufficiently stable in the methodology of their collection. One of the most important economic indicators, such as the Gross Domestic Product, turns out to be published in a quarterly series only after 2008, being published annually in the years before that.
This article consists of seven sections. The first section introduces the reader to the Albanian environment of foreign investments. The second section presents a general framework about previous literature and studies. While in the third section, the methodology used in this study is presented, followed by the fourth section, which details the econometric analysis along with the presentation of data and the empirical implementation and testing of hypotheses. The fifth section presents the results, followed by the limitations of the sixth section. The last section summarizes the conclusion of the study.

## *1.1 FDI background in Albania*

Albania has a favourable geographical position to benefit from the implementation of international projects and to attract new investors. Like all developing countries, Albania has shown an increasing interest in foreign direct investments. Thanks to the reforms taken by the governments over the years, foreign investments have had a significant growth in the last two decades especially in sectors such as mining and processing of minerals, telecommunications, banking, and energy (shown in Figure 1 below). Referring to data from the Bank of Albania in 2023, energy and mining constitute the vast majority of the total stock of FDI, followed by the information and communication sector with 16% and financial services with 14%. Manufacturing accounts for less than 10% of all the country's FDI. According to the Albanian Investment Development Agency (AIDA), European countries remain the main source of foreign direct investments in Albania which, in the end of 2020, account for 54.2% of the total FDI stock.

**Figure 1: FDI quarterly flow from 2004-2024**




Source: Bank of Albania/ https://tradingeconomics.com/

Through the secondary data provided by INSTAT from 2004 to 2024 period, it is evident that the pandemic of 2020 also impacted the inflow of foreign investments, bringing the investments flow in the Albanian economy to the 2016's level. Thus, according to the data, the decline in FDI was

by 140 million Euros or 13% less than in the year 2019. It was particularly in the second quarter of 2020 when the closure of economic activity resulted in the greatest fall. Foreign direct investment started the recovery process by the end of 2020 with a total value of 940 million Euro. The industry of mineral extraction and fuel faced the greatest impact during the second the period of 2020, due to the importance that raw materials and especially fuels have on global markets.
During 2022, FDI increased by 37 % compared to the previous year, which is equal to 1.37 billion Euro.
According to the Bank of Albania, the highest volume of foreign investments in the fourth quarter of 2022 comes from Netherlands—71.8 million Euro, —followed by Italy with 37.7 million Euro and Austria with 27.4 million Euro.
The largest volume of investments from non-residents in the fourth quarter of 2022 impacted the sectors of mining and quarrying, real estate, and finance and insurance, with 66.4 million Euro, 66 million Euro, and 65.8 million Euro, respectively. This is reflected also in the volumes of the country's exports where ferroalloys count for 10.4 % of the total, followed by energy production and crude oil extraction shown in Table 1 below.

**Table 1. Albanian exports by composition in 2022.**

| Category | Percentage (%) | Subcategories | Subcategory Percentages |
|---|---|---|---|
| Ferroalloys | 10.4% | Raw Iron Bars, Raw Aluminum, Scrap Iron | 1.44%, 1.35%, 0.91% |
| Electricity | 6.66% | - | - |
| Crude Petroleum | 6.5% | - | - |
| Footwear Parts | 7.51% | Textile Footwear, Rubber Footwear | 0.74%, 0.74% |
| Leather Footwear | 6.21% | - | - |
| Non-Knit Men's Suits | 3.07% | Knit Women's Suits, Knit Sweaters | 1.82%, 0.92% |
| Insulated Wire | 2.79% | Electric Motors | 0.61% |
| Chromium Ore | 2.73% | Refined Petroleum, Copper Ore | 0.90%, 0.85% |
| Perfume Plants | 1.48% | - | - |
| Processed Crustaceans | 1.17% | Processed Fish | 0.71% |
| Paper Containers | 1.45% | - | - |
| Other Exports | Various | Various subcategories | Various |

*Source: OECD*

Table 1, presents the main Albanian export categories in percentage shares, and their subcategories. The sector of mineral extraction and textile make the vast part of the Albanian exports.

## 2. Literature Review

Previous studies concerning the factors determining FDI in countries in transition have majorly assessed factors such as market size, which are essential for Foreign Direct Investment in economies in transition (Botrić and Škuflić, 2006; Falk 2015) and factors of gravity that explain the pattern of FDI in Southeast European countries (Mateev, 2008).
Others are proximity, trade barriers, tax policy and tax incentives, labor costs, and regional integration. Demekas et al. (2005) showed that gravity factors explain a large part of the flows of FDI in transition economies, including Southeast European countries, takeing into consideration of course the business environment and the political environment, which are of great importance for

foreign direct investments. Janicki and Wunnava (2004) suggest that international trade is perhaps the most important and determining factor of FDI in countries with economies in transition.

Because of data quality and different methodology of data collection, evaluating the impact of FDI in transition economies is difficult either methodologically and practically (Welfe, 2013; Weyerstrass, 2008 and 2001). In general, impacts of FDI may be affected by the state of governance. Weak institutional frameworks, military or ethnic conflicts, and instability may inhibit development, while democratic movements and political stability may be beneficial for economic, political, and social development (e.g., Aisen and Veiga, 2013; Clemens, 2010; Jong-A-Pin, 2009).

Eren and Zhuang (2015) have investigated the various impacts of different types of FDI on the economic developments in 12 new EU member states between 1999 and 2010 and found that neither mergers and acquisitions nor greenfield investments influence the economic growth. Similarly, Nath (2009) examines the FDI inflows and their impact on real GDP growth per-capita for 13 transition economies across Central and Eastern Europe and the Baltic region from 1991 to 2005 showing that FDI has no significant influence on the economic growth of these economies compared to trade and domestic investment.

Similarly, the FDI literature on Albanian economy during the transition period is characterized by some unclear conclusions:

Boriçi and Osmani (2015) investigated the link of FDI on economic growth in Albania. Applying the cointegration analysis of time-series data, they discovered a significant long-run relationship between FDI and GDP growth. They recommended that Albania should invest more in its economy in order to attract more FDI.

Hysa and Hodo (2016) investigated the real effects of FDI on economic growth in Albania through the cointegration method with quarterly data from 1991 to 2012. Empirical findings reveal a great correlation between GDP growth and the ratio of FDI to GDP, thus proving significant support for economic growth.

Beyond these results, Golitsis et al. (2018) tested the effect of remittances and FDI on economic growth, using quarterly data between 1996 and 2014 from the World Bank. Using the Granger causality test and the VAR test, they found that remittances cause economic growth in both the short and long term while FDI appeared to be unrelated to economic growth. This would indeed indicate that transfers from emigration to support their families are much more significant than FDI.

Also, Demeti and Rebi (2014) maintained the argument that FDI does not support the promotion of economic development in Albania. The study used data from the period between 2002 and 2013 and used Pearson's correlation coefficient and Granger's causality test. This study, however, found a positive relationship between FDI and labor productivity, which is the main indicator of economic development. The reasoning for this was that the most productive sectors of Albania have attracted more FDI during this period, bringing as an example the hydropower sector, which occupied a substantial part in Albania's FDI stock during this period.

Similar results are shown by Jakšić et al. (2018) who argue that FDI in the case of the Croatian economy have a negative effect on exports, as it is mostly directed into the service sector rather than the industrial sector.

Recently, Hobbs, S., Dimitrios P., and Mostafa E. A. (2021), evaluated the case of Albania with annual data collected from 1992 to 2016 and proved the existence of long-run relationships between trade, economic growth, and FDI. They proved that exports were more effective in stimulating economic growth than FDI, because, according to VECM tests, the dependence of exports and GDP growth was more significant. In conclusion, while their study failed to establish causality from FDI inflows to exports, support for reverse causality from exports to FDI inflows is strong. This result seems to corroborate the assertion that Albania's increasingly open trade policies have been attractive to foreign investors. This is most likely because trade liberalization is simultaneously associated with higher exports and FDI inflows.

In general, in the case of Albania, the empirical results are unclear and the role of FDI inflows in economic growth or development as well as in the impact on the host country's exports is not clearly predicted. On the other hand, most findings suggest that economic growth and development cause increased FDI inflows.

Albania's commercial policies can be characterized as promoting exports. As the trend in most transition economies show, when FDI increases, so do exports. Therefore, research on the relationship between FDI, trade, and GDP will help to understand the effectiveness of Albania's open trade policies more appropriately than the narrow research between FDI and GDP.

The limitations associated with previous studies are due to the fact that the time series span is relatively small since these research are mostly based on annual data, which results only in a few observations. Such small data does not allow to put in the model a sufficient number of variables that would help in better explanations of how macroeconomic variables interact with each other, as well as provide more reliable results from econometric tests.

## 3. Methodology

Although many studies have investigated the link between FDI, economic growth, and exports, there have been very many difficulties in quantifying this relationship due to the use of various econometric methods and explanatory variables, which are often unique for new studies, and as a result, this leads to biased results and controversy over the interpretation of the results (Sapienza, 2010).

Since studies on the case of Albania have provided ambiguous results for the relationship of the above variables, and there are still few studies that found that there may be a bidirectional or endogenous relationship of FDI, the interest in deepening these relations in more details and up to date data is used to test the relationship and impact between FDI, exports and economic growth using the same econometric methods, which will lead to a better understanding of the causal influences between the variables.

The following research questions can shed more light on a better understanding of the impact between FDI, exports and economic growth for this particular economy:

- $H_1$: What is the impact of FDI inflows and economic growth in GDP on Albanian exports?
- $H_2$: And what are the effects of exports and GDP on FDI inflows?

To answer the above questions a general macroeconomic model is used with the variables as follows:

Exports = f(Exports−k, FDIt−k, GDPt−k)
FDIt = f(FDIt−k, Exports−k, GDPt−k)

Where FDI represents the incoming flows of Foreign Direct Investments measured in millions of Euro; Exports represent economic openness; GDP is the Gross Domestic Product, measured by time unit t.

The time series data will be tested for unit roots, then Granger causality will be tested between the variables, as well as co-integration and the Error Correction Model (VECM) to investigate the short- and long-run relationships between FDI- ves, exports and economic growth.

The general VECM model can be written as follows:

$$\Delta Y_t = \alpha_0 + \sum^{k}_{j=1}\beta_j \Delta Y_{t-j} + \sum^{k}_{j=1}\delta_j \Delta X_{t-j} + \phi_1 Z_{t-1} + \varepsilon_t$$

where Z is the error correction term (ECT) and represents the OLS residuals from the long run cointegration regression. This model can be expressed in two equations according to the two hypotheses presented above:

$$\Delta \ln Exp_t = \alpha_1 + \sum^{k}_{j=1}\beta_{11j}\Delta \ln Exp_{t-j} + \sum^{k}_{j=1}\beta_{12j}\Delta \ln FDI_{t-j} + \sum^{k}_{j=1}\beta_{13j}\Delta \ln GDP_{t-j} + \phi_1\, ECT_{t-1} + U_{1t} \quad (1.1)$$

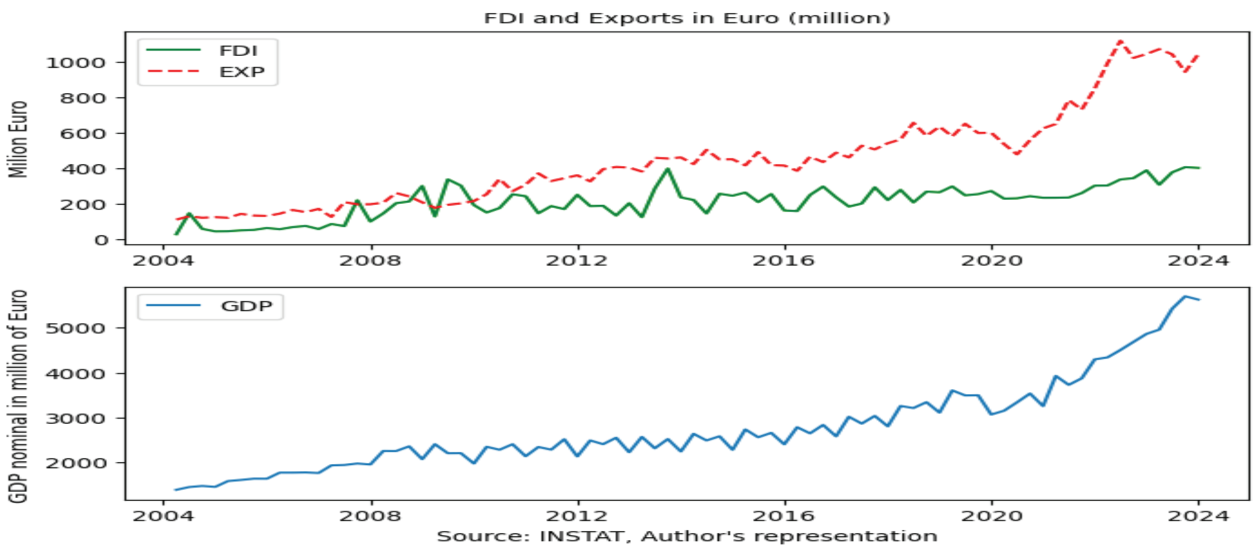
$$\Delta \ln FDI_t = \alpha_2 + \sum^{k}_{j=1}\beta_{21j}\Delta \ln FDI_{t-j} + \sum^{k}_{j=1}B_{22j}\Delta \ln Exp_{t-j} + \sum^{k}_{j=1}\beta_{23j}\Delta \ln GDP_{t-j} + \phi_2\, ECT_{t-1} + U_{2t} \quad (2.1)$$

Where $\alpha_1$ and $\alpha_2$ are the constants of the two equations and $ECT_{t-1}$ is the error correction term with a delay period, where $k$ denotes the length of the delay, while $\beta j$ and $\phi j$ are the coefficients to be estimated and $Ut$ represents the uncorrelated disturbance terms. Note that the error correction term is related to the fact that the deviation of the last period from the long-run equilibrium affects the short-run dynamics of the dependent variable. Thus, the ECT coefficient, $\phi$, measures the speed at which the dependent variable returns to equilibrium following a change in the independent variable.

### *3.1. Data Description*

The analysis in this study is conducted using secondary data, made available from the Bank of Albania, INSTAT, and AIDA. The data used are quarterly (n = 80) starting from the first quarter of 2004 to the first quarter of 2024. This means that, unlike previous studies, which were based on annual data of the two post-communist decades, we can add more detailed and qualitative information thus enabling statistically more reliable results due to the higher number of observations used. The time-series data for GDP are presented in millions of the national currency and are not seasonally adjusted. For the period 2004-2007, the data have uniform distribution, as quarterly measurements of the GDP in Albania started to be available from 2008 onwards. The other variables employed include FDI and total quarterly exports given in millions of Euro from the first quarter of 2004 to the first quarter of 2024 as shown in Figure 2, below.

**Figure 2: Quarterly Flows of FDI, GDP, and Exports.**




**Source: Bank of Albania, INSTAT, Author's representation**

## 4. Empirical Analysis

To assess whether the variables are stationary or not, the Augmented Test Dickey and Fuller (1979) is used. Meanwhile, to see if the variables are co-integrated, that is, if there is a long-term relationship between the variables, Johansen's test (1988) and Stock and Watson's test (1988) were used. Using the VECM model, the long-term equilibrium after a shock to the independent variables is studied, and finally, the short-term dynamics between the variables under study are evaluated using the Granger test of causality to determine the direction of causality between them.

### *4.1.1 The ADF test for stationarity*

The variables need to be stationary, which means that each variable needs to be tested for the existence of a unit root, and this is done by the Augmented Dickey–Fuller test.

The null hypothesis is based on the fact that for any series, the series is non-stationary because it has a unit root. The alternative hypothesis states that the series is stationary, so it does not have a unit root. Therefore, in order to reject the main hypothesis, one should have that the ADF t-statistic is less negative than the critical value for any chosen level of significance.

We can see in the Table 1 below that for the data at the current level of significance, the null hypothesis cannot be rejected since the t-statistic is greater than the critical values (5%) for all the three variables tested. These variables can be stationary in their first order difference.

**Table 2. ADF Test for of unit root for FDI, Exports, GDP.**

| Dependent Variable | Null Hypothesis | t-Statistic | Prob. | Result |
|---|---|---|---|---|
| EXP_EUR at level | Unit root | 0.522534 | 0.9865 | yes |
| D(EXP_EUR) first difference | Unit root | -11.34246 | 0.0001 | no |
| GDP_EUR at level | Unit root | 2.682207 | 1.0000 | yes |
| D(GDP_EUR) first difference | Unit root | -4.676948 | 0.0000 | no |
| FDI_EUR at level | Unit root | -3.492889 | 0.0107 | yes |
| D(FDI_EUR) first difference | Unit root | -8.916650 | 0.0000 | no |

*Source: Author*

### *4.1.2 Cointegration test*

From the above fact that our time series are first-order integrated, the cointegration test by Johansen has been applied to check whether there is a long-run relationship between the variables. In this regard, the following two tests have been carried out: the *trace rank test* and the *maximum eigen value* test.

The null hypothesis is that cointegration does not exist, so r = 0. The alternative hypothesis says that at least one cointegrating relationship is present.

The second basic null hypothesis is that there is at most one cointegrating equation: r = 1. Its alternative hypothesis would be that there is more than one cointegrating equation. The basic null hypothesis will be rejected if the trace statistic would be less than its critical value. On the other hand, if the trace statistic is greater than its critical value, then the basic null hypothesis is rejected.

Table 3, shows the result of a test of the three first-order series for cointegration in the third rank between them. Since the t-statistic values exceed the critical values under the alternative hypothesis of more than one cointegrating equation, this alternative is accepted, showing that there are three cointegrating first-differencing equations of one lag.

**Table 3. Cointegration Rank Test**

| | | | | |
|---|---|---|---|---|
| Unrestricted Cointegration Rank Test (Trace) | | | | |
| Hypothesized | | Trace | 0.05 | |
| No. of CE(s) | Eigenvalue | Statistic | Critical Value | Prob.** |
| None * | 0.506561 | 103.5160 | 29.79707 | 0.0000 |
| At most 1 * | 0.359202 | 49.83293 | 15.49471 | 0.0000 |
| At most 2 * | 0.189946 | 16.00978 | 3.841466 | 0.0001 |
| **Trace test indicates 3 cointegrating eqn(s) at the 0.05 level | | | | |
| Unrestricted Cointegration Rank Test (Maximum Eigenvalue) | | | | |
| Hypothesized | | Max-Eigen | 0.05 | |
| No. of CE(s) | Eigenvalue | Statistic | Critical Value | Prob.** |
| None * | 0.506561 | 53.68305 | 21.13162 | 0.0000 |
| At most 1 * | 0.359202 | 33.82316 | 14.26460 | 0.0000 |
| At most 2 * | 0.189946 | 16.00978 | 3.841466 | 0.0001 |
| **Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level** | | | | |
| * denotes rejection of the hypothesis at the 0.05 level | | | | |
| **MacKinnon-Haug-Michelis (1999) p-values | | | | |

### *4.1.3 The VECM Model*

According to Johansen's testing, there exists cointegration between FDI, exports, and GDP. It is possible to come up with an estimate of the speed of adjustment in the long-run equilibrium of variables after a shock through error correction (ECT), which should be negative and have a value higher than 5% of critical value of significance.

The VECM's coefficient estimations between FDI, exports, and GDP when applied on equations 1.1 and 2.1 can be reformulated in:

$$D(LOG\_EXP)=(-0.003764)(LOGEXP(-1)-5.326LOGFDI(-1)+6.952LOGGDP(-1)-32.7837)+(-0.247951)D(LOGEXP(-1))+(0.003)D(LOGFDI(-1))+(0.729D(LOGGDP(-1))+(0.020213) \quad (1.2)$$

$$D(LOG\_FDI)=(0.060407)(LOGEXP(-1)-5.326LOGFDI(-1)+6.952LOGGDP(-1)-32.783)+(0.766264)D(LOGEXP(-1))+(-0.284814)D(LOGFDI(-1))+(0.4626)D(LOGGDP(-1))+(-0.006729) \quad (2.2)$$

From the test results, the error correction term when FDI inflow is the dependent variable is negative (-0.341541) and statistically significant [t=-3.18074< -1.96] indicating a long-term impact of exports to FDI. A shock to exports causes FDI to recover by approximately 34% per quarter, reaching the equilibrium after three periods. On the other hand, the error correction term when the dependent variable is the flow of exports, is positive and statistically insignificant, which shows that there is no long-term impact of FDI towards exports.

The same case is observed for the relationship between FDI inflows and GDP where the error correction term when the dependent variable is FDI inflow is negative −0.295145and statistically significant [t= −3.71067<-1.96] and indicating a long-term impact of GDP towards FDI. A shock in GDP causes FDI to recover by approximately 30% per quarter, reaching equilibrium after three periods. On the other hand, the error correction term when GDP is the dependent variable, although it is negative, results statistically less insignificant, indicating that there is a weaker (4%) long-term impact of FDI towards GDP.

So, from the analysis of the used model-VECM, it results that FDI inflows do not have a long-term impact either on the level of exports or on economic growth-GDP. On the contrary, both exports and Albanian economic growth have a long-term impact on FDI inflows.

### *4.1.4 Granger Causality Test*

Through Granger causality tests we can investigate the existence of causality in the short term between FDI, exports and GDP.

From Table 4, the null hypothesis stating that FDI does not cause Exports, cannot be rejected, since the F statistic is below the critical value and the probability is above 0.05. On the contrary, the null hypothesis stating that Exports do not cause FDI, can be rejected, since the F statistic is above the critical value and the probability is below 0.05.

**Table 4. Granger causality test for Exports and FDI**

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|---|---|---|---|
| LOGEXP does not Granger Cause LOGFDI | 78 | 7.98156 | 0.0007 |
| LOGFDI does not Granger Cause LOGEXP | | 0.00253 | 0.9975 |

*Source: Author*

From Table 5, below, the causality relationship remains as in the case of GDP and FDI, only in contrast, the causality relationship from FDI to GDP is not very important relative to the second hypothesis rejected convincingly.

**Table 5. Granger causality test for GDP and FDI.**

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|---|---|---|---|
| LOGFDI does not Granger Cause LOGGDP | 78 | 3.10285 | 0.0509 |
| LOGGDP does not Granger Cause LOGFDI | | 6.30378 | 0.0030 |

*Source: Author*

As for the short-term relationship between Exports and GDP, in Table 6, the causality relationship from economic growth, GDP, to exports is very strong, but this does not reverse the direction since the basic hypothesis that Exports cannot be rejected do not cause GDP.

**Table 6. Granger causality test for GDP and exports**

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|---|---|---|---|
| LOGEXP does not Granger Cause LOGGDP | 78 | 0.22025 | 0.8028 |
| LOGGDP does not Granger Cause LOGEXP | | 13.5835 | 1.E-05 |

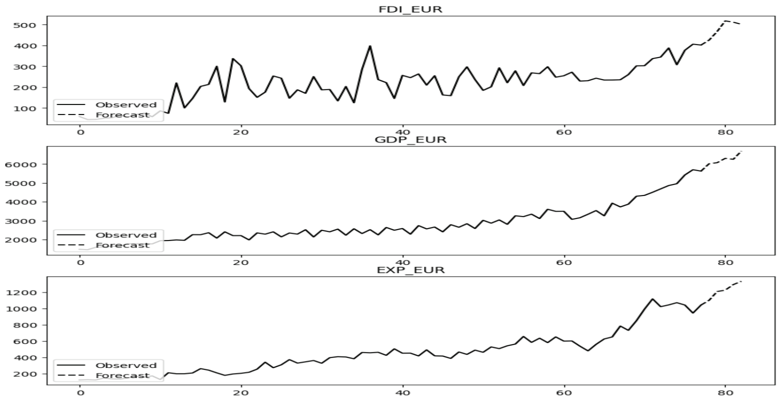
*Source: Author*

Thus, from the above, there exists a one-way flow of causality from Exports to FDI and from GDP to exports. However, bi-directional causality has been established only in the combination between GDP and FDI inflows, which, is not very strong.

## 5. Results

The VECM model for quarterly data predicts an upward trend for all three variables in the next 5 periods; however, FDI inflows are characterized by greater fluctuation compared to exports that are also expected to continue growing.

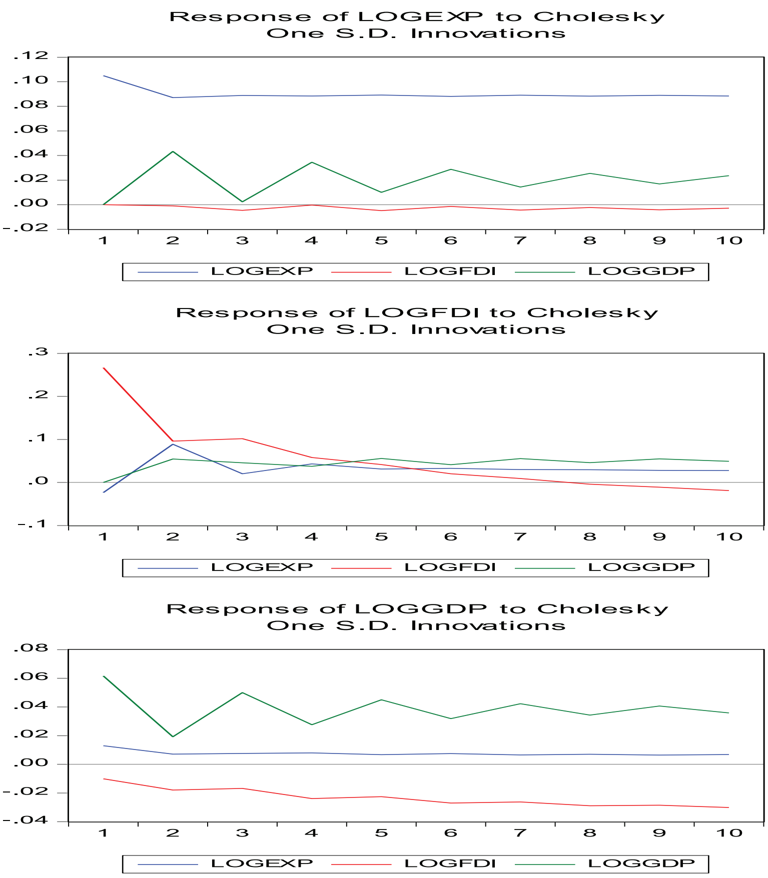
**Figure 3. VECM forecast for the next 5 periods of each time series:**




*Source: INSTAT, author's calculation*

Finally, in Figure 4, we see how the effect caused by the change of one variable on other variables will be in the long term (10 periods).

**Figure 4. Response of the variables to the impulse changes in each of them in the next 10 periods.**




*Source: Author*

In the first graph where there are presented the responses of the three variables to a shock in exports (in blue line), we see that this shock appliedto the same variable (export growth), it remains stable over time indicating that shocks to export growth have aminor impact on the exports themselves, while it causes a significant variability in foreign direct investment (in red line), implying that FDI inflow is sensitive to changes in export growth and no significant fluctuations on GDP growth (in green line).

In the second graph, after the shock in FDI on the same variable (in red line), there is an initial sharp decline in FDI itself and then a stabilization showing a short-term volatility then its returning to equilibrium. As for the remaining two variables, both export growth (in blue line)and GDP (in green line) exhibit a minimal reaction to a shock in FDI, indicating that these remainunaffected by short termfluctuations in FDI.

Finally inthe last graph,export growth (in blue line) remains stable to shocks in GDP, while FDI shows a larger reaction to GDP shocks, but not as severe as in the previous graph and a moderate sensitivity to GDP itself . Overall FDI is the most volatile variable in the presence of economic shocks, showing significant short-term fluctuations on both internal and external changes while export is the most stable variable, being unaffected to shocks in exports, FDI, or GDP, indicating that export growth remains mostly unaffected by economic fluctuations.

The impact of shocks on GDP seems to be more moderate, if compared to that on FDI showing more stability but still displaying some sensitivity to changes. The result, therefore, is very important as it suggests that the government should focus more on trade openness, growth and exports—devaluating thus the role of FDI inflows.

## 6. Limitations

A problem encountered with studies that have used different secondary data for different countries is their instability as a result of different methods of data collection. Data quality from countries under transition is also not guaranteed. This leads to the fact that the same studies carried on the same countries to result in controversial conclusions.

The fact that the analysis of the model used (VECM) indicates that the FDI inflows do not have a long-term impact either on the level of exports or on economic growth (GDP) is probably related to the composition of these investments. In fact, most of the FDI stock is invested in the energy sector (while the domestic demand for energy is steadily increasing) and in hydrocarbon-mining sector which is focused on mineral extraction rather than in investing in the processing tecnology of these minerals.

## 7. Conclusion

Although Albania enjoys a favorable geographical position, relatively low labor costs, and some fiscal incentives, it still ranks among the countries with the lowest inflow of foreign capital in the region, recording much lower levels of FDI than its actual potential. Several barriers in attracting such investments are found in the political instability of the country, its weak infrastructure, and corruption.

In contrast to prior studies, which relied on truncated annual data, this study uses more detailed and better quality of the information by employing quaterly data, thus enabling statistically more reliable results from the higher number of observations used.

The analysis with the VECM model indicates that FDI inflows do not have a long-term impact either on the level of exports or on economic growth (GDP). On the contrary, both exports and economic growth have a long-term impact on FDI inflows. This relationship is also verified by Granger causality tests for the short term which showed causality in only one direction.

Overall FDI is the most volatile variable in the presence of economic shocks, showing significant short-term fluctuations on both internal and external changes while export is the most stable variable, being unaffected to shocks in exports, FDI, or GDP, indicating that export growth remains mostly unaffected by economic fluctuations.

This is likely due to the fact that, over these years, foreign investments have primarily resulted from the privatization of small, medium, and large state-owned enterprises and have been mainly focused on labor-intensive industries or have been oriented towards residential real estate transactions.

These results constitute an important information for policy-making as it supports the idea that the focus of government policies should be oriented towards economic opening and export growth, thereby undervaluing the role of FDI inflows.

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# SUPPLY CHAIN OPTIMIZATION FOR ENVIRONMENTAL SUSTAINABILITY

Pupavac, Drago, *Polytechnic of Rijeka, Croatia, drago.pupavac@veleri.hr*

***Abstract:*** *This work aims to investigate the possibilities of optimizing supply chains for ecological sustainability. In the tripartite components of sustainability (economy, society, environment), economic issues are currently dominating. A model of supply chains for a sustainable future should equally embrace all three components. The purpose of the work is to promote environmental sustainability. The research results are based on the mathematical method of dynamic programming. The main finding of this paper points to the conclusion that the optimization of supply chains from the point of view of total (economic and ecological) costs is the first and most important step towards greener and ecologically sustainable supply chains.*

***Keywords:*** *sustainability, supply chains, economic costs, environmental costs, dynamic programming*

## 1. Introduction

Despite significant progress and numerous examples of good practice, the concept of sustainable development, which includes improving economic and social well-being while protecting the environment, may not have achieved the desired global sustainability. Global supply chain has a large effect on the environment. From sourcing raw materials to create products, to how finished products are transported to their final distributor, the supply chain can utilize many valuable, non-renewable resources during each step of the way. Environmental crises are distinguished by rapid and largely unexpected changes in environmental quality that are difficult if not impossible to reverse (Taylor, 2009). With the Covid-19 crises, disruption in global supply chains, inflation, war in Ukraine and energetic crises it's very hard to think about environmental crises. Business world has focused, mainly on economic sustainability.

The impact of the supply chain on the environment is primarily negative. The typical consumer company's supply chain creates far greater social and environmental costs than its own operations, accounting for more than 80 percent of greenhouse-gas emissions and more than 90 percent of the impact on air, land, water, biodiversity, and geological resources (Bové & Swartz, 2016). Consumer companies can thus reduce those costs significantly by focusing on their supply chains. Accordingly, the main hypothesis of this work is: The incorporation of environmental sustainability into supply chains is a critical step toward achieving sustainable development. The methods of analysis and synthesis, comparative method, and the dynamic programming method were used to prove the hypothesis.

## 2. Literature review

### *2.1. Supply chains*

McKinsey & Company (2022) defined supply chain as interconnected journey that raw materials, components, and goods take before their assembly and sale to customers. A supply chain consist of all stages involved, directly or indirectly, in fulfilling a customer request. A typical supply chain consists of: customers, retailers, wholesalers/distributors, manufactures and component/raw material suppliers. Success in the supply chain is measured in terms of supply chain profitability. The higher the supply chain profitability, the more successful the supply chain (Chopra & Meindl, 2001). For many companies, sustainability is gaining a new dimension. Sustainability has become increasingly important not just from economic but also from ecological and social perspective. While traditional supply chain management focuses on operational speed, cost, and reliability, sustainable supply chain management incorporates the goals of environmental and societal values. This includes dealing with global issues like climate change, water security, deforestation, human rights, fair labor practices, and corruption. The notion of supply chain optimization has grown in popularity in recent years, as firms strive to improve their operational efficiency and cost-effectiveness. However, this optimization must not be at the expense of the environment. Instead, environmental sustainability and supply chain optimization must be studied concurrently to secure a long-term, sustainable future. As the world strives to solve serious environmental challenges, the concept of a low-carbon economy that prioritizes low energy consumption, low pollution and sustainable development is gaining support (Liao, 2023). The supply chain management industry is facing one of its biggest challenges. It is imperative that all links of the supply chain, i.e. the complete supply network, be economically, socially and ecologically sustainable. Sustainable supply chain management is becoming increasingly important for businesses of all sizes and industries (Seuring, 2013). Meeting environmental and social requirements at all levels of the supply chain guarantees that the minimum sustainability performance is met.

### *2.2 Sustanibility*

The concept of sustainability, although widely accepted, is often interpreted in different ways. For example, Andrew Dobson (2000) listed more than three hundred definitions. The most common use of this concept, however, is related to sustainable development, which is defined as development that meets the needs of the present generation without compromising the ability of future generations to meet their needs (World Commission Environment and Development, 1987). Since then, the concept of sustainability has developed in two directions. The first includes three types of sustainability; ecological, economic, and social, which must be in harmony with each other (Crane & Matten, 2010). Another distinguishes between strong and weak sustainability (Kuhlman & Farringotn, 2010). The distinction between strong and weak sustainability is one of the basic reasons why there are many different definitions of sustainable development today and why the discussion about what this concept encompasses is still ongoing in the scientific and professional public. The incorporation of sustainability into supply chains is a critical step toward achieving sustainable development, as supply chains consider the product from the time raw materials are first processed until it is delivered to the end user.

#### *2.2.1. Economic Sustainability*

Economic sustainability, sometimes known as the "profit" pillar, is correlated with economic development, growth, productivity, profitability, and the stability of prices and markets (Elkington, 1994; Kuhlman and Farrington, 2010). This pillar in business relates to a company's short- and long-term profitability, which may be assessed using metrics like revenues and market capitalization (Zarra, et al, 2019). Many companies believe that consumers do not care about how they deal with their suppliers and employees, they only being concerned with price. These firms argue that they must find the lowest-cost supplier and relentlessly cut labor costs to remain competitive in the global market arena. However, not all firms accept this rationale. Many managers believe that the implementation of sustainable practices in their business can bring benefits to their firms in terms of revenue effects. Figure 1 depicts the impact of sustainable supply chain methods on customers, as well as the pricing, sales, and revenue implications that arise.

**Figure 1. Economic Benefits of Supply Chain Sustainable Practices**


*Source: Author prepared according: Mefford, R. (2011). T he Economic Value of a Sustainable Supply Chain, Business and Society Review. Volume 116, Issue 1, pp. 111, http://dx.doi.org/10.1111/j.1467-8594.2011.00379.*

Economic sustainability refers to a company's ability to compete fairly in a given industry. It includes respect for copyright, prevention of counterfeit goods (OECD-EUIPO, 2016), and avoidance of anti-competitive practices (Yang and Ji, 2016).

### *2.2.2. Environmental Sustainability*

Environmental sustainability, the most researched pillar of sustainability, focuses on how we use raw materials to meet human needs and the environmental damage that this causes. Environmental sustainability is the „planet" pilar (Elkington, 1994; Kuhlman and Farrington, 2010). Environmental sustainability promotes recycling, resource reuse, and environmental damage mitigation. The survival of the economy is closely linked to environmental sustainability. Namely, numerous business ventures depend on resources such as clean water, clean air, arable land, and a stable climate. Coca-Cola, as the world leader in the production of soft drinks, recognized the necessity of water protection as a critical factor for the success of its business in the future. To this end, it has developed cooperation with the world organization for nature protection - World Wildlife Fund (The Economist, 2008) for the protection of seven main river basins of drinking water. At the moment, many "green" businesses are not profitable, and the external costs that numerous business ventures make to the ecological system have not been converted into internal costs, which puts polluters in an even more favorable position. Thus, market relations do not solve the issue of balance between production and consumption on the one hand and nature on the other, but act as an accelerator of the destruction of nature and its resources (Strahinja, 2006).

### *2.2.3. Social Sustainability*

Social sustainability has a critical importance for human life. Social sustainability lacks a broadly accepted definition (Cope, Keman, Sanders & Ward, 2022). Social responsibility can be defined as ability of local community to create a life from itself for itself. It is a „people" pilar. Sociial sustainability is a complex concept that include topics such as (Şebnem Yılmaz Balaman): health and social equity, human rights, labor rights, practices and decent working conditions, social responsibility and justice, community development and well-being, product responsibility, community resilience, and cultural competence. The objective of social sustainability is to secure people's socio-cultural and spiritual needs equitably (Popovic, Kraslawski, Avramenko, 2013). Every individual has varied demands, which vary depending on the current state of society (Assefa & Frostell, 2007). Social sustainability might be considered one of the most essential characteristics of sustainability, as the purpose of sustainable development is to make the environment, both societal and natural, a better place for humans.

### *2.3. Environmental Sustainability and Supply Chains*

Companies face pressure to improve *environmental sustainability* in *supply chain*. The "greening" of a supply chain is the management process by which manufacturers, buyers, and retailers reduce their environmental impact throughout the value chain. It involves all stages, including product design, material selection, manufacturing process, transportation of goods, and the recycling and disposal of used goods. Environmental goals that can "green" a company's supply chain include: 1) reducing energy, water, and natural resource consumption, 2) increasing clean and renewable energy use, 3) decreasing waste production and pollution emissions and 4) improving waste byproducts treatment. Green supply chain involves assessing the whole environmental impact of products and services over their entire life span (Handfield, 2005). The concept of a green supply chain is linked to the larger concept of a "sustainable economy." Practitioners suggest that the major goal of environmental sustainability in supply chains should be to enhance organizations' environmental performance while maintaining productivity (Parajuli et al., 2019).

## 3. Matherial and methods

Let's say (Pupavac, Krpan, Marsanić, 2021) that for a product to be manufactured and delivered on the demand location within the supply chain, certain production and logistic activities need to be done and which can be classified in five phases (I-V): $x_1$ (procurement of raw materials), $x_2$ (production), $x_3$ (warehousing and land transport ), $x_{4,}$ (maritime transport), $x_5$ (distribution), and for which within the global logistic system it is possible to engage 27 different participants: $f_1$, $f_2$, $f_3$...,$f_{23}$. (cf. Table 1).

Table 1. Production phases within the supply chain and potential supply chain participants

| Phases of logistic process | Potential supply chain participants | Costs of each phase within the supply chain (in 000 €) | | |
|---|---|---|---|---|
| 1 | 2 | 3 | | |
| | | Economic | Environmental | Total |
| I. Delivery of raw materials Incoterms EXW - Ex Works | $f_1$– Russia | 11 | (35×0.03)=1.05 | 12.05 |
| | $f_2$ – Finland | 12 | (25×0.03)=**0.75** | 12.75 |
| | $f_3$ – Egypt | 14 | (40×0.03)=1.20 | 15.20 |
| | $f_4$ – Bulgaria | 14 | (30×0,03)=0,9 | 14.90 |
| | $f_5$ – Moldavia | **10** | (35×0,03)=1,05 | **11.05** |
| | $f_6$ – Belarus | 11 | (45×0,03)=1,35 | 12.35 |
| II. Production | $f_7$ – Czech | 32 | (32×0.03)=0.96 | 32.96 |
| | $f_8$ – Romania | 22 | (40×0.03)=1.2 | 23.20 |
| | $f_9$ – Poland | 26 | (25×0.03)=**0.75** | 26.75 |
| | $f_{10}$ – Slovakia | 24 | (30×0.03)=0.9 | 24.90 |
| | $f_{11}$ – Serbia | **20** | (50×0,03)=1,5 | **21.50** |

| Phases of logistic process | Potential supply chain participants | Costs of each phase within the supply chain (in 000 €) | | |
|---|---|---|---|---|
| III. Warehousing and land carriage (railway operator, road transport operator) | $f_{12}$ – national railway operator<br>$f_{13}$ – ABC Logistics | **8**<br>9 | (0.7×0.03)=**0.021**<br>(4.5×0.03)=0.135 | **8.021**<br>9.135 |
| IV. Sea shipping (ship operators) | $f_{14}$ - Global Alliance<br>$f_{15}$ - Grand Alliance<br>$f_{16}$ - Maersk-Sealand | **7**<br>8<br>10 | (31.2×0.03)=0.936<br>(30.0×0.03)=**0.9**<br>(33.0×0.03)=0.99 | **7.936**<br>8.90<br>10.99 |
| V. Distribution (distributors in North America) | $f_{17}$ – East Coast<br>$f_{18}$ – West Coast<br>$f_{19}$ – Canada | 12<br>**11**<br>14 | (2.8×0.03)=**0.084**<br>(3.1×0.03)=0.093<br>(3.5×0.03)=0.105 | 12.084<br>**11.093**<br>14.105 |
| I., II. | $f_{20}$ – Austria | 30 | (65×0.03)=1.95 | 31.95 |
| II., III. | $f_{21}$ – Switzerland | 36 | (40×0.03)=1,2 | 37.20 |
| I., II., III. | $F_{22}$ – GB | 42 | (75×0.03)=2.25 | 44.25 |
| II., III., IV. | $F_{23}$ – Croatia | 40 | (60×0.03)=1.8 | 41.80 |
| III., IV., V. | $f_{24}$ – Germany | 28 | (28×0.03)=0.84 | 28.84 |
| III., IV. | $f_{25}$ – Italy | 22 | (30×0.03)=0.9 | 22.90 |
| IV., V | $f_{26}$ – USA<br>$f_{27}$ – USA | 20<br>**18** | (25×0.03)=0.75<br>(22×0.03)=**0.66** | 20.75<br>**18.66** |

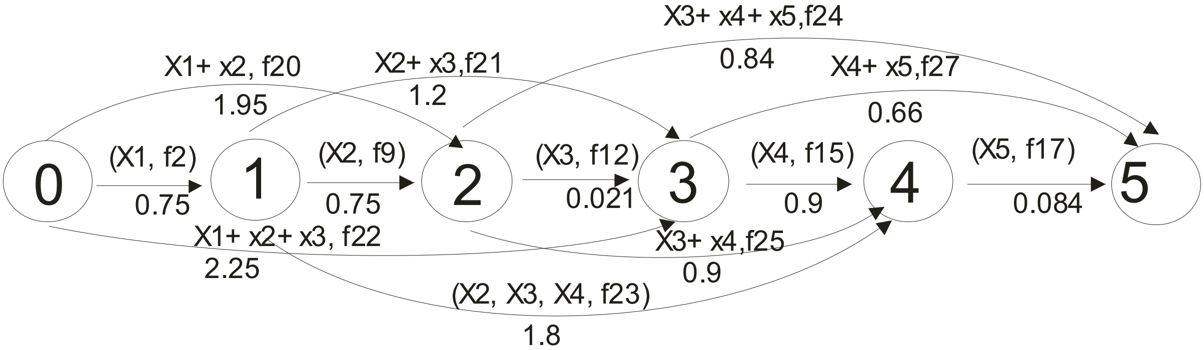
The assumption is that the supply chain produces and delivers 100 tons of goods per month. Economic and environmental costs are arbitrarily estimated. Economic costs are the cost price of each stage within the supply chain. Environmental costs refer to pollution of rivers, air, environment, waste, and are expressed in monetary units in such a way that their cost is estimated at 30 EUR/t $CO_2$. The ecological costs of transport were estimated in such a way that the $CO_2$ emission of truck transport is 150 g-$CO_2$/tkm, sea transport 39 g-$CO_2$/tkm and rail transport 20 g-$CO_2$/tkm (Niwa, 2009).

## 4. Results and discussion

Based on the data from table 1, it is evident that in order to design an optimal network from an economic, environmental or total cost aspect, it is not necessary to consider all potential participants, but only some of them. Once non-competitive potential supply chain participants have been eliminated, it is possible to approach the design of the appropriate supply chain network and solve the problem posed.

The following shows the supply chain network from a environmental aspect (cf. figure 2).

**Figure 2. Logistic network of potential qualified global supply chain participants from environmental aspect**



Above every branch of the logistic network (cf. *Figure 2*) a logistic chain phase is entered as well as potential participants for carrying out a certain activity within the global logistic chain and under the branches of the logistic network costs for carrying out a certain phase within the logistic chain are entered.

In the following, the problem of the shortest path in the network is solved from an environmental aspect by applying the dynamic programming method. Other problems (from economic and total costs aspects) were solved according to the same principle, and the description of their solution is omitted. By applying the recursive expression the following is obtained

f(0) = 0 i f(1) = 0.75, and then

$$f(2) = \min \begin{Bmatrix} f(0) + c(x1 + x2, f20 = 0 + 1.95 \\ f(1) + c(x2, f9 = 0.75 + 0.75 \end{Bmatrix} = 1.50$$

$$f(3) = \min \begin{Bmatrix} f(0) + c(x1 + x2 + x3, f22 = 0 + 2.25 \\ f(1) + c(x2 + x3, f21 = 0.75 + 1.2 \\ f(2) + c(x3, f12) = 1.5 + 0.021 \end{Bmatrix} = 1.521$$

$$f(4) = \min \begin{Bmatrix} f(0) + \infty = 0 + \infty = \infty \\ f(1) + c(x2 + x3 + x4, f23) = 0.75 + 1.80 \\ f(2) + c(x3 + x4, f25) = 1.50 + 0.90 \\ f(3) + c(x4, f15) = 1.521 + 0.90 \end{Bmatrix} = 2.40$$

and finally

$$f(5) = \min \begin{Bmatrix} f(0) + \infty = 0 + \infty = \infty \\ f(1) + \infty = 10 + \infty = \infty \\ f(2) + c(x3 + x4 + x5, f24 = 1.5 + 0.84 \\ f(3) + c(x4 + x5, f27) = 1.521 + 0.66 \\ f(4) + c(x5, f17) = 2.40 + 0.084 \end{Bmatrix} = 2.181$$

which means that the length of the shortest path is p*, i.e. the minimum value of the function of the target z* = d(p*) = 2.181, and in this example we have optimum ways p* = (0,1,2,3,5). If the managers choose this solution they will have a cost of supply chain from 66 810 €. The optimal supply chain formed from an economic aspect will have a cost in the amount of 56,000€. We can conclude that a supply chain which is optimized from a environmental aspect has a higher cost for 22,87 % than a supply chain which is optimized from an economic aspect. An overview of other optimal solutions from different aspects is given in table 2.

**Table 2. Overview of optimal solutions**

| Optimization by aspects | Optimal way on network | Supply chain participants | Economic costs (000 €) | Environmental costs (000 €) | Min total costs (000 €) |
|---|---|---|---|---|---|
| Economic | 0,1,2,3,4,5<br>0,2,3,4,5<br>0,2,3,5 | f5,f11,f12,f14,f18<br>f20,f12,f14,f18<br>f20,f12,27 | 56<br>56<br>56 | 4.497<br>3.000<br>2.631 | 60.497<br>59.000<br>58.631 |
| Environmental | 0,1,3,5 | f2,f9,f12,f27 | 64 | 2.181 | 66.810 |
| Total costs | 0,2,3,4,5 | f20,f12,f14,f18 | 56 | 3.000 | 59.000 |

Based on the data from table 2, we can see that we have not optimal solutions which do not include environmental costs. The optimal solution from the environmental aspect is higher 13.95 % than the best solution from the economic aspect which includes potential environmental cost. It seems reasonable to choose the best solution from the total costs aspect which is also one of the three optimal solutions from the economic aspect. This solution will have slightly higher environmental costs than in the optimal solution, but it is a sure way towards their reduction and elimination.

## 5. Conclusion

Environmental sustainability and supply chain optimization are two concepts that must go hand in hand. By integrating sustainability into supply chain optimization, businesses can reduce their environmental impact, improve their reputation, and ensure long-term sustainability. A growing number of multinational firms have made the commitment in recent years to only do business with suppliers who uphold social and environmental criteria. The most problem arises at first-tier suppliers. Lower-tier suppliers nearly always have worse business practices, which exposes businesses to more substantial financial, social, and environmental risk. The findings of this scientific discussion confirmed the possibility of developing more optimal supply chains in terms of environmental costs. The difference in economic (total) costs in the resulting supply chains is negligible. Optimizing supply chains from the standpoint of economic costs yields significantly better results only if potential environomenat costs are ignored. Supply chain managers must set goals that intentionally create productive tension between economic and environmental criteria and move the supply chains toward a sustainable future.

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# TOURISTS' SATISFACTION AND QUALITY ATTITUDES TOWARDS TOURISM SUPPLY ON THE EASTERN COAST OF ISTRA COUNTY: AN EMPIRICAL STUDY

Golob, Marino, *mr.sc., Polytechnic of Rijeka, Croatia, e-mail: mgolob@veleri.hr*

Golob, Martin, *univ.spec.oec., orcid:* https://orcid.org/0000-0002-3964-4562 , *Polythechnic of Rijeka, Croatia, e-mail: mgolob1@veleri.hr*

Knapić, Elin, *bacc.oec., Polytechnic of Rijeka, Croatia, e-mail: eglavicic@veleri.hr*

***Abstract:***

*The paper aims to investigate various factors influencing tourists' attitudes i.e., satisfaction with both the accommodation units and the catering offer, the professionalism and hospitality of the tourism staff, a sense of security, lack of tourism offer, but also their motives, accommodation and arrival arrangements, their spending budgets etc. An online questionnaire was adopted using convenience and snowball sampling techniques. The questionnaire consisted of several parts: sample characteristics regarding age, country of origin, education and other sociodemographic characteristics of the responding population; then parts involving satisfaction and quality attitudes. The research results provide useful indicators of the advantages and disadvantages of the tourism offer in the tourist destination of Eastern coast of the Istria County, as well as an insight into the dominant groups of tourists, which will surely act as a signpost in which direction it will be necessary to develop future tourism offer in the area. The paper highlights that Eastern part of Istria County, despite the fact that it is less visited compared to the western part of the Istria County, is a valuable tourism destination that is being recognized for its specific attributes, and as such should not be striving for mass, but sustainable tourism and improvement of quality of those factors that resulted to be "weak points", as evidenced in this research. The distinctiveness of the Eastern part of the Istria County also lies in the fact that, as shown by this research, visitors have a tendency to return, which indicates satisfaction with previous experiences and which is reflected by a large percentage of independent organization of arrivals, both thanks to the proximity of outbound travel markets, and the high degree of security that visitors have recognized in the destination. Given the fact that previously mentioned area is a less populated and not so touristically prominent part of the largest Croatian peninsula compared to its western part, tourists' attitudes toward the tourism offer have not been an object of many studies.*

***Keywords:*** *tourism supply, tourist satisfaction, Istria, EU tourism.*

## 1. Introduction

One of the main drives of development, especially in rural environments hosting small communities, is tourism activity. If such circumstances exist of course, providing an establishment of such activities.

The Eastern part of the Croatian largest peninsula of Istria, famous and known for its tourism activity, has long been ignored and considered a lesser tourism destination by industry professionals, but also researchers that mainly focused on the more prominent and touristically developed parts of Istria County in the Republic of Croatia. In recent years, business development brought large tourism companies to the Eastern coast of Istria concentrated around the townships of Labin and Rabac areas (jutarnji.hr, 2017), with hotel investments changing the tourism offer significantly. A big part of these cities' economy is naturally, tourism, which supports local businesses and large companies alike, but also provide job and entrepreneurial opportunities to local and national population as well. Investigating the backbone of the local economy, especially focusing on the quality and satisfaction attitudes of incoming tourists, is vital in understanding parameters that define a successful tourism destination for future endeavours and for the all stakeholders involved.

## 2. Satisfaction and Quality in Tourism

Tourism Area Life Cycle (Butler, 2006) suggests that all tourism destinations have a certain period of discovery, growth, mature and decline, just as commodity goods. Tourism industry professionals are dully aware that a tourism destinations' image has to be refreshed "in a way" every 25 to 30 years. This process has to be in line with the current preferences of tourists, in order to prevent a certain decline or to extend the life cycle of the tourism destination. Butler (2006) stresses out potential problems for tourism destinations that are not professionally managed, do not invest in market research or rebrand their "experience product". To effectively enable the before mentioned, tourism destination stakeholders should be acting on relevant and latest findings in the area of tourist satisfaction with the tourism destination offer as well as their current perceptions regarding various factors that make up the tourism offer or the "experience product". In that regard, tourist satisfaction is an important and encompassing variable in the wider tourism industry. Having a "happy" tourist is the endgoal for many tourism stakeholders, taking accounts from the micro level (service and product companies that operate in the tourism industry) to the mezzo level (tourism destinations) and to the macro levels (national and international tourism industry). Tourist satisfaction is therefore closely related to tourist experiences and is reflecting their needs being fulfilled and their travel/visitation expectations being met, that then impacts their future preferences and decisions (Komilova et al, 2021; Quintal & Polczynski, 2010; Sumaedi et al.,2015). Tourist satisfaction is influenced by many factors. Several of them can be linked to service quality, tourist destination uniqueness, infrastructure, accommodation quality etc. But on the other hand, tourist satisfaction is also connected to tourist behaviour, as Prebensen et al. (2017) state, and by the tourist destination value that is perceived by the tourist while visiting. In that regard, it is important to stay up to date with tourist perceptions of the tourism offer, especially after COVID-19, and to continue monitoring on a consistent term. The important activity in tourism destination management is therefore to fully understand tourist satisfaction and to purposedly continue to measure it in order to tailor the tourism destination offer according to recent and relevant findings. At its core, tourist satisfaction can be defined as a tourist feeling of pleasure or a feeling of disappointment that stems from evaluating performance with reality (Kotler, 2020). Therefore, if the performance is below tourist expectations, the tourist can not be satisfied, at least not in full. On the other hand, if expectations are exceeded by the performance, the tourist can be considered satisfied or "happy" as such. Another important aspect of tourist satisfaction, as evidenced in numerous marketing and tourism studies, is the influence of tourist satisfaction on future activities of tourists like revisiting intentions and further recommendations of tourism destinations (Kim & Choe, 2019). Qaulity is another crucial concept in the tourism industry. When related to the quality of an tourism destination, UNWTO (2024) defines it as: "the result of a process which implies the satisfaction of all tourism product and service needs, requirements and expectations of the consumer at an acceptable price, in conformity with mutually accepted contractual conditions and the implicit underlying factors such as safety and security, hygiene, accessibility, communication, infrastructure and public amenities and services. It also involves aspects of ethics, transparency and respect towards the human, natural and cultural environment. Quality, as one of the key drivers of tourism competitiveness, is also a professional tool for organizational, operational and perception purposes for tourism suppliers". As Lopez Cruz et al. (2022) state, perceived quality occurs when a tourist or a consumer judges a product or a service and that judgment then becomes and important indicator of the satisfaction they perceive. Same authors further state that the expectations that the tourists create about the tourism offer are are indispensable when conceptualizing the quality of the service and must be taken into account. Grönroos (2007) defines basic parts of quality. One part is technical quality and the other is functional quality. The first one addresses factors of provided services such as appearance, cleanness of staff clothes, physical states etc, while the other addresses modalities of providing the service like staff behaviour, waiting time, politeness of staff etc. It is important to note that the concept of tourist satisfaction is a more broad concept than service quality (Ryglova & Vajčnerova, 2014) which relies primarily on service dimensions. Ryglova & Vajčnerova (2014) further state, based on Zeithaml, Parasuraman & Berry research (1985) that "any conceptual model on perceived service quality proposed should consider the two parties in the production of a service: the client and the enterprise, so the proposal takes these elements into account, considering that both have an influence on the provision of a quality service". Wahyudiono & Soerjanto (2022) point out that service quality greatly impacts toiurist revisit intention and stress out "that that perceptions of service quality and satisfaction have proven to be good predictors of future visitor behavior intentions". Tourism satisfaction and quality, including service quality, are therefore vital factors in designing and managing tourism destinations, especially from the standpoint of upcoming generations of "new" tourists. New generations of tourist vary related to consumption ideas, their behaviour and the choices they make. New generations of tourists seek new products and services that are agreeable with their emotions. They value tourism experience way more then previous generations of tourists (Akkhaporn, 2024).

## 3. Methodology

Aims and research questions, research methodology and sociodemographic profile of the respondents will be presented in this section of the paper.

### *3.1. Aims and research questions*

Objectives of the study are mainly focused on finding the overall satisfaction and quality perceptions of the Tourism supply on the Eastern coast of the Istrian peninsula. While the Tourism supply on the before mentioned area was historically considered lesser in terms of quality and offer, recent tourism developments in the area prompted an investigation in order to determine is it really so at this point in time. The findings of this empirical study, as presented in this paper, could be proven of significant value to local stakeholders in the tourism sector, thus contributing to future positive development of the area. Nevertheless, albeit the research is focused on a narrow local area and providing valuable data for local stakeholders, certain findings could be potentially valuable to to a wider tourism sector stakeholders in The Republic of Croatia and The European union, as well. The paper aims to find out current attitudes and perceptions relating to accommodation units and the catering offer, the professionalism and hospitality of the tourism staff, a perception of security, lack of tourism offer, together with their relationships addressed to the overall satisfaction of the tourists with the destination that is investigated. The questions that guided the research are as follows:

RQ1: Is there a specific difference in age groups of participating respondents regarding their satisfaction of the tourism offer on the eastern part of Istria County?

RQ2: Is there a specific difference between participating respondents relating to their overall satisfaction based on accommodation arrangements?

RQ3: What factors are more significant or valuable in determining overall satisfaction of the tourists in this particular tourism destination?

### *3.2. Research methodology*

An online survey was administered in February of 2023 using convenience and snowball sampling techniques. The survey consisted of several parts: sample characteristics regarding age, country of origin, education and other sociodemographic characteristics of the responding population; then parts involving satisfaction and quality attitudes. Simple Multiple-Choice questions and Likert-scale type questions were used. Collected data was analyzed by descriptive statistics in order to efficiently present the results that were obtained during the survey. Median, mode, standard deviation, range, maximum and minimum were used, as well as percentages. Data from different age groups were compared using two-tail t-tests in order to determine if the difference between age groups is statistically significant. Pearson Coefficient was used to determine the relationship between variables. ANOVA analysis was used to determine differences between groups of respondents relating to their accommodation arrangements.

### *3.3. Respondents' profile*

The survey was completed by almost the same number of respondents in terms of gender, that is, the number of female respondents was slightly higher. In total, 54% of female respondents and 48% of male respondents participated in the online survey as evidenced in Table 1.

Only a small proportion of participants under the age of 18 and those over the age of 66 took part in the research. The first group, youth, has a tendency to stay in destinations that carry the reputation of party destinations, or travel in an organized manner via agency arrangements with their education institutions. On such field trips there is always a tendency to visit more developed tourist destinations, and in the case of Istria County, they are located on the western coast of the peninsula. Regarding the elderly population aged 66 and over, the small number of research respondents can certainly be attributed to a potentially lower level of use of social networking sites or other digital media like e-mail, and therefore the percentage of survey respondents is understandable, which does not necessarily reflect the real situation and does not mean that tourists of this age do not make up a larger share of the real number of arrivals and overnight stays in the area of Eastern Istria County, which certainly represent a limitation of the study. Among the respondents, the age group of 36-45 years (25% of respondents) were dominant, followed by 22% of respondents between 26 and 35 years. The same percentage, 20% of respondents, was in the 26-45 and 46-55 age lifespans. In order to use age group as the independent variable in analysis, it was decided to combine respondents' age groups to two main age groups. The first age group, (ranging from 0 to 45 years old) representing 53% of the sample size (n=53). All other age groups from 46 to 66 years and older were combined to represent the second age group (47%, n=47). The rationale behind the divide was that younger and older respondents respond differently because they have different lifecycles, hence, their overall satisfaction could differ related to their habits, priorities and expectations of a tourism destination.

Regarding the country of origin of the participating respondents, those from the countries proposed in the questionnaire dominate. With the exception of Great Britain, domestic tourists and tourists from neighboring countries are dominant. Due to the proximity and favorable transport connections Slovenians occupy (22%) the sample, followed by Germans with 19% (who are also the most represented outbound market in the Croatian tourism sector). They are followed by Austrians with a share of 17%, then domestic tourists with a share of 14% and Italians with a share of 11%, and tourists from Great Britain with 7%. The remaining 10% are made up of tourists from the "other countries" category, and in this case, they are tourists from Bosnia and Herzegovina, France, Luxembourg, Belgium and Montenegro. The results show that respondents have a higher level of education: 32% of them have completed graduate studies, 31% undergraduate, 25% high school, and only 7% has completed only elementary school. The smallest share has a master's degree or doctorate in science, only five of the respondents. Although it is not always the case, the educational status of the respondent is often reflected in the motive of the trip/vacation. For example, a more educated structure of tourists shows a greater tendency to visit cultural assets and institutions of the tourism destination (Richards, 2021).

**Table 1: Sociodemographic profile of the respondents**

| Gender Group | Number | Percentage |
|---|---|---|
| Male | 46 | 46% |
| Female | 54 | 54% |
| TOTAL | 100 | 100% |

| Age Group I | Number | Percentage |
|---|---|---|
| 0-18 | 3 | 3% |
| 19-25 | 3 | 3% |
| 26-35 | 22 | 22% |
| 36-45 | 25 | 25% |
| 46-55 | 20 | 20% |
| 56-65 | 20 | 20% |
| 66+ | 7 | 7% |
| TOTAL | 100 | 100% |

| Country of Origin | Number | Percentage |
|---|---|---|
| Croatia | 14 | 14% |
| Italy | 11 | 11% |
| Slovenia | 22 | 22% |
| Germany | 19 | 19% |
| Austria | 17 | 17% |
| Great Britain | 7 | 7% |
| BiH | 4 | 4% |
| Luxembourg | 1 | 1% |
| Belgium | 1 | 1% |
| France | 2 | 2% |
| Montenegro | 2 | 2% |
| TOTAL | 100 | 100% |

| Age Group II | Number | Percentage |
|---|---|---|
| 0-45 | 53 | 53% |
| 46+ | 47 | 47% |
| TOTAL | 100 | 100% |

| Education | Number | Percentage |
|---|---|---|
| Elementary | 7 | 7% |
| High School | 25 | 25% |
| Undergraduate | 31 | 31% |
| Graduate | 32 | 32% |
| Msc/Doctorate | 5 | 5% |
| TOTAL | 100 | 100% |

| Income | Number | Percentage |
|---|---|---|
| 0-800 € | 8 | 8% |
| 801-1100 € | 8 | 8% |
| 1101-1400 € | 16 | 16% |
| 1401-1700 € | 25 | 25% |
| 1701-2000 € | 20 | 20% |
| 2000 € + | 23 | 23% |
| TOTAL | 100 | 100% |

*Source: research results*

The results in this study indicate that the majority of respondents are in the demographic group with higher incomes: 25% of respondents have monthly incomes in the range of €1,401-1,700 per month, which is far above the Croatian monthly average, but compared to the dominant outbound markets, this represents a lower average income. 23% of respondents have monthly incomes above €2,001, followed by 20% of respondents with incomes between €1,701 and 2,000. 16% of them have incomes between €1.101 and €1400, only 8% reported incomes below €800, which justifies the smaller share of respondents, since the budget intended for travel is not part of the essential living expenses that can be afforded by visitors with lower buying power.

## 4. Research results and discussion

The results of the survey will be presented and discussed in the three sections below: motives and modes of arrival to the tourism destination, satisfaction and quality attitudes and return intention and recommendation attitudes.

### *4.1. Motives and modes of arrival to the tourism destination*

Research respondents were asked to identify their main motive for arrival to the tourism destination of Eastern coast of the Istria County (The destination of Labin, Raša, Rabac area). The results show that "Sun & Sea" motive is the most dominant one with 15% of overall respondents, followed by 12% of overall respondents answering "Walks & Sightseeing". "Historical & Cultural Sites", "Sports" and "Passive Vacation" followed with equal share of 11% as evidenced in Table 2.

**Table 2: Motives and modes of arrival to the tourism destination**

| Motives | Number | percentage |
|---|---|---|
| Sun & Sea | 15 | 15% |
| Good Food | 5 | 5% |
| Comfortable Accommodation | 5 | 5% |
| Nature Beauty | 10 | 10% |
| Exploring new places | 5 | 5% |
| Good road connection | 5 | 5% |
| Walks & Sightseeing | 12 | 12% |
| Good service in stores | 1 | 1% |
| Fun & Dancing | 0 | 0% |
| Peace, Quiet & absence of crowds | 7 | 7% |
| Choice of Short Fieldtrips | 2 | 2% |
| Passive Vacation | 11 | 11% |
| Sports | 11 | 11% |
| Historical & Cultural Sites | 11 | 11% |
| TOTAL | 100 | 100% |

| Incentives | Number | Percentage |
|---|---|---|
| Reccomendation | 26 | 26% |
| Previous Visits | 27 | 27% |
| Affordable Offer | 22 | 22% |
| Internet promotion | 18 | 18% |
| Brochure | 5 | 5% |
| Family Decision | 2 | 2% |
| TOTAL | 100 | 100% |

| Arrangements | Number | Percentage |
|---|---|---|
| Independent | 68 | 68% |
| Tourist agency | 32 | 32% |
| TOTAL | 100 | 100% |
| | | |
| | | |
| | | |

*Source: research results*

Although "Sun & Sea" motive is the single most prevalent one, other motives like "nature beauty", "walks & sightseeing", "sports" and "historical & cultural sites" have a significant place in the overall motives structure, clearly showcasing that the modern tourist has different motives, and that this tourism destination has been recognized as not just a "Sun & Sea" destination. Incentives that influenced selection of this tourism destination were recommendations (26%), previous visits (27%), affordable offer (22%), internet promotion (18%), brochure (5%), family decision (2%). Most of the respondents chose to arrive to the tourism destination on their own arrangements. Only 32% percent of the overall respondents chose to arrive by a tourist agency.

**Table 3: Spending budgets and accommodation structure**

| Daily Spending Budget | Number | Percentage |
|---|---|---|
| 0-20€ | 2 | 2% |
| 21-30€ | 9 | 9% |
| 31-50€ | 25 | 25% |
| 51-70€ | 42 | 42% |
| 71-90€ | 16 | 16% |
| 91-110€ | 6 | 6% |
| 111€ + | 0 | 0% |
| TOTAL | 100 | 100% |

| Accommodation | Number | Percentage |
|---|---|---|
| Private | 27 | 27% |
| Hotel | 25 | 25% |
| Camping | 31 | 31% |
| Hotel Apartment | 9 | 9% |
| Family & Friends | 8 | 8% |
| TOTAL | 100 | 100% |
| | | |
| | | |

*Source: research results*

Most of the respondents had a daily spending budget between €51 and €71, followed by 16% of respondents who spent on average between €71 and €90 on a daily basis and those that spent between €31 and €50 (25%). As evidenced in Table 3., most of the respondents stayed in a camp (31%), then private accommodation (27%), hotels (25%), hotel apartments (9%) or with family and friends (8%).

## *4.2. Satisfaction and quality attitudes*

Table 4. shows descriptive statistics for satisfaction and quality attitudes given by the respondents of the survey. Variable S.SUM stands for the overall satisfaction which is given a solid mean of 3,36 out of the range from minimum 1 (not satisfied at all) to maximum 5 (fully satisfied) (Median=3, Mode=4). Satisfaction with the accommodation quality (S.ACCOM) resulted in a mean of 3,52 (Median=4, Mode=4); satisfaction with the cleanliness of the destination has been valued at the mean of 3,53 (Median=4, Mode=4). Respondents were the least satisfied with the tourism destination staff and the qualities they presented (Mean=3,47; Median=4; Mode=4), while showed the highest satisfaction attitude toward the tourism destination safety (Mean=4,06, Median=4, Mode=4).

**Table 4: Descriptive statistics for satisfaction and quality attitudes**

| Measure / Variable | S.SUM | S. ACCOM | S. CLEAN | S. STAFF | S. BARS | S. SAFE |
|---|---|---|---|---|---|---|
| | | | | | | |
| Mean | 3,36 | 3,52 | 3,53 | 3,47 | 3,52 | 4,06 |
| Standard Error | 0,07590531 | 0,07450849 | 0,082210619 | 0,1048857 | 0,071745904 | 0,072223 |
| Median | 3 | 4 | 4 | 4 | 4 | 4 |
| Mode | 4 | 4 | 4 | 4 | 4 | 4 |
| Standard Deviation | 0,759053105 | 0,745084905 | 0,822106189 | 1,048857002 | 0,71745904 | 0,72223 |
| Sample Variance | 0,576161616 | 0,555151515 | 0,675858586 | 1,10010101 | 0,514747475 | 0,5216162 |
| Kurtosis | 0,534055566 | -0,218746476 | 0,116363719 | -0,583572457 | -0,194119164 | 1,0659003 |
| Skewness | -0,854782127 | -0,44350896 | -0,264800575 | -0,347893291 | -0,155130499 | -0,7473809 |
| Range | 4 | 3 | 4 | 4 | 3 | 3 |
| Minimum | 1 | 2 | 1 | 1 | 2 | 2 |
| Maximum | 5 | 5 | 5 | 5 | 5 | 5 |
| Sum | 336 | 352 | 353 | 347 | 352 | 406 |
| Count | 100 | 100 | 100 | 100 | 100 | 100 |

*Source: research results*

Accommodation quality variable has a positive correlation with the overall satisfaction (0.094302). The correlation coefficient is relatively low, suggesting a weak positive relationship between these two variables. Cleanliness of the tourism destination has a positive correlation with both Accommodation quality attitudes (0.1721597) and tourism destination staff quality (0.2236282). The correlation coefficients are moderate, indicating a moderate positive relationship between these variables. Tourism destination staff quality has a moderate positive correlation with the overall satisfaction with the tourism destination of Eastern Istria coast (0.2928277) and a weak positive correlation with cleanliness of the destination (0.2236282). It also has a weak positive correlation with hospitality offer (restaurants, bars, clubs, etc.) (0.1551705). The correlation coefficient with accommodation quality is very low (0.0330889), suggesting a weak positive relationship. Hospitality offer (restaurants, bars, clubs, etc.) has a weak positive correlation with cleanliness of the tourism destination (0.2301649) and tourism staff quality (0.1551705). The correlation coefficient with accommodation quality is relatively higher (0.1126181), although indicating a weak positive relationship. Tourism destination safety variable has a weak positive correlation with the overall satisfaction with the tourist destination of Eastern Istria coast (0.1997314) and a weak negative correlation with hospitality offer (-0.06082). The correlation coefficients with accommodation quality attitudes, cleanliness, and staff attitudes are all relatively low, suggesting weak positive relationships. These results only show the strength and direction of the linear relationship between the variables and do not provide information about the underlying causes or other potential relationships that may exist. It is evident from the research results (Table 5.) that a moderate positive relationship between the overall satisfaction and tourism staff quality attitudes is the strongest of the variables researched, followed by tourism destination safety perceptions. It can be concluded from the research findings that quality of Eastern coast of Istria hospitality staff and the perceived safety of the tourism destination play an important role in the overall satisfaction. Furthermore, the research results show a weak negative relationship between hospitality offer of restaurants, bars, clubs etc. that could be linked with the Eastern coast of Istria perception of a family holiday destination and not the party destination. However, it's important to note that correlation does not imply causation, and there may be other factors or underlined relationships that are not captured by these correlation coefficients and the variables investigated in the research.

**Table 5: Correlation coefficients related to Overall satisfaction**

| | S.SUM | S. ACCOM | S. CLEAN | S. STAFF | S. BARS | S. SAFE |
|---|---|---|---|---|---|---|
| S.SUM | 1 | | | | | |
| S. ACCOM | 0,094302 | 1 | | | | |
| S. CLEAN | 0,0796397 | 0,1721597 | 1 | | | |
| S. STAFF | 0,2928277 | 0,0330889 | 0,2236282 | 1 | | |
| S. BARS | -0,0133545 | 0,1126181 | 0,2301649 | 0,1551705 | 1 | |
| S. SAFE | 0,1997314 | 0,0916017 | 0,0649867 | 0,1090753 | -0,06082 | 1 |

*Source: research results*

Table 6. represents a statistics summary and ANOVA (analysis of variance) analysis for respondents' attitudes toward the overall satisfaction when categorized into three main and most dominant groups of accommodation arrangements: Hotel, Camp, and Private. The summary part of the Table 6. provides information on the count, sum, average (mean), and variance for each group.

**Table 6. Statistics summary and ANOVA single factor analysis results**

**SUMMARY**

| *Groups* | *Count* | *Sum* | *Average* | *Variance* |
|---|---|---|---|---|
| Hotel | 25 | 89 | 3,56 | 0,423333333 |
| Camp | 31 | 104 | 3,35483871 | 0,503225806 |
| Private | 27 | 86 | 3,185185185 | 0,925925926 |

ANOVA

| *Source of Variation* | *SS* | *df* | *MS* | *F* | *P-value* | *F crit* |
|---|---|---|---|---|---|---|
| Between Groups | 1,825778238 | 2 | 0,912889119 | 1,480435308 | 0,233704696 | 3,110766166 |
| Within Groups | 49,33084827 | 80 | 0,616635603 | | | |
| Total | 51,15662651 | 82 | | | | |

*Source: research results*

The ANOVA results indicate that there is no significant difference between the group means because the p-value (0.233704696) is greater than the chosen significance level (e.g., $\alpha = 0.05$). Therefore, based on this analysis, there is insufficient evidence to conclude that the mean ratings of the three groups (Hotel, Camp, and Private accommodation arrangements) are significantly different. However, the findings of the study still provide interesting insights into tourist satisfaction related to their accommodation arrangements. Given the results, it is evident that the respondents that stayed at hotels (including hotel apartments) were overall the most satisfied group (3,56), as opposed to those that stayed in camps (3,35) and private accommodation (3,18).

The difference between the overall satisfaction of both observed age groups (0-45 yrs. and 46+ yrs.) did not prove to be statistically significant (p=0,98) and the results also showcase the average rating of both groups is very similar, 3,35849 was given by the first younger group and 3,36170 by the latter older group. Based on study findings, it can be stated that there is no specific difference in age groups of participating respondents regarding their satisfaction with the tourism offer on the eastern part of Istria County.

## *4.3. Return intention and recommendation attitudes*

Based on research results given in Table 7., it appears that the majority of respondents in both categories selected "Probably" as their intent, with "Neither Probably nor unprobable" being the second most common choice. The least popular choices were "Very Probably" and "Very Unprobable" in both tables. Given that 26% of respondents came to the Eastern coast of Istria due to a recommendation, it was interesting to investigate their recommendation intent based on their experience.

**Table 7: Return and recommendation intent attitudes**

| Return Intent | Number | Percentage |
|---|---|---|
| Very Probably | 4 | 4% |
| Probably | 35 | 35% |
| Neither Probably or Unprobable | 40 | 40% |
| unprobable | 20 | 20% |
| Very unprobable | 1 | 1% |
| TOTAL | 100 | 100% |

| Recommendation Intent | Number | Percentage |
|---|---|---|
| Very Probably | 21 | 21% |
| Probably | 41 | 41% |
| Neither probably or unprobable | 25 | 25% |
| unprobable | 10 | 10% |
| Very unprobable | 3 | 3% |
| TOTAL | 100 | 100% |

*Source: research results*

Based on the results provided in Table 8., it can be said that there is a moderate positive relationship (0.227565197) between the overall satisfaction with the tourism destination and the return intention of the respondents. Also, there is a moderate positive relationship (0.365316151) between the overall satisfaction and the recommendation intent of the respondents. The findings of the study are in line with findings of a similar research done by Wahyudiono & Soerjanto (2022) that state that overall tourist satisfaction directly effects their return intention to the visited tourism destination and partly in line with the research conducted by Tri Nguyen Huu et al. (2024).

**Table 8. Correlation coefficients for return and recommendation intent related to Overall satisfaction**

| Variable | S.SUM | RETURN | RECOMM |
|---|---|---|---|
| S.SUM | 1 | | |
| RETURN | 0,227565197 | 1 | |
| RECCOM | 0,365316151 | 0,458541529 | 1 |

Source: research results

As evidenced in Table 8., there is a moderate positive relationship (0.458541529) between the return intention of the respondents and the recommendation intention expressed by the respondents of the survey. These correlation values indicate that there are positive associations between the variables in the table, but further information should be sought after and provided in order to fully understand the specific nature and direction of return and recommendation intentions for this specific tourism destination in the Republic of Croatia.

## 5. Conclusions

Taking into account the results of the conducted empirical research, overall satisfaction can be determined as well as other satisfaction and quality attitudes related to the tourism destination of Eastern coast of Istria county, specifically the areas of the city of Labin, Raša and Rabac. The respondents expressed an average to high level of satisfaction related to the before mentioned tourism destination. The respondents rated the overall satisfaction of the tourism destination with 3,36 (Likert scale from 1 to 5), that can be considered an average rating with standard deviation of 0,75. Accordingly, it can be stated that the surveyed participants of the study are satisfied with the offer that the tourism destination of Eastern coast of Istria provides them, however, there is still room for significant improvement. The respondents rated several variables beside the overall satisfaction; accommodation quality (3,52), cleanliness of the tourism destination (3,53), hospitality staff quality (3,47), restaurant, bars and clubs offer (3,52) and safety of the tourism destination. The safety variable got the highest rating of 4,06 with the standard deviation of 0,72. In modern times, it can be assumed that safety is an important, even crucial, factor when determining their vacation or visit destination and the correlation coefficient also corresponds with this assumption, meaning that safety is a vital factor in the overall satisfaction rating in this research. Given the third research question: What factors are more significant or valuable in determining overall satisfaction of the tourists; the results clearly indicate, beside the before mentioned safety factor, that quality of the hospitality staff plays an important role in determining the overall satisfaction with the correlation coefficient of a moderate positive correlation of the overall satisfaction related to the tourism destination of Eastern Istria coast (0.2928277). Research results clearly indicate that staff quality and destination safety are the main strengths of the Eastern coast of Istria tourism destination, with accommodation quality and cleanness following.

Age and lifecycle of the tourists plays a significant role in decision making related to the choice of the vacation destination, but also their satisfaction and return intention. This paper tried to determine is there a specific difference in age groups of participating respondents regarding their satisfaction of the tourism offer on the eastern part of Istria County that can be used in recommendations for the local stakeholders regarding tourism destination improvement. The research provided results that show an almost identical rating for both age groups (0-45 yrs. and 46+ yrs.). Respondents in the "up to 45 years" age group rated their overall satisfaction with a grade of 3,35849 and the second age group (45+ years) gave an 3,36170 rating. The difference is minor and is not statistically significant ($t(98)=-0,0211$, $p=0.98$). Furthermore, the paper tried to answer the second research question: Is there a specific difference between participating respondents relating to their overall satisfaction based on accommodation arrangements, assuming their experience can be largely different in those instances. ANOVA analysis was used to produce results between groups and the results showed that there is no statistical significance between groups regarding their accommodation arrangements influencing their overall satisfaction ($p=0.233704696$). However, the results still provide interesting findings that can be potentially interesting for local stakeholders. Respondents that stayed at hotels in the tourism destination rated their overall satisfaction higher (3,56) than others staying in camps (3,35) and private accommodation (3,18). Private accommodation, often as part of households, is widespread in the Republic of Croatia and is the prevalent form of accommodation capacities available in the country; and the results potentially demonstrate lesser quality than other modes of accommodation present at the time. Recommendations regarding the improvement of private accommodation quality in the tourism destination of Eastern coast of Istria could be an inevitable predicament for the future development of the destination. Furthermore, future developments of hotel capacities, especially those with higher standards, is crucial in increasing the quality of the tourism destination. As Weiermar (2000) argues that "today international tourism and international tourists call for a well designed combination of global, national and local cultures, of globally and locally valid service qualities. This blending would create tourism and destination specific cultures, thus leading to unique and differentiated tourism experiences in destinations", could it be that now, when the investigated area of Eastern Coast of Istrian peninsula has "global products" like new and luxurious hotels that the overall satisfaction is higher?

Among the respondents, the most commonly selected return intent was "Probably" with 35%, followed by "Neither Probably nor Unprobeable" with 40%. The least selected options were "Very Probably" with 4% and "Very Unprobeable" with 1%. This indicates that a significant portion of respondents expressed a likelihood of returning, while a small percentage indicated a high or very low probability of returning. In terms of the recommendation intent, "Probably" was the most common choice with 41%, followed by "Neither Probably nor Unprobable" with 25%. The least chosen options were "Very Probably" with 21% and "Very Unprobable" with 3%. This suggests that a substantial number of respondents were inclined to recommend, while fewer expressed extreme opinions regarding recommendation. The correlation table indicates that there is a moderate positive relationship between the overall satisfaction and the return intent (0.227565197), the overall satisfaction and the recommendation intent (0.365316151), as well as the return intent and the recommendation intent (0.458541529). These findings suggest that there are connections between the variables, but further analysis is required to determine the nature and significance of these relationships. In summary, the majority of respondents expressed a probability of returning and a willingness to recommend, with "Probably" being the most commonly selected option in both categories. Additionally, the correlation analysis suggests some interdependence between the variables. These insights can be vital in decision-making processes related to customer return and recommendation behavior which can be beneficial in development of tourism destinations like the Eastern coast of Istria county. However, it is important to conduct further research and analysis to gain a more comprehensive understanding of the underlying factors influencing the results of the study.

Limitations of the survey are clearly linked with the small sample size of only 100 respondents and the fact that the sample is thus not being representative of the tourism destination visitor total population. Another limitation can be attributed to the questionnaire distribution method, as the survey was conducted online using e-mails and social media that poses certain difficulties in assessing respondents' credibility, as is the case with other online surveys.

Recommendations for further research should be directed to investigating visitors' attitudes in depth and continually, especially regarding their satisfaction and multiple variables that influence their satisfaction in order to provide data that could be proven useful to create successful development strategies and plans that will benefit local stakeholders and local companies alike. Tourism is an important part of the overall economy in the Republic of Croatia and thus any research in this field is vital and ensures the right direction of Croatian tourism sector future developments.

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- **Expertise:** Papers are not always sent to a reviewer whose field is identical to the subject matter of that paper. You do not have to be precisely qualified in a field to be a constructive reviewer. In fact, quite the contrary, an excellent paper will speak beyond its narrowly defined field. If, however, a paper is so distant from your field that you do not feel qualified to judge its merits, please return it to the publishing manager for the journal, who will locate another reviewer.

- **Confidentiality:** Reviewers receive unpublished work which must be treated as confidential until published. Reviewers must not disclose to others which papers they have reviewed; nor are they to share those papers with any other person.
- **Conflict of Interest:** Reviewers must declare any conflict of interest or any other factor, which may affect their independence – in cases for instance where they have received a paper of a colleague or an intellectual opponent. In cases of conflict of interest, please notify the editorial team of your inability to review a particular paper.
- **Intellectual Merit**: A paper must be judged on its intellectual merits alone. Personal criticism or criticism based solely on the political or social views of the reviewer, is not acceptable.
- **Full Explanation:** Critical or negative judgments must be fully supported by detailed reference to evidence from the paper under review or other relevant sources.
- **Plagiarism and Copyright:** If a reviewer considers that a paper may contain plagiarism or that it might breach another party's copyright, they should notify the editors, providing the relevant citations to support their claim.
- **Responsiveness:** Reviewers are asked to return their reports within four weeks.

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