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Editorial

Journal of Economics and Behavioral Studies (JEBS) provides distinct avenue for quality research in the everchanging fields of economics & behavioral studies and related disciplines. Research work submitted for publication consideration should not merely limited to conceptualization of economics and behavioral developments but comprise interdisciplinary and multi-facet approaches to economics and behavioral theories and practices as well as general transformations in the fields. Scope of the JEBS includes: subjects of managerial economics, financial economics, development economics, finance, economics, financial psychology, strategic management, organizational behavior, human behavior, marketing, human resource management and behavioral finance. Author(s) should declare that work submitted to the journal is original, not under consideration for publication by another journal and that all listed authors approve its submission to JEBS. Author (s) can submit: Research Paper, Conceptual Paper, Case Studies and Book Review. Journal received research submissions related to all aspects of major themes and tracks. All submitted papers were first assessed by the editorial team for relevance and originality of the work and blindly peer-reviewed by the external reviewers depending on the subject matter of the paper. After the rigorous peer-review process, the submitted papers were selected based on originality, significance and clarity of the purpose. The current issue of JEBS comprises papers of scholars from Ethiopia, Uganda, Nigeria and South Africa. Assessing the Organizational Communication Style and Its Effect on Employees' Performance, Governance and the Manufacturing Sector Growth among the BRICS Nations, Determinants of Export Performance in Uganda, Liquidity Management and Financial Performance of SACCOs and Telecommuting and Normative Commitment of Employees were some of the major practices and concepts examined in these studies. The current issue will therefore be a unique offer where scholars will be able to appreciate the latest results in their field of expertise and to acquire additional knowledge in other relevant fields.

Editor In Chief

Ijaz Ur Rehman Ph.D

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Assessing the Organizational Communication Style and Its Effect on Employees' Performance in the Case of Wachemo University

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Abstract: In the case of Wachemo University, this paper looks into evaluating organizational communication style and how it affects employee performance. 261 sample respondents were given a standardized questionnaire as part of the study's survey methodology. The study's aims were achieved by combining the dependent variable, employee performance in the organization, with the independent variables completeness, correctness, consideration, clarity, conciseness, courtesy, and concreteness. Vice Presidents of Academic Affairs, Research and Community Service, and Administrative and Development are all involved in this investigation. The sample was chosen purposefully within each office: from the academic vice-president's office, the colleges of business and economics, social science, and agricultural science were chosen; from the research and community service vice-president office, the following institutions were chosen: Community service directorate office, Research publication office, and Research directorate office. The finance office and Student service office were chosen from the administrative and development vice-president office. Following collection, the data was analyzed using tables and graphs that use descriptive statistics. Additionally, a multiple linear regression model was employed to investigate how changes in each of the study's independent factors affected how well the employees performed. The results demonstrate that every independent variable has a favorable and significant impact on how well an organization's employees perform. Affective commitment and the communication surrounding work and organization were both favorably impacted by social and emotional subjects that were discussed between superiors and subordinates. The organization should build a fluid communication style between different departments for them to better coordinate and cooperate to achieve the overall organizational goals, according to the results and recommendations.

Keywords: *Organization, communication style, employees performance.*

1. Introduction

All the production factors—including people, machines, methods, markets, money, and materials—should be used properly if you want to remain successful in the fiercely competitive and tough global market economy. Human resource poses the biggest difficulty among the production variables since, in contrast to other inputs, employee management necessitates expert handling of thoughts, sentiments, and emotions to ensure maximum efficiency. In this challenge, organizational communication is crucial. It is possible to generate and enable low productivity with a high degree of worker boredom and disarray if leaders or managers of any organization are unable to coordinate a perfect and seamless flow of communication interaction among employees and the outside business environment. People, however, comprehend and interpret messages in various ways. The correctness of a message being transmitted can be interfered with by a variety of undesired interferences in communication, which poses a threat to effective communication (Koontz, 2001). Because businesses profit from having a satisfied workforce, maintaining employee satisfaction has become a top goal for many organizations (Lee and Moreo, 2007).

Without communication among its members, no organization can exist. According to Greenberg and Baron (2008), communication is defined as "the process by which one person, group, or organization (the sender) transmits some type of information (the message) to another person, group, or organization (the receiver)". Wang (2005). It has frequently been theorized from the standpoint of human resource management that an employee's knowledge, aptitude, and skill set will enable them to be a good performer upon hiring. Therefore, management must design its goals and rules so that workers carry out their jobs and complete their given responsibilities. Communication systems are fast changing at this time, and they are constantly being asked to play a bigger part in the effort to achieve economic and political stability. They are crucial for the success and growth of an organization. The cornerstone of an organization's success is effective workplace performance, and how effective the workers are will decide how successful the organization is. For employees to know what

is expected of them and for managers to ensure that each employee has immediate access to the resources they need to complete each assignment given to them, there must be effective communication between the two parties. Every action the management takes to improve employee performance falls under the category of communication. The purpose of this study is to evaluate organizational communication style and its impact on employee performance. Communication helps to motivate employees by informing and clarifying the task at hand, how it is being performed, and how to improve it if it isn't up to par.

Statement of the Problem: Communication helps the organizational members to make both personal and organizational goals. And also helps them to co-ordinate the internal activities of the organization. To the extent, the less effective communication of any organization is the less effective its performance will be. E.g. the new employee orientation program is the first and most essential step for any organization toward efficient communication. New employees feel a great sense of confidence with the orientation program. And this thing leaves a positive impact on their performance. In this respect the job of a manager cannot be ignored, because problems occur when directions are not clear. Every manager should be a good communicator because he communicates the message to one or a group (Ivancevich & Matteson, 2002). Lack of effective communication is one of the most inhibiting factors of successful organizational performance (Robbins et al., 2010, 288). For instance, communication helps members in the organization to discuss relevant organizational issues and generate and share information for creating ideas and making decisions, so that both the organizational and individual goals are achieved. Members transmit commands, inform each other of changes, coordinate to resolve problems and help each other with improvements. According to Hellweg & Phillips (2012), worker productivity increases when there is communication within the organization.

Besides many other things communication within the organization helps the employees to perform their tasks well, to have information about the duties they have to perform, and about the goals of the organization. They argue that the existence of communication within the organization leads to effective decision-making. A study by the University of East London shows that the concept of communication is immeasurable in modern management, and it seeks to meet clear understanding between manager and all the employees. It explains that employee communication is; an infect exchange and clear provision of information, commands and directions between management and employees. And it makes the organization work properly and employees to be well aware of their responsibilities and duties. (University of East London, 2009). The basic functions of management (Planning, Organizing, Staffing, Directing and Controlling) cannot be performed well without effective communication. Studies have shown that effective communication helps employees to coordinate activities, achieve goals and it is also dynamic in socialization, decision-making, problem solving and change-management processes. Effects of poor employee communications decreased cross-collaboration, lower morale, reduced efficiency or productivity, suppressed innovation, increased employee grumbling and higher turnover. The absence of such an effective communication channel tends to under-utilize the expertise and vital information of the employees, which could be critical input for formulating an effective communication strategy to reduce or eliminate apathy in performing their roles.

To what extent do these communication gaps affect the work performance of employees and the organizational performance as a whole? The effect of poor communication on employees and the organization needs empirical evidence from the employees. It is for this reason that this study is set to fill that gap. For this reason, this study aims to advance the understanding of the organizational communication style and its effect on employee performance because the University is a multi-diverse workforce. There is a genuine need to examine to assess the organizational communication style and its effect on employee performance.
Specifically, the study was trying to answer the following research questions

- What is the structure of communication that exists at Wachemo University?
- What is the relationship between effective organizational communication and employee performance?
- How does communication improve employee performance?
- Which one is the most useful channel of communication from an employee's point of view?
- What are the barriers and failures to organizational communication systems?

Hypothesis: After careful concern of all independent variables and the dependent variable of the study, the following hypotheses were developed.
Ho1: The performance of the employee and completeness are not significantly correlated.

Ho2: There is no connection between employee performance and correctness that is noteworthy.
Ho3: The performance of the employee and consideration has no real connection.
Ho4: Performance of the employee and Clarity do not significantly correlate.
Ho5: Performance of the employee and conciseness do not significantly correlate.
Ho6: There is no connection between courtesy and an employee's output.
Ho7: Performance of the employee and Concreteness do not significantly correlate.

Objectives of the Study

General Objective: The general objective of this research is to assess the organizational communication style and its effect on employee performance.

Specific Objective
To assess the communication structure of Wachemo University
To determine how employee performance is impacted by communication
To examine the connection between productive organizational communication and workers' output.
To determine the most effective means of communication from the perspective of the workforce.
To determine the organizational communication system's obstacles and shortcomings.

Significance of the Study
People exchange their thoughts, feelings, ideas, and emotions through communication. By getting to know one another and sharing the same love for life, man fulfills his wants while also helping others. Humans are social creatures. He is unable to handle worldly affairs on his own. To perform his routine actions, he requires assistance from others. It is possible to send messages from one person to another through communication.

The findings of this research will benefit Wachemo University by:

- Higher quality of services and products
- Greater levels of trust and commitment
- Increased employee engagement and higher levels of creativity
- Greater employee job satisfaction and morale of employees
- Better workplace relationships
- Greater acceptance of change
- Reduced staff turnover
- Less organizational unrest
- Reduced costs
- Helps an employee understand the terms and conditions of their employment and drives their commitment and loyalty.
- The Wachemo University personnel will receive useful information from the research regarding the effectiveness, dependability, and economy of their communications policies, practices, and programs. The study will give Wachemo University staff members knowledge about the impact of effective communication and how ineffective communication has negatively impacted employee performance. The study will then recommend strategies for improving communication to boost employee performance.

Scope of the Study: The study restricts its scope to Wachemo University and defines it in line with the factors specified in the hypothesis due to time, resources, and other constraints. Furthermore, it was finished within a year.

Limitations of the Study: It was quite challenging for the researcher to do the study completely free of any issues or constraints. As with all studies, this one has its limitations. Some respondents failed to return the questionnaires by the deadline, which caused a delay in the researcher's ability to submit the report by the deadline. Other respondents failed to return the questionnaires entirely. In addition, some respondents had demanding jobs, and others weren't as eager to complete the questionnaires. Therefore, these and other such issues could have had an impact on the paper's quality, which could have limited the outcome.

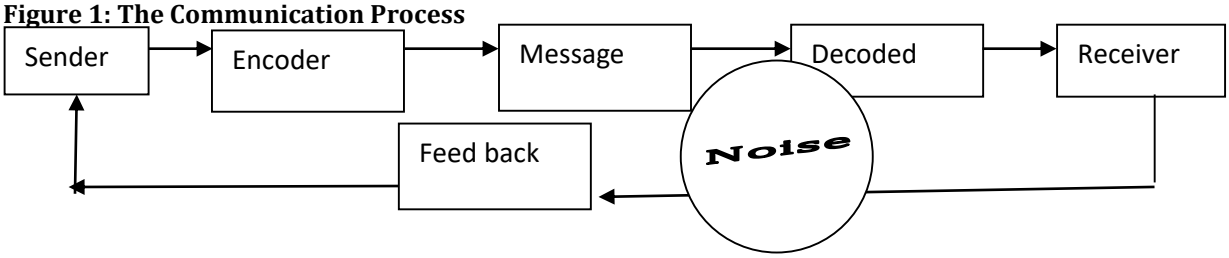
Organization of the Study: There are five sections in this work. Introduction, Statement of the Problem, Research Questions, and Objective of the Study with General Objective and Specific Objectives are all included in section 1 along with the study's Significance, Scope, and Organization. The second section reviews relevant literature. Empirical and theoretical reviews are also undertaken there, organizing the literature review and creating a conceptual framework. The third section examines research methodology, data collection methods, sampling methods, sample sizes, data processing methods, model testing, operationalization of variables, instrument validity and reliability, as well as ethical issues. The results of the data analysis and interpretation are reported in section four. The findings are compiled in section five, along with the conclusions and recommendations.

2. Review of Related Literature

Theoretical Basis of Organizational Communication: The idea of effective communication on employee performance and its research has been founded on a number of theories, the most popular of which are probably the systems theory, classical, and human relations theories. These theories explain how an organization behaves, communicates, and, more especially, how well it communicates. The idea essentially provides methods from which the researcher can employ effective communication to gauge internal performance within an organization in this setting. Given this, the Human Relations Approach and Systems Approach will receive a lot of attention because they provide a comprehensive view of an organization. According to the system theory, an organization is a system of interconnected, related pieces.

Defining Communication: According to Keyton (2011), communication is the process of conveying knowledge and a shared understanding from one person to another. The Latin word communis, which means "common," is the source of the English term "communication." The term emphasizes the reality that there can be no communication until there is an understanding that arises from the sharing of knowledge. According to Cheney (2011), Figure 1 illustrates the concept and lists the critical components of the communication process. By comparing the definitions provided by many authors, a more precise definition of communication can be found. These definitions include some of the following: Communication takes place when two parties exchange messages that have a common meaning. “The process of exchanging ideas or information between humans is known as communication. Communication is the process of conveying messages (facts, ideas, attitudes, & opinions) from one person to another so that they are understood. “People exchanging their thoughts, ideas, and feelings with one another in terms that are easily understood is known as communication. You might have noticed that all of the definitions listed above have something in common. All of the definitions emphasize that communication requires at least two participants and some sort of message that is meant to be passed from one side to another. In addition, when people communicate, they do so in a form that is understandable to one another. They exchange information among themselves.

Figure 1: The Communication Process



The sender and the receiver are two components that are present in every communication exchange. The communication is started by the sender. In a school, the sender is a student who needs or wants to explain a concept or idea to others. The person to whom the communication is sent is known as the receiver. By deciding whatever words, symbols, or gestures to use to create a message, the sender encodes the notion. The result of the encoding, which can be expressed through spoken, nonverbal, or written language, is the message. A medium or channel serves as the communication's carrier while the message is transmitted through it. The communication can take place in person, over the phone, via email, or in a written report. The communication is decoded by the receiver into useful information. Anything that skews the message is considered noise. Noise includes, but is not limited to, varying interpretations of the message, language obstacles, interruptions,

emotions, and attitudes. Finally, feedback happens when the recipient reacts to the sender's message and sends it back. The sender can get feedback to see if their communication was received and understood. Communication quality is determined by the process's various components. The efficiency of communication can be affected by issues with any one of these components (Keyton, 2011). A message, for instance, ought to be able to be understood as the sender intended.

Given the variety of options, choosing the right medium for message transmission might be crucial. A school administrator or other organization representative can pick from a variety of written media, including memos, letters, reports, bulletin boards, handbooks, newsletters, and the like. Face-to-face interactions, telephone calls, computers, public address systems, closed-circuit video, taped messages, sound/slideshows, e-mail, and other options are available for verbal media. Body language, facial emotions, posture, and even clothing can convey messages nonverbally. People only selectively decode information. When information supports one's own opinions, people are more likely to accept it, Feedback Medium Receiver Encode Encode Sender Encode Noise Message Decode Needs and Values (Keyton, 2010). One-way communication is the term used to describe a communication process where feedback is absent. Feedback encourages two-way conversation, which is more desirable. The ability of the school administrator to collaborate with other school stakeholders (faculty, support staff, community members, parents, central office) and develop a shared understanding of what the school/school district is trying to achieve, where it wants to go, and a shared sense of commitments that people have to make to advance the school/school district towards a shared vision and clarity of goals is crucial for success in the modern school. The effectiveness of the school or school district will increase when administrators are able to create a shared purpose, vision, values, and goals. Effective communication is essential to developing a relationship between school administrators and other stakeholders.

Organizational Communication: Members of an organization gather, transmit, and evaluate pertinent information about the organization and the changes taking place inside it (Kreps, 1990). Organizational communication is this process. The sender conveys a message to the recipient through communication, either verbally or nonverbally. However, communication entails grasping the meaning of the message as well as conveying it. No matter how brilliant an idea may be, it is useless if it is not successfully transmitted and understood (Robbins et al., 2010). When the recipient comprehends exactly what the sender is trying to convey, communication is perfect. However, in practice, there are many obstacles to optimal communication within an organization. Some of the causes will be discussed later in this chapter. The effectiveness of communication and overall performance in organizations are related, according to earlier research (Tubbs and Moss, 2008). One of the main obstacles to successful organizational performance is ineffective communication (Robbins et al., 2010). To achieve both organizational and individual goals, communication, for instance, enables members of the organization to discuss pertinent organizational issues, produce and share information for developing ideas, and reach decisions. Members communicate orders, update one another on changes, and work together to solve issues and make improvements.

Types of Communication in Organization: In line with Greenberg and Baron's assertion (2008). There are two categories for communication: (1) Internal and (2) External, depending on whether it takes place inside or outside the organization. Two categories are taken into consideration depending on the type of communication, such as (1) Formal and (2) Informal. Three types of communication have been identified from the perspective of the flow of communication. They are (1) lateral, (2) upward, and (3) downhill. Three categories of communication have been identified, depending on the medium or form: (1) Written (2) Oral or Spoken (both together constitute Verbal), and (3) Non-Verbal. Each of these is covered in detail in the section that follows.

Internal and External Communication

Internal Communication: Within an organization, information is transmitted through internal communication. There are several ways to communicate with businesses, including memos, reports, meetings, face-to-face conversations, teleconferences, video conferences, notices, etc. An essential tool for handling business-related issues is internal communication.

External Communication: Communication with individuals outside of an organization is known as external communication. It serves as the company's method of making contact with the outside world. Business letters,

press releases, advertisements, leaflets, invitations, telegrams, proposals, and more are examples of external communication. External messages can have a significant impact on an organization's reputation and eventual success. The appropriate letter, proposal, or one-on-one meeting can win over an unhappy client, pique interest in a company's goods or services, support the negotiation of a successful sale, promote collections, spur employee motivation, and generally foster goodwill. Outward communications are any messages sent by a company to its partners, clients, financial institutions, government agencies, the media, and the general public. They may take the shape of letters, calls, reports, advertisements, press materials, speeches, visits, etc., and this has a significant impact on an organization's public relations and public image. Any communications a company receives from the outside are considered internal communications. They must be noted, attended to, analyzed, taken into consideration, responded to, and stored.

Formal and Informal Communication

Formal Communication: The channels of power within the organization are followed in formal communication. The organization has purposefully created formal channels of communication. They stand in for the communication that takes place within the official organizational structure. Formal communication refers to established patterns of communication that have been created, sanctioned, and acknowledged by an organization's management. The organizational system depends on it in its entirety. An organizational chart can be thought of as an anatomical representation of the routes (paths) that official messages follow. Thus, formal communication refers to the chain of command that establishes the flow and course of official messages between persons or organizational divisions. Formal communication typically moves in four different directions; diagonal, horizontal, upward, down, and up.

Downward Communication: Vertical communication is communication that involves message exchanges between two or more organizational levels. A manager and a subordinate may be involved, or it may span several levels of the organization. It can move either upwards or downwards. Downward communication refers to official messages sent from managers and supervisors to subordinates. Typical examples of downward communication include speeches, policy and procedure manuals, employee handbooks, company leaflets, briefings on the organization's mission and strategies, staff meetings, assignment of tasks and responsibilities, performance feedback, job descriptions, and certain information regarding the organization's strategies and goals.

Upward Communication: Formal communications also go up from subordinates to managers and supervisors. Without upward communication, management would be oblivious to how their downward signals were received and perceived by the workforce, missing out on key insights and denying employees the opportunity to join the organization. Management needs to understand what is going on in the organization to solve issues and make wise decisions. Executives rely on lower-level personnel to provide them with accurate, timely updates on issues, new trends, opportunities, improvements, etc. because they are unable to be everywhere at once.

Horizontal Communication: Information flow between people working at the same organizational level, such as departments, is known as horizontal communication. As a result, it frequently involves peers and coworkers. Horizontal information supports, guides, and synchronizes intra- and interdepartmental actions. Staff specialists who advise managers in diverse departments, such as those in engineering, accounting, and human resources management, are a significant source of horizontal communication in organizations. For the following reasons, horizontal communication is crucial in an organization:

Diagonal Communication: Teams made up of people from different functional areas and even different hierarchical levels are used in some organizational models. Many employees are required to communicate with colleagues in different departments and on different levels to solve problems and coordinate work as the use of self-managed work teams grows among these persons from different units and organizational level management layers. To guarantee that all points of view are taken into account, a team composed of representatives from all functional areas, such as accounting, marketing, operations, and human resources, might be formed to work on a particular product project.

Informal Communication: A middle manager of a medium-size manufacturing company was surprised when a fellow employee congratulated her on her promotion. She has received no formal announcement. In addition to formal channels, organizations also have informal channels of communication. Informal communication arises from the social relationships that evolve in the organization and they are not available or feasible through formal channels. Not all messages flow along the official paths prescribed by the organization's chain of command. Many messages, as in the example above, flow along an informal network commonly called the 'grapevine'. Informal communication, better known as grapevine, is communication that takes place without regard to hierarchical or task requirements. Informal communication channels are not deliberately designed and therefore, do not abide by the formal organizational hierarchy or chain of command.

Informal channels exist because of their unique advantages and because of the weakness inherent in formal channels of communication. Informal channels allow people to handle predictable routine situations well because they tend to be filled with oral rather than written messages, they are effective means of transmitting broad, general kind of information. But communication through formal channels is a laborious process that involves long delays between the times a worker first sends a message and the time a reply is received, consequently, formal channels are inefficient means:

- To meet unanticipated communication needs
- For managing crises
- For effectively communicating complex or detailed information
- For sharing information

All organizations have informal networks, but the type of information the grape vine carries depends on the general condition of the organization. If an organization's managers are fairly open with employees and send all necessary information through formal channels, the grapevine usually carries personal interest items. However, when the formal communication channels fail to do the job, the grapevine begins to carry information about the organization. In other words "the grapevine busies itself with official matters only when the formal channels of common fail to deliver, are not understood, or are not accepted by the people for whom the message are intended. Researchers have found that although some entirely false rumors are spread by the grapevine, information passed by this means is 75 to 95 percent accurate. Informal messages may be more accurate than formal ones because status, power and rank differences are temporarily set aside. Managers who listen carefully to the informal communication network find it as a useful source of information about employee concerns and problems. Some managers "leak" new ideas or proposals to the grapevine to test the workers' response. If an idea is greeted with hostility, they drop it or revise it, if the idea is received positively they introduce it into official channels.

Verbal and Non-Verbal Communication

Verbal Communication: Verbal communication is the written or oral use of words to communicate. It can take place through various channels (such as face-to-face or over the telephone) and can take place at different levels (individually, and in groups). Verbal communication is a significant part of a manager's job. For example, most managers hold meetings, talk on the phone, and give speeches. Research has found that mangers spend as much as 90 percent of their total communication time involved in oral communication.

Written Communication: As the name implies it is the communication which is produced in black and white. Written communication is conveyed through business letters, memorandums, reports, resumes, written telephone messages, newsletters, policy manuals, etc. It is a very common form of communication in most organizations and is suitable for many situations.

Oral Communication: In this medium of communication the two parties in communication exchange their ideas or message with the help of word of mouth. The message-instruction order, directive, etc, is conveyed through spoken words. This method can be observed in a number of forms of communication such as conferences, committee meetings, interviews, telephone conversations, face-to-face talks, etc.

Nonverbal Communication: Nonverbal communication refers to information conveyed by actions and behaviors rather than by spoken or written words. It plays a critical role in shared understanding and meaning

because it influences messages sent and received. In fact, most shared understanding comes from nonverbal messages, such as facial expressions, voice, hand gestures, and even clothing worn. If verbal and nonverbal communication contradict each other, the receiver is likely to become confused and give more weight to the nonverbal communication. Nonverbal communication also conveys the emotional state of the sender, which can often be the most important part of the message. If your boss claims not to be angry but is turning red, has clenched fists, & is standing tense & stiff as a board, you may want to walk softly, because the nonverbal express extreme anger. Much nonverbal communication is unconscious or subconscious. Quite a bit of information sharing can take place without a word ever being spoken. Assume, for example, that you are in your business communication class trying to hear the lecture. However, you cannot hear very well because there is a group of students just behind you talking about a party.

The professor notices the distraction & throws a nasty Glare at the talking students, who immediately stop. A message was sent (stop talking) & received (the students stopped) without a word being spoken. Although nonverbal communication can stand alone, it frequently works hand-in-hand with speech. Our words carry part of the message and nonverbal signals carry the rest. Together the two modes of expression make a powerful team augmenting reinforcing and clarifying each other. For example, imagine that you are running a meeting. You might clear your throat and straighten up in your chair as you say, "I would like to call the meeting to order now." Later you might hold up three fingers and say, "there are three things we need to decide today." As the meeting progresses, you might substitute gestures for comments- nodding your head and smiling to show approval, frowning to express reservations. You might also use nonverbal communication to regulate the flow of conversation; by tilting your head, for example, you could invite a colleague to continue with a comment. Finally, you might hedge your bets by saying one thing by implying another nonverbally.

Principles of Effective Communication: Ainobushoborozi (2013) harnessed the seven (7) indicators below to achieve effective communication.

Completeness: Communication must always be complete according to communication theorists whilst conveying all essentials necessitated by the targeted persons. An encoder of information takes the decoder's thoughts into consideration and conveys the message respectively. In a research conducted by Ainobushoborozi (2013), the following are some features of complete communication; an organization's reputation is established and improved through communication completeness. Besides, it is cost-efficient with crucial information remaining untouched whilst an extra message is conveyed. Communication, which is all-inclusive furnishes extra information wherever needed and erases all doubts in the cognizance of the receiver. Further to the above, when communication is complete decision-making is enhanced, making the intended audience of the message get all desired and fundamental information in simple terms. This persuades the audience.

Conciseness: Ainobushoborozi (2013) stressed that it is the act of delivering an intended message in the least possible words without foregoing the other essentials of information. Communication in such ways is both timesaving as well as cost-saving. It accentuates and emphasizes the main message as it avoids using unwarranted and needless words. According to the researcher, essential messages are only presented to the audience. This makes the message extra attractive and coherent to the audience. It is not repetitive in nature.

Consideration: It means being considerate of others' concerns. Effective communication must take the audience into consideration that is, the audience's viewpoints, background, mind-set, education level, etc. Make an attempt to predict your audience, their requirements, emotions as well as problems. Ensure that the self-respect of the audience is maintained and their emotions are not at harm. Modify words in the message to suit the audience's needs while making the message complete. Features of considerate communication are as follows: Emphasize on "you" approach that is it personalizes issues and identifies with the audience and exhibits interest in the audience as it stimulates a positive reaction from the audience. Stress out on positive words such as jovial, committed, thanks, warm, healthy, help, etc.

Clarity: Clarity implies placing emphasis on a specific message or purpose at a time, rather than trying to achieve too much at once. Clarity in communication makes understanding easier. Ainobushoborozi (2013) confirms that complete clarity of thoughts and ideas enhances the meaning of the message as it makes use of

exact, appropriate and concrete words.

Concreteness: Concrete in communication implies being particular and clear rather than fuzzy and general. Concreteness strengthens confidence. Features in concrete messages are that it is supported with specific facts and figures. Words used are clear and build a reputation. Concrete messages are not misinterpreted.

Courtesy: Nothing is more important than being courteous and ethical in the delivery of the message. This act helps the sender gain some level of credibility from the receiver at any point. It implies that the receiver tends to buy into the idea that the sender is selling. Courtesy in a message implies the message should show the sender's expression as well as respect for the receiver. The sender of the message should be sincerely polite, judicious, reflective and enthusiastic. The courteous message implies taking into consideration both viewpoints as well as the feelings of the receiver of the message. It is therefore positive and focused on the audience since it is to win their attention.

Correctness: Correctness in communication indicates that there are no grammatical errors in communication. Indicators of correct communication are that; the message is exact, correct and well-timed. Correct messages boost the confidence level and have a greater impact on the audience/readers. It also looks out for the precision and accurateness of facts and figures used in the message and makes use of appropriate and correct language in the message.

Barriers to Effective Communication: A school administrator has no greater responsibility than to develop effective communication (Pauley, 2010). Why then does communication break down? On the surface, the answer is relatively simple. I have identified the elements of communication as the sender, the encoding, the message, the medium, the decoding, the receiver, and the feedback. If noise exists in these elements in any way, complete clarity of meaning and understanding does not occur. The author, George Bernard Shaw wrote, that the greatest problem with communication is the illusion that it has been accomplished (Shaw, 2011). Four types of barriers (called —noise, see Figure 1) are process barriers, physical barriers, semantic barriers, and psychosocial barriers (Eisenberg, 2010). Every step in the communication process is necessary for effective and good communication. Blocked steps become barriers. Consider the following situations:

Sender Barrier: A new administrator with an innovative idea fails to speak up at a meeting, chaired by the superintendent, for fear of criticism.
Encoding Barrier: A Spanish-speaking staff member cannot get an English-speaking administrator to understand a grievance about working conditions.
Medium Barrier: A very upset staff member sends an emotionally charged letter to the leader instead of transmitting her feelings face-to-face.
Decoding Barrier: An older principal is not sure what a young department head means when he refers to a teacher as "spaced out."
Receiver Barrier: A school administrator who is preoccupied with the preparation of the annual budget asks a staff member to repeat a statement because she was not listening attentively to the conversation.
Feedback Barrier: During a meeting, the failure of school administrators to ask any questions causes the superintendent to wonder if any real understanding has taken place. Because communication is a complex, give-and-take process, breakdowns anywhere in the cycle can block the transfer of understanding.

Physical Barriers: Any number of physical distractions can interfere with the effectiveness of communication, including a telephone call, drop-in visitor distances between people, walls, and static on the radio. People often take physical barriers for granted, but sometimes they can be removed. For example, an inconveniently positioned wall can be removed. Interruptions such as telephone calls and drop-in visitors can be removed by issuing instructions to a secretary. An appropriate choice of media can overcome distance barriers between people.

Semantic Barriers The words we choose, how we use them, and the meaning we attach to them cause many communication barriers. The problem is semantic, or the meaning of the words we use. The same word may mean different things to different people. Words and phrases such as efficiency, increased productivity, management prerogatives, and just cause may mean one thing to a school administrator, and something

entirely different to a staff member. Technology also plays a part in semantic barriers to communication. Today's complex school systems are highly specialized. Schools have staff and technical experts developing and using specialized terminology—jargon that only other similar staff and technical experts can understand. And if people don't understand the words, they cannot understand the message.

Psychosocial Barriers: Three important concepts are associated with psychological and social barriers: fields of experience, filtering, and psychological distance (Antos, 2011)). Fields of experience include people's backgrounds, perceptions, values, biases, needs, and expectations. Senders can encode and receivers decode messages only in the context of their fields of experience. When the sender's field of experience overlaps very little with the receiver's, communication becomes difficult. Filtering means that more often than not we see and hear what we are emotionally tuned in to see and hear. Filtering is caused by our own needs and interests, which guide our listening. Psychosocial barriers often involve a psychological distance between people that is similar to actual physical distance. For example, the school administrator talks down to a staff member, who resents this attitude, and this resentment separates them, thereby blocking the opportunity for effective communication.

Effect of Communication on Employee Performance: Several professionals have expressed mixed opinions on communication competency used as a predictor of employee success. The importance of communication cannot be denied for organizations as applied to their ability to influence the bottom line as found in growing evidence linked with work productivity (Muda et al., 2014). With effective communication, a company is able to have good coordination among the teams or units in an organization whereby the absence of it will reflect problems in running business operations or critically cause damage between individuals. It has been suggested that the persons who are involved in communication processes need to possess both basic skills and abilities, otherwise, the information could be missed to understand appropriately and it depends on the facilities available in organizations and the actions of managers to see the acceptability of information to have an accurate deliverance (Chen, 2008). Furthermore, as one of the crucial elements, the managers have been asked to learn the feedback gained from the employees which probably affects their work motivation (Muda et al., 2014).

This relates to the circumstances that are currently faced by the employees including the right time of delivering such information, thus, they may perform based on the messages they receive. In obtaining such a good performance, the managers must show the initiative of developing and providing opportunities to learn new skills to their employees through the communication process. Beyerlein et al. (2003) state, that it is management's responsibility to align support systems in the strategic design so that employees can communicate their needs and frustrations, as this will keep an organization functioning effectively and make the most of people who are an organization's greatest resource. Furthermore, other studies have investigated whether openness of communication has a direct relationship with employee performance (Dwyer, 2005). Furthermore, other studies have investigated whether openness of communication has a direct relationship with employee performance (Dwyer, 2005). In addition, supportive communication from fellows has received some attention as a source of employee performance (Ducharme and Martin, 2000).

Empirical Review of the Study: In the light of this study, there have been many researchers and theorists who have dealt with it and brought about many findings, which are been used in most modern organizations as far as effective communication is concerned. Femi (Ph.D.) conducted a study on "The Effect of Communication on Workers' Performance in Selected Organizations. In Lagos State, Nigeria" he saw communication as an important component of an organization's project. This is because it was assumed the global world has become widespread that, most organizations petition to meet their needs with a lesser resource moral through communication. His research tests the substantial relationship between communication and workers' performance in some designated organizations in Lagos State, Nigeria. Statistics for the research were gathered through a questionnaire with a sample populace of 120 respondents. The outcome of the research revealed the relationship between effective communication and workers' performance, productivity and commitment. Per the outcome of the study, a recommendation was made for managers to communicate with employees consistently and regularly to improve workers' commitment and performance.

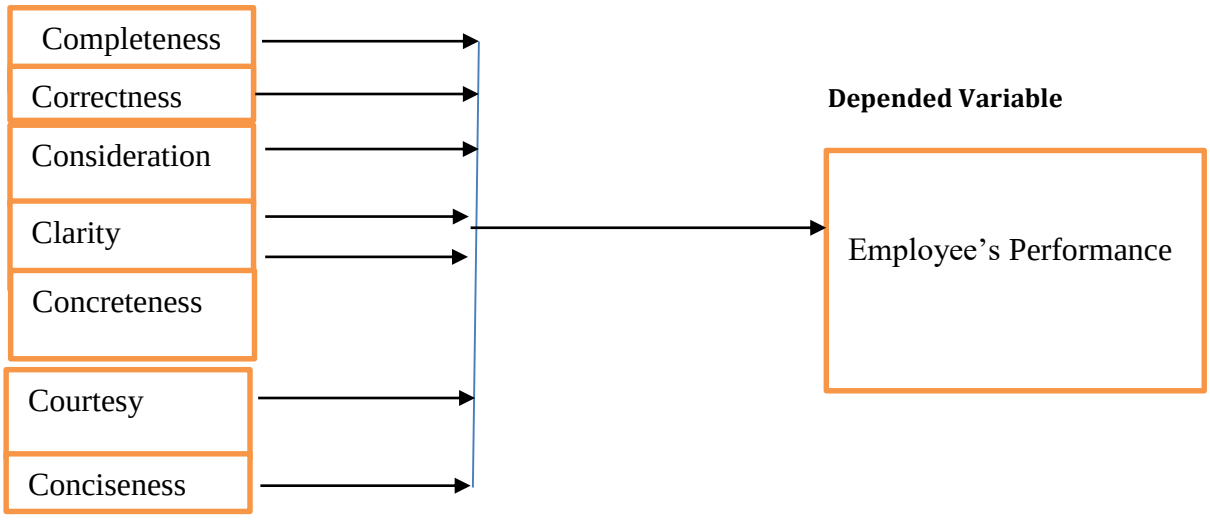
Wang (2005) presented a paper, which sought to investigate the functions of socio- emotional-oriented communication and job-related communication in augmenting institutional commitment in the People's Republic of China. A statistical methodology was used to analyze data from a questionnaire. A sample size of 69 was selected as respondents. The key findings from the study were that social-emotional-oriented communication among employees is a positive indicator of performance. Conversely, the finding failed to establish any unique linkage between horizontal and social-emotional communications. The paper concluded that vertical and job-related communication helps employees of governmental agencies in China to remain focused on the outlined objectives of their organizations. Rajhans (2012) also highlighted employee motivations and performance. From his analysis morale, motivation and performance of employees have a clear reflection on the manner in which an organization communicates with its members. The study aimed to explore the inter-relationship between communication and motivation and its overall impact on employee performance. Rajhans (2012), considers the results of a study of organizational communication and motivational practices followed at a large manufacturing company, Vanaz Engineers Ltd., based in Pune, to support the hypothesis propounded in the paper.

With a focus on employee communication, Tumbare (2009) did research on an internal communication assessment of the Lilongwe City Assembly. Her study assessed the organizational communication of the Assembly. Explicitly, the effect of internal communication at the Lilongwe City was measured. The methodological approach measured the current and ideal amounts of information within the organization. These are receiving information from others, sending information to others, action on information sent, channels of communication, communication relationships, communication and work satisfaction, timeliness of information received from key sources and sources of information. Findings from a sample of 186 respondents of the Assembly indicated a great need to receive information and to interact with Assembly management more frequently than what is happening currently. The communication between subordinates and co-workers seems to be satisfactory. However, the majority of his respondents expressed the need to engage with Assembly management on a number of key issues, including staff welfare, salaries and benefits.

Ainobushoborozi (2013) similarly did a study that examined the impact of effective communication on labor productivity in civil engineering projects with a case study of Kampala Central division. Multinomial logit (MNL) estimation technique was employed to measure the existing relationship between effective communication and labor productivity, and other explanatory variables include work duration spent in a company, educational qualifications, timely information on changes at work, cooperation at work and adequate training provided to employees. The findings showed that asking for clarity in communication, cooperation at work to get tasks completed and timely information about changes affecting work is statistically meaningful to labor productivity in civil engineering projects. He stressed that to attain the targeted productivity level, managers should ensure clarity of any instruction at work, provide adequate training to employees, ensure cooperation at work by providing incentives and finally develop a good communication plan to ensure timely information delivery, especially on changes affecting work.

Conceptual Framework: Based on the above review of related literature this study follows the conceptual framework shown in Figure 2. The study emphasizes assessing the organizational communication style and its effect on employee performance.

Figure 2: The Conceptual Framework of the Study



3. Research Methodology

Description of the Study Area: This research will be conducted at Wachemo University, Hossana, Ethiopia. Hosanna is the administrative and commercial center of the Hadiya Zone, in the Southern Nations, Nationalities and People's Region (SNNPR). The town of Hossana has been declared a model town by the regional state government. The town got its new administration structure in 2004 consisting of three sub-towns and eight kebeles. Hossana town is located south west of Addis Ababa at a distance of 232 km. Hossana is located southeast of Hawassa (the capital of SNNPR) at approximately 168 km via Halaba-Angeca and 203 km via Halaba. The absolute geographic location of Hossana is from 70 30′ 00′ to 70 35′ 00″ North latitude and from 370 491′ 00″ to 370 53′ 00″ East longitudes. The administrative area of Hossana town is 10,414.3 hectares, out of this 4,585.48 hectares of the town has been master planned (Hossana Town Finance and Economic Development Office, 2014). Wachemo University (WCU) is one of the third-generation public higher educational institutions which was founded in February 2001 E.C. It is located 230 km south of Addis Ababa, at Hosanna town in an area of over 200 hectares. Wachemo University is 3 km away from the town and located on the road from Hossana to Addis Ababa. The University commenced its function in 2004 E.C. admitting 538 students in 12 departments under 4 faculties. There were 194 staff: 103 academic and 91 administrative and supporting staff during its establishment. Currently, the University has admitted over 18000 students in regular and continuing education programs in around 50 departments under 6 colleges. It has over 1800 academic and administrative staff. Furthermore, the university has opened its branch campus at Durame town (Kambata Tambaro Zone).

Research Design: Kothari (2004) stated that using an appropriate research design is crucial to identify the data-gathering instrument to be used, to collect relevant and adequate information and to identify how information is organized & analyzed. According to Lee and Ling (2008) Descriptive type of research design allows a researcher to gather information, summarize, present data and interpret it for clarification. In descriptive research, the essential focus is to describe specific views or opinions and to examine the relationships and variations in the relevant variables. So the research design used in this study is a descriptive survey.

Research Approach: As explained by Admasu (2012), mixing qualitative and quantitative approaches gives the potential to cover each method's weaknesses with strengths from the other method. Employing mixed approaches is also useful to overcome any kind of data inadequacy. So in this study, a combination of qualitative and quantitative approaches to doing research was employed.

Data Sources and Collection Method: Both primary and secondary sources of data were used for the study. Primary data was provided empirical data collected through the administration of structured questionnaires. The questions will kept short and language use will be as simple as possible to encourage legibility and maximize the response rate. The source of primary data was the staff of Wachemo University. The secondary source of data was collected from various sources to complement the survey-based analysis mainly from different reports, websites and literature, which are relevant to the study. The questionnaire was prepared with both open-ended and close-ended questions, open-ended questions help the respondents to express their feelings and opinions with their own words.

Target Population: Population is a collective term used to describe the total quantity of cases of the type that are the subject of the study. It can consist of objects, people and even events (William, 2011). Since the population constitutes the totality of units about which the research intends to study, the population for the study comprises all staff of Wachemo University under the three vice-president offices. Those are the academic vice-president office, research and community service vice-president office and administrative and development vice-president office.

Sampling Technique and Sample Size: The total population might be too large to study therefore; the researchers restrict respondents to a part of the population that represents the whole. For this study, the researchers selected three vice-president offices at Wachemo University. Wachemo University staff were divided into three strata: Such as staff under the academic vice-president office, staff under the research and community service vice-president office and staff under the administrative and development vice-president office. Under each office the sample was selected purposively: from the academic vice-president office: College of business and economics, College of social science and College of agricultural science was selected, from the research and community service vice-president office: Research Directorate office, Community Service Directorate office and Research publication office. From the administrative and development vice-president office: The finance office and Student service office were selected.

Office Name	Sample under each Office	Target Population
Academic vice-president office	College of business and economics	66
	College of social science	80
	College of agricultural science	69
Research and community service vice-president office	Community service directorate office	4
	Research directorate office	4
	Institute of indigenous knowledge directorate office	4
	Research publication office	4
Administrative and development vice-president office	Finance office	15
	Student service office	15
Total		261

Operationalization of Variables

a) Dependent Variable: In this study employee performance is considered as the dependent variable and measured by using a five-point Likert scale for multiple-item questions (1=strongly disagree and 5= strongly agree) to identify the overall effect of communication on employees' performance.

b) Independent Variables: In this study, Completeness, Correctness, Consideration, Clarity, Conciseness, Courtesy and Concreteness will be used as independent variables.

No	Variable	Definition	Measurement	Expected effect on Employees performance (+/-)
1	Completeness	Implies it must include all the relevant information as required by the intended audience.	Five-point Likert scale of strongly disagree to strongly agree	+
2	Correctness	Implies both the factual information including in communications and the language and grammar use are correct and well-timed.	Five-point Likert scale of strongly disagree to strongly agree	+
3	Consideration	The sender must take into consideration the receiver's opinions, knowledge, mindset, background, etc. To communicate, the sender must relate to the target recipient and be involved.	Five-point Likert scale of strongly disagree to strongly agree	+
4	Clarity	Implies the communication should be clear to the sender only the receiver will be sure about it. The message should emphasize a single goal at a time and should not cover several ideas in a single sentence.	Five-point Likert scale of strongly disagree to strongly agree	+
5	Conciseness	The message should be precise and to the point. The sender should avoid lengthy sentences and try to convey the subject matter in the least possible words.	Five-point Likert scale of strongly disagree to strongly agree	+
6	Courtesy	**Implies the sender of the message should be sincerely polite, judicious, reflective and enthusiastic.**	Five-point Likert scale of strongly disagree to strongly agree	+
7	Concreteness	**Implies being particular and clear rather than fuzzy and general.**	Five-point Likert scale of strongly disagree to strongly agree	+

Source: Own literature review.

Methods of Data Analysis and Interpretation: In this study, descriptive analysis and inferential analysis (Pearson Correlation and multiple regressions) were applied to find out the effect of communication styles on employee performance. The quantitative data was fed into Statistical Package for Social Science (SPSS) Vr.20 software to analyze by descriptive and inferential statistics, which are obtained through a questionnaire. Descriptive analysis was used to reduce the data into a summary format by tabulation (the data arranged in a table format) and mean and standard deviation. The reason for using descriptive statistics is to compare the different variables. In descriptive analysis, the variable is ranked by referring to the values of mean and standard deviation. The independent variables with the highest mean value produce the highest impact on the dependent variables. Inferential analysis is concerned with the various tests of significance to determine what valid data can be used for conclusions. Inferential statistics allows inferring from the data through analysis of the relationship between two or more variables and how several independent variables might explain the variance in a dependent variable. Pearson's correlation and multiple linear regressions are the main inferential statistical methods employed in this study to analyze the relationships between the dependent variable (employee's performance) and the independent Variables (Completeness, Correctness, Consideration, Clarity, Conciseness, Courtesy and Concreteness).

The value of a dependent variable is defined as a linear combination of the independent variables plus an error term,

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \ldots \beta_KX_K + E,$
$Y = \beta0 + \beta1X1 + \beta2X2 + \beta3\ X3 + \beta4X4 + \beta5X5 + \beta6X6 + \beta7X7 + E$
Where:
Y is the response or dependent variable- the employee's performance
X1= Completeness
X2= Correctness
X3=Consideration
X4= Clarity
X5=Conciseness
X6= Courtesy
X7= Concreteness
β0 is the intercept term. The intercept is defined as the average value of the dependent variable(Y) when the effect of independent variables(X) is eliminated. β1, β2, β3, β4, β5, β6, and β7 are the coefficients associated with each independent variable which measures the change in the mean value of Y, per unit change in their respective independent variables. The regression coefficients are also interpreted as the change in the expected value of Y associated with a one-unit increase in an independent variable with the other independent variables held constant. E= is a vector of errors of prediction.

Model Test: The model test is used to test the validity of the model is accurate. Multicollinearity in regression occurs when predictor variables (independent variables) in the regression model are more highly correlated with other predictor variables than with the dependent variable. Hence, as necessary, tests for multicollinearity and heteroskedasticity were made. Tests for multicollinearity were done by using the variance inflation factor (VIF). As a rule of thumb, if the VIF of a variable exceeds 10, there is a serious multicollinearity problem. Moreover, another assumption in regression analysis is that the errors have a common variance. If the errors do not have a constant variance, we say they are heteroskedastic. To detect this problem Breusch- Pagan test of heteroskedasticity was done by running the hettest command in Stata. The null hypothesis which states that the error term has constant variance (homoskedastic) will accepted if the Chi-square calculated is less than the table value.

Validity Test: Validity is the degree to which a test measures what it aims to measure (Creswell, 2009). To achieve validity in the instruments of data collection, the questionnaires which were initially prepared by using simple language words, and checked by professionals to comment on the extent to which the items were appropriate in securing relevant information to the study. Since testing validity reveals ambiguous instructions and vague questions in the questionnaire, the researcher conducted a pilot study to gather important comments and suggestions from respondents about unclear instructions & questions in dispatching the questionnaire. Then the issues that arose by respondents were corrected and refined. Finally, the improved version of the questionnaires will be printed and dispatched to a sample of the respondents who participated in the study consequently; the above-mentioned processes enhanced the internal validity of the instrument.

Reliability Test: According to Saunders et al. (2009), reliability analysis refers to the extent to which the technique of data collection results in reliable findings, similar interpretations are made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data. Reliability is an indicator of measuring internal stability and consistency while reliability analysis uses Cronbach's Alpha to determine the correlation among the items. Cronbach's alpha is one of the most commonly accepted measures of reliability it measures the internal consistency of the items in a scale. It indicates the extent to which the items in a questionnaire are related to each other. The normal range of Cronbach's alpha value ranges between 0-1 and the higher values reflect a higher degree of internal consistency. The criteria of Cronbach's alpha for establishing the internal consistency reliability are: Excellent ($\alpha>0.9$), Good ($0.7<\alpha<0.9$), Acceptable ($0.6<\alpha<0.7$), Poor ($0.5<\alpha<0.6$), Unacceptable ($\alpha<0.5$) (David, 2003). In this study, each statement was rated on a 5-point Likert scale response which includes strongly agree, agree, undecided (average), disagree and strongly disagree. Based on this an internal consistency reliability test was conducted on 261 Wachemo University staff. Instruments were developed based on research questions and objectives.

Ethical Consideration: According to Bryman and Bell (2003) plagiarism refers to passing off another person's work as if it were your own, by claiming credit for something that was done by someone else. It is taking and

using another person's thoughts as if they were your own. Because of that care was taken to ensure that all work borrowed from other scholars was acknowledged. Mugenda (2003) notes that participation in research is voluntary and subjects are at liberty to withdraw from the study at any time without any consequences. The researcher was required to communicate this to the respondents before starting the study. No respondent was forced to take part in the study but this was done voluntarily. So for this study, all participants were properly informed about the purpose of the study and thus responses to the questionnaires were based on informed consent. All the sources used in this research work are appropriately acknowledged. Besides, certain ethical considerations will be sufficiently observed when collecting the data through the questionnaires.

4. Data Analysis and Interpretation

Introduction: The research study attempted to assess the organizational communication style and its effect on employees' performance in the case of Wachemo University. In this chapter, the results of the study are presented through triangulating the different source results. The chapter consists of two sections. The first section deals with the analysis of econometric results collected through a questionnaire. The second section deals with the results and interpretation of quantitative and qualitative results collected through questionnaires.

Background Information of the Respondents

Table 1: Gender of the Respondents

Gender	Number	Percentage
Male	100	40
Female	150	60
Total	250	100

Source: (Survey 2021).

Gender specification in the study is one of the needed activities that must be included in the demographic characteristics of the respondents. Therefore the table 1 below shows that 100 (40%) of the respondents were female and 150(60%) respondents were Male. This also indicated that there is gender inequality.

Table 2: Age of the Respondents

Age	Number	Percentage
21-30	70	28
31-40	100	100
41-50	80	32
Total	**250**	**100**

Source: (Survey 2021).

When we see the age composition of the respondents above in table 3, the majority of the sampled respondents', age group falls between the ages of 31 to 40 which accounts for 100% of the total number of sampled respondents. The percentage of ages between 21-30, 21-30, 41-50 is 28% and 32% respectively. This shows the majority of respondents are between the ages of 31 and 40 years in which they are active work. Also, they are the age group expected to imitate and be flexible according to the environment.

Table 3: Job Level of the Respondents

Job Level	Number	Percentage
Management	35	14
Supervisory	75	30
Subordinate	140	56
Total	**250**	**100**

Source: (Survey 2021).

With regard to the Job Level of the Respondents, the figure shows that the majority of the respondents 140(56%) have a subordinate level, 75(30%) respondents have a supervisory level and the remaining 35(14%) have a management level.

Table 4: Terms of Employment

Terms of Employment	Number	Percentage
Permanent	240	96
Contract	10	4
Total	**250**	**100**

Source: (Survey 2021).

Table 4 shows that 240(96%), managers were employed on permanent terms whereas 10(4%) of the subordinates were also on contract terms.

Work Experience of the Respondents: Data on the work experience of the respondents was gathered, frequencies were computed and percentages calculated. The results are presented in Table 5.

Table 5: Work Experience

Work Experience	Frequency	Percentage
1-3 Years	85	34
4-6 Years	90	36
>6 Years	75	30
Total	**250**	**100**

Source: (Survey 2021).

The analysis in Table 5 shows that 85(34 %) of the workers worked for 1-3 years .90 (36%) of them worked with the organization for 4-6 years and 75 (30%) of the workers have worked for more than six years.

Communication Channels used at WCU: The managers and subordinates were asked to mention the main channels of communication used in WCU. The frequencies were computed and percentages were calculated. The results are presented in Table 6.

Table 6: Communication Channels used in WCU

Communication Channels	Frequency	Percentage
Letters and memoranda	80	32
Telephone/ e-mail|	75	30
Posters and notice board	50	20
Face to face	40	16
Meetings	5	2
Total	**250**	**100**

Source: (Survey 2021).

Data obtained in table 6 indicates that letters and memoranda are the used channels of communication at WCU. This was so because 80 (32%) of the respondents reported that they used letters and memoranda most of the time which was supported by 75 (30%) of the respondents who also indicated that they used telephone/ e-mail to communicate with them most of the time. The other mentioned channels of communication at WCU were the Posters and notice board, face-to-face oral communication and meetings.

Table 7: Organizational Communication

No	Item	Mean	Std Dev
1	Employees receive clear, accurate and prompt information on what the organization expects of them.	3.46	1.06
2	Employees are kept informed on matters that affect their work and the working conditions	3.05	1.195
3	Employees are given an opportunity to voice their suggestions and fears.	3.10	1.090
4	The organization implements the views and opinions of workers.	2.28	1.223
5	The organization provides prompt feedback to the employees	4.0	1.0

Source: (Survey 2021).

Respondents are asked if employees receive clear, accurate and prompt information on what the organization expects of them, the response shows that the mean of (3.46) and standard deviation of (1.06) shows that they have Employees receive clear, accurate and prompt information on what the organization expects of them. A mean of 2.7 and a standard deviation of 1.28 clearly show employees are kept informed on matters that affect their work and the working conditions. Similarly, respondents agree that employees are allowed to voice their suggestions and fears. The mean (2.28) and (1.22) show the organization does not implement the views and opinions of workers. The mean of 4.00 and standard deviation of 1.0 indicates that the organization provides prompt feedback to the employees.

Table 8: Organizational Communication

No	Item	Mean	Standard Deviation
1	My superior provides information that I understand.	4.5	1.1
2	My superior share information that leads to do my job timely manner.	4.05	1.195
3	My superior actively listened to my viewpoints	4.10	1.090
4	My superior always speaks politely and this motivates me to model him/her.	2.5	1.8
5	My superior maintains essential information flows to me.	4.0	1.0

Source: (Survey 2021).

The above table shows that a mean of 4.5 and a standard deviation of 1.1 indicate that the superior provides sufficient amounts of useful information that employees understand. Similarly, a mean of 4.05 and a standard deviation of 1.19 clearly show superior share and response to information on time. The same is true for the question that the superior actively listened to my viewpoints and agreed with the mean of 4.1 and standard deviation of 1.2. A Mean of 2.5 and standard deviation of 1.0 clearly shows that Superior speaks less politely and this demotivates workers. They agree on the idea superior maintains essential information flows to workers.

Table 9: Factor Analysis for Employee Performance

No	Item	Mean	Standard Deviation
1	I receive meaningful recognition for work well done.	4.4	1.06
2	I receive useful feedback from communication superior on my job performance	4.15	1.195
3	My work has contributed to good of the organization would please me	4.10	1.090
4	I like to feel that I am making some contribution not for myself but for the organization as well.	3.88	1.223
5	I meet the formal performance requirements of the job.	4.2	1.0

Source: (Survey 2021).

The above table indicates that respondents receive meaningful recognition for work well done and they receive useful feedback from superiors on their job performance. Similarly, their work has contributed to the good of the organization would please me and I like to feel that they are making some contribution not only for themselves but for the Organization as well. Also, they meet the formal performance requirements of the job.

Results of Multiple Regression Analysis

Table 10: Result of Multiple Regression Analysis

Model	Unstandardized coefficient	Standardized coefficient	Std. error	p-value
Constant	-.260	-	.254	.307
Completeness	.023	.227	.007	.001
Correctness	.055	.041	.079	.048
Consideration	.190	.296	.038	.000
Clarity	.096	.283	.020	.000
Conciseness	.152	.202	.045	.001
Courtesy	.132	.186	.042	.002
Concreteness	.115	.159	.046	.015
F statistics	F(7,111)= 26.956			0.000
R^2 (R^2 adj.)	0.760(0.736)			

Source: Own survey data 2021.

As shown in the table, the coefficients of the regression for Completeness (0.023, p< 0.01). This shows there is a significant relationship between Completeness and employees' performance of the organization. From this result, we can understand that a complete message helps to perform work well. The other factor, Correctness is significant at 1 percent and 5 percent level of significance and it is concluded there is dependable pattern of relationship between Correctness of the message and employees performance. Other factor Consideration (0.190, p < 0.01) is a significant determinant of the performance of employees. When the Consideration level increases the performance of the employees also increases. The regression output shows that Clarity of communication (0.096, p<0.01), has a significant relationship with the performance of employees. This clearly shows that when the Clarity increases the performance will also increase. Hence the null hypothesis of the study which states that there is a significant relationship with the performance of employees is accepted.

The result additionally exhibited that the other factor influencing employee performance is Conciseness (0.132, p < 0.01), the regression result clearly shows that there is a significant and positive relationship with the employee performance of the organization. The result of regression helps to accept the null hypothesis which states that there is a significant relationship between the employee's performances of in relation to the difference in Conciseness. Other variable in this study is Courtesy (0.152, p < 0.01), as shown in the regression output it has a positive and significant relationship with the employees' performance. Also, the hypothesis states that there is a significant relationship between employee performance and Courtesy of communication so this hypothesis is supported. The other variable in this study that is expected to create variation in the employees' performance in the organization is Concreteness (0.115, p< 0.05), which shows there is a significant relationship between employees' performance in the organization. Based on the regression result, the null hypothesis which states that there is a significant relationship between the employee's performances of the organization in relation to the difference in Concreteness is accepted.

5. Conclusion and Recommendations

Conclusion: From the results, the communication systems frequently used include face-to-face, telephone, written memos, email/internet and grapevines, with the most useful channel of communication being face-to-face. Communication in the organization serves for transmitting, for instance, commands and regulations, for reducing ambiguity and for creating and maintaining social relationships among the members in the organization which contributes to enhancing the employees' organizational commitment. In communication, employees get enough information to accomplish their tasks and receive feedback from managers to improve their performances; employees can give feedback to superiors about their tasks and give suggestions and

critical opinions on how to improve organizational performance. All of these allow employees to know the organization better and it may cause them to form attachments with, identification and involvement in the organization; good communication also provides an opportunity for employees to achieve their individual goals together with organizational goals; it also educates employees in the importance of obligation.

Furthermore, these results supported the relevant assumptions of human relations theory that emphasizes human needs and favors informal communication. It is important that the organization satisfies employees' needs for social interaction with management and especially provides opportunities for employees to achieve their self-actualization. Good communication is an essential condition for an organization to achieve its organizational goals, as well as individual goals. When the organization works well and cares about employees' individual development, the employees' highest level of need - that for self-actualization - can be fulfilled; thereby they can contribute best to the organization. If the organization highlights each individual's capability and contribution, provides opportunities for them to participate in decision-making, and encourages them to be more involved in the organizational operations, then the employees tend to commit at higher levels to the organization because they want to or ought to do so.

Recommendations: Employee performance can be further enhanced if bottlenecks in the communication systems are either removed or kept at their least. Particularly, information distortions caused by omissions and exaggerations must be addressed by both management and employees. There should be fewer distractions during communications to reduce or remove selective learning. Added to this, management must avoid communication overload because it reduces clarity in communication. Even though open and candid communication is encouraged, it is recommended that such communications come with courtesy and consideration, and without malice or prejudice. The organization should reinforce a change in attitude among managers to promote effective communication. The respondents had suggestions as to the practices that could help eliminate ineffective communication. In particular, the organization should timely provision of feedback, respectful treatment of the workers, clear and comprehensive delivery of information, and accessible help and guidance on the part of the managers. Timely delivery of information will also reduce time pressure on employees which more often than not reduces efficiency, effectiveness, productivity, and output.

When information is delivered on time, it gives room for clarity to be sought to ensure concreteness and correctness. The fact that face-to-face is considered a more useful channel of communication provides a unique opportunity for management to involve the grassroots in the formulation of policies as well as in decision-making. This will ensure employees feel valued and also elicit a commitment to the implementation of decision-making to achieve set goals and objectives. Based on these findings, managers are recommended to make the following adjustments in their treatment of the workers, provide better guidance and help to the workers, be more available for assistance, offer help, and inquire if the workers are facing any difficulties; provide feedback on staff's performance regularly; avoid yelling at workers, getting annoyed, and using a disrespectful tone; and establish clear communication explain rules comprehensively, repeat and clarify if needed, perhaps create a leaflet and tips, provide employee handbooks, and use reminders. To increase employee engagement and reduce turnover intention, managers are recommended to meet the employees halfway and practice mutual understanding and support by means of establishing friendly and trustworthy relations. Managers are encouraged to identify employees' perceived barriers so that they can provide career assistance to employees by asking them directly to tackle the reasons that impede their career interests.

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Governance and the Manufacturing Sector Growth among the BRICS Nations

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Abstract: The objective of this study was to examine the relationship between selected governance factors and growth rates in the manufacturing sector's output among the member states of BRICS. This study examined the institutionalized growth theory and explored four governance factors: government effectiveness, regulatory quality, control of corruption, and voice and accountability. The study also considered factors associated with both exogenous and endogenous growth theories. The estimation process involves applying the first difference generalized method of moments (D-GMM) on a linear dynamic panel model. The data spans from 2010 to 2021. The findings of this study suggest that among the BRICS nations, government effectiveness is the most significant predictor of growth in the manufacturing sector, out of the four governance factors that were examined. The factors of voice and accountability, control of corruption, and regulatory quality did not demonstrate the capacity to exert influence on variations in the growth of the manufacturing sector within the BRICS countries. Unlike prior studies, our research incorporates a range of established growth theories in constructing the empirical model. Additionally, we employ an instrumental variable approach for dynamic panel data analysis. We utilize robust standard errors to address potential issues of endogeneity and model misspecification. Therefore, BRICS countries should devote a sizeable portion of their resources to building solid mechanisms that make it easier for the implementation, oversight, and thorough reporting of government activities inside their manufacturing sector. This strategy could increase governmental effectiveness, which would encourage overall manufacturing sector growth.

Keywords: *Manufacturing sector output growth, governance factors, D-GMM, BRICS.*

1. Introduction

According to Saba & Ngepah (2023), empirical evidence suggests that the manufacturing sector plays a significant role in driving long-term economic growth. According to Aiginger and Rodrik (2020), it is argued that no economy on a global scale has achieved economic progress without making significant investments in the manufacturing sector. The manufacturing sector plays a crucial role in facilitating structural transformation, creating productive employment opportunities, and fostering sustainable economic growth (Su & Yao, 2016; Herman, 2020). According to the United Nations Conference on Trade and Development (UNCTAD, 2020), there is empirical evidence suggesting that both developed and emerging economies have demonstrated a strong emphasis on the manufacturing sector, allocating a significant portion of their budget towards its development. The BRICS economies have significantly benefited from the manufacturing sector. Due to the quick industrialization these nations have experienced, the acronym BRICS—which stands for Brazil, Russia, India, China, and South Africa—has recently attracted a lot of attention. This has led to substantial growth in their respective manufacturing sectors (Das & Kalita, 2018; Lima & Navarro, 2017).

The narrative surrounding the BRICS remains ongoing, but as of late, this coalition of countries has emerged as a representation of noteworthy shifts taking place within the sphere of global economic and political dynamics (Lopez-Claros, Dahl, & Groff, 2020). The political environments within the member states of BRICS have experienced a range of transformations (United Nations, 2023). The expansion of the manufacturing sector within the BRICS nations has been impacted by a number of significant governmental factors, such as voice and accountability, regulatory quality, government effectiveness, and control of corruption. The factors in question have been identified by Kaufmann, Kraay, and Mastruzzi (2010), as well as Chen (2020). Guriev and Tsyvinski (2018) assert that Russia has consistently pursued efforts to expand the breadth of its economy and reduce its dependence on natural resources through a focus on the manufacturing sector. India implemented substantial

economic reforms, including the introduction of the Goods and Services Tax (GST), to streamline the tax system and promote business convenience (Saraswat & Kaur, 2019). According to Zhang (2020), China underwent a significant economic transformation, transitioning from an investment-led growth model to a consumption-driven one. The aforementioned transition led to a reorganization of the manufacturing industry. Brazil underwent a series of political controversies that led to the removal of its head of state from office and the subsequent installation of a new administration (Lopes & Power, 2019).

South Africa experienced political instability as a result of leadership changes and implemented strategies to address issues such as corruption and economic inequality (Nolutshungu, 2021). Understanding the diverse modifications is crucial for policymakers and stakeholders to develop and implement effective governance reforms that promote the growth and competitiveness of the manufacturing sector in the BRICS countries. Previous studies have recognized the importance of effective governance practices and the relationship between governmental factors and the promotion of the manufacturing sector to foster economic growth in the BRICS countries (Naudé et al., 2013; Aradhna, 2014; Aldrighi and Colistete, 2015, and others). This study employs panel data from 2010 to 2022 to analyze the influence of government factors on the growth of the manufacturing sector in the BRICS nations. It specifically focuses on benchmarking the institutionalized growth theory and considers the effects of exogenous and endogenous growth theories as control variables. According to the World Bank (2022), the average manufacturing sector output for the BRICS countries between 2010 and 2021 was around 822 billion US dollars.

South Africa struggled with a manufacturing output of just 39.4 billion US dollars in 2020, while China emerged as the manufacturing powerhouse, reaching a high output of 4.87 trillion US dollars in 2021. When it comes to measuring governance, the average government effectiveness index for the BRICS countries was 0.0098. China had the highest rating in 2021 (0.8407), and Russia had the lowest in 2010 (-0.6015) (World Bank, 2021). The average regulatory quality for the BRICS countries was -0.1695. South Africa had the highest rating in 2011 (0.4464), while Russia had the lowest in 2015 (-0.5599) (World Bank, 2021). The average score for examining corruption control was -0.3888, with Brazil exhibiting the least corruption in 2011 (0.1684), and Russia showing the worst in 2010 (-1.0992). The average score for voice and accountability was -0.2461, with the highest score recorded in South Africa in 2021 (0.7885) and the lowest in China in 2010 (-1.6805). This demonstrates substantial growth among the BRICS.

Theoretical Framework: This study discusses three growth models that have been influential in the field of economics. The first is the exogenous growth model that Solow proposed in 1956 and which Mankiw and Romer further developed in 1992. The second is the endogenous growth model, initially introduced by Romer in 1990 and later popularized by Lucas in 2000. Lastly, the study also considers the institutionalized theory introduced by Acemoglu and Robinson in 2006. The exogenous growth theory, commonly known as the neoclassical growth theory, elucidates the mechanisms by which a consistent rate of economic growth can be achieved through the optimal allocation of labor, capital, and technological advancements. Based on the exogenous growth theory, the impact of capital investment and labor force growth on output is primarily limited to their influence on output levels rather than their effect on the long-term growth rate. Technological advancement emerges as the sole determinant influencing the long-term growth rate of an economy, thereby serving as the primary driver behind productivity disparities among nations worldwide. Nevertheless, the theory operates under the assumption of fixed technology, constant returns to scale, and diminishing returns to factor inputs. As a result, the theory posits that nations will converge towards their respective long-term growth rates.

According to Romer (1990), the endogenous growth theory posits that economic growth is contingent upon investments made in research and development. The proponents of the endogenous growth theory posit that enhancements in productivity lead to advancements in overall production. Moreover, they argue that productivity is closely associated with a more rapid rate of innovation, the development of new inventions, and increased investment in human capital. The institutional growth theory emphasizes the influence of various factors, such as the quality of governance, on the process of economic growth. Furthermore, it takes into account additional factors such as ethnic diversity, religion, culture, and institutions at large. Previous studies have recognized the importance of effective governance practices and the relationship between governmental factors and the promotion of the manufacturing industry to foster economic growth in the BRICS countries

(refer to Naudé et al., 2013; Aradhna, 2014; Aldrighi and Colistete, 2015, and other relevant literature). This study employs panel data from 2010 to 2022 to investigate the influence of government factors on the growth of the manufacturing sector in the BRICS nations. The analysis incorporates the institutionalized growth theory and controls for factors associated with both exogenous and endogenous growth theories.

2. An Abridged Literature Review

The empirical literature examining the correlation between governance factors and the growth of the manufacturing sector in the BRICS countries has garnered significant scholarly interest. This relationship has been the subject of several recent studies, including those by Yadav and Jain (2017), Dzisi and Appiah (2020), and Zhang and Li (2018). A notable study conducted by Naude et al. (2013) examines the impact of institutional quality on the growth of the manufacturing sector in the BRICS countries. The findings of the study revealed a significant correlation between higher levels of institutional quality and the growth of the manufacturing sector. The study by Aradhna (2014) looked at how democratization affected the economies of Brazil, India, and South Africa. The results indicated that the process of democratization had a favorable influence on both governance and economic growth within the aforementioned nations. In a similar vein, Aldrighi and Colistete (2015) investigated the effects of trade liberalization and institutional reforms on the process of industrialization and economic growth within the BRICS countries, namely Brazil, Russia, India, China, and South Africa. The researchers discovered that institutional enhancements, particularly those pertaining to the legal framework, play a more pivotal role than trade liberalization in promoting industrialization and fostering economic growth. Zhang and Li (2018) emphasized the significance of governmental policies and regulations in facilitating the expansion of the manufacturing industry in China.

The authors of the study discovered that the provision of governmental assistance for research and development, alongside investments made in infrastructure, has played a crucial role in fostering the expansion of this particular industry. In their study, Dzisi and Appiah (2020) emphasized the significance of governmental policies and regulations in facilitating the expansion of the manufacturing industry in Brazil. The study revealed that the presence of corruption and political instability has impeded the progress of growth within this particular sector. Consequently, the researchers recommended that the Brazilian government undertake the necessary reforms to effectively tackle these prevailing challenges. Several studies have examined the correlation between governance and the growth of the manufacturing sector in the BRICS countries. In addition, other studies have focused on identifying the factors that contribute to the growth of the manufacturing sector in these countries, irrespective of governance considerations. Islam and colleagues (2018) conducted a study to examine the factors influencing the growth of the manufacturing sector in the BRICS countries. They employed a panel dataset for their analysis. The findings showed that capital investment, labor force, and technology had a significant impact on the growth of the manufacturing sector in the BRICS countries. Chandra and Sengupta's (2019) study focused primarily on the factors that affect competitiveness in the BRICS countries' manufacturing sectors.

The study found that a number of factors, including the growth of human capital, infrastructure, and technology, had an impact on the manufacturing sector's competitiveness. In their study, Zhang et al. (2019) analyzed the factors that influence the growth of the manufacturing sector in BRICS countries. The authors employed panel data analysis as their methodology for this investigation. The study's results emphasized several key factors that play a critical role in driving growth in the manufacturing sector, including foreign direct investment, human capital, technological innovation, and trade openness. In their study, Goyal et al. (2018) investigated the factors that influence the growth of the manufacturing sector in the economies of the BRICS. They employed the dynamic panel threshold approach as their analytical framework. The findings of the study indicate that there is a significant relationship between capital investment, research and development, export orientation, institutional quality, and the growth of the manufacturing sector. Furthermore, the analysis conducted in this study has uncovered the existence of threshold effects, suggesting that certain factors have varying effects on economic growth depending on specific thresholds. Despite the existing literature on the determinants of manufacturing sector growth in the BRICS countries, there remains a research gap in understanding the influence of governance factors, such as voice and accountability, regulatory quality, control of corruption, and government effectiveness, on the growth of the manufacturing

sector in these countries. Hence, the objective of this research is to fill this void by examining the influence of governance factors on the growth of the manufacturing sector in the BRICS nations.

3. Methodology

Research Design: This study employs a hybrid research design that combines elements of both longitudinal and causal relationship research designs. The annual data for the five BRICS nations from 2010 to 2022 has been collected and utilized to form panel data. These data sets have been subjected to analysis using panel data regression techniques.

Data Type and Data Sources: The present study employs secondary data sourced from the World Bank Development Indicators (WDI). The data has been organized in a panel format, allowing for analysis using panel data analytical techniques. Panel data has gained popularity as a preferred method of data compilation due to its ability to facilitate multiple-country analysis, offer additional degrees of freedom, and effectively handle heterogeneity and multicollinearity in the data involving multiple countries (Moyo & Jeke, 2019; Tran, Ivashchenko & Brooks, 2019).

Model Specification: The research employs a linear dynamic panel regression model for estimation. The empirical model was developed through a series of steps, which are outlined as follows in this study: The study introduces a broader panel model, as follows:

$$y_{it} = \alpha + x'_{it}\beta + u_{it} \qquad i = 1, \dots, N; t = 1, \dots, T \qquad (1);$$

The variable of interest, denoted as y_{it}, refers to the output of the manufacturing sector. In this context, i represents the specific country in the panel, while t represents the time indicator within the panel. The indexes i and t are used to represent the cross-section dimension and the time-series dimension in the panel, respectively. The scalar α represents a constant term, while β is a vector consisting of the gradient coefficients of the regression variables. The symbol x_{it}' denotes the stimulus variables in the panel model, and u_{it} represents a two-error component idiosyncratic error term that follows a specific form.

$$u_{it} = \mu_i + v_{it} \qquad (2)$$

In equation (7), μ_i represents a perturbation that remains constant over time and is not observable in relation to a specific effect on a country. It accounts for the individual-specific effects that are not included in the regression model. However, v_{it} represents a residual perturbation that exhibits temporal fluctuations in relation to the time period of the respective countries. Both μ_i and v_{it} are assumed to be identically and independently distributed (Baltagi, 2008). Furthermore, in the specified model (1), it is assumed that the vector of stimulus variables is independent of the error term, denoted as $E(X'_{it}u_{it}) = 0$. In this particular instance, the conditional expectations y_t are as follows:

$$E(y_{it} \setminus x_{it}) = x'_{it}\beta \qquad (3)$$

The specification of the unconditional population moment condition is as follows:

$$g(\beta) = E[x_{it}u_{it}] = E[x_{it}(y_{it} - x'_{it}\beta)] = 0 \qquad (4)$$

The sample moment condition is as follows:

$$g_T(\hat{\beta}) = \frac{1}{T}\sum_{t=1}^{T} x_{it}(y_{it} - x_{it}'\hat{\beta}) = 0 \qquad (5)$$

When the x'_{it} matrix contains one or more endogenous regressors, the least squares estimator is prone to bias and inconsistency. The empirical model under investigation in this study exhibits endogenous regressors resulting from potential simultaneity in the growth equation for the manufacturing sector. Consequently, it is not feasible to estimate this model using panel least squares procedures such as fixed effects (FE), random effects (RE), or pooled ordinary least squares (OLS) estimation. Estimation procedures of this nature are prone

to encountering endogenous consequences resulting from variable bias (Baltagi, 2008). To mitigate these concerns, the present study introduces a specific empirical model that enables the application of an Instrumental Variable (IV) estimation procedure. This approach effectively addresses the issue of endogeneity bias arising from endogenously determined regressors in the panel model. Therefore, this research employs Arellano & Bond (1991) first differenced generalized method of moments (D-GMM) estimator. This estimator is a dynamic panel data estimation technique that utilizes instrumental variables to mitigate the issue of endogeneity bias in the panel model. The specification of the generalized linear dynamic panel model is as follows:

$$y_{it} = \alpha\, y_{i,t-1} + x'_{it}\beta + \mu_i + \gamma_t + \varepsilon_{it} \quad (6)$$

In this study, the variable under investigation is denoted as $y_{i,-1}$, representing the first lag of the variable. The unobserved heterogeneity effect is denoted as γ_t, which represents the time dummy variable that captures shocks affect $y_{i,\,t}$ across the individual countries being examined. Lastly, the idiosyncratic error term is represented as$\varepsilon_{i,t}$. The empirical model to be estimated in this study is specified with reference to the generalized dynamic panel mode in equation (6).

$$logmso_{i,t} = \alpha\, logmso_{i,t-1} + \beta_1\, ge_{i,t} + \beta_2\, regq + \beta_3\, cc + \beta_4\, voice + \beta_5 loggkf_{i,t} + \beta_6 loghumc_{i,t} + \beta_7 \log(n + g + \delta)_{i,t} + \beta_8 domcred_{\,i,t} + \beta_9 fdi_{i,t} + \beta_{10} inf_{i,t} + \beta_{11} tradeopen_{i,t} + \beta_{12} lrate_{i,t} + +\mu + \gamma t + \varepsilon_{i,t} \quad (7)$$

Where;

logmso is the logarithm of manufacturing sector output (manufacturing sector output has been measured in current US dollars) ; $Logmso_{t-1}$ is the logarithm of the one-period lag of the manufacturing sector output; *ge* is a measure of government effectiveness which is measured in units of standard normal distribution ranging from -2.5 (very weak) to 2.5 (very strong); *regq* is regulatory quality which captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development and it is in units of a standard normal distribution ranging from -2.5 (very poor quality) to 2.5 (very good quality); *cc* is the control of corruption index which captures perceptions of the extent to which public power is exercised for private gain including both petty and grand forms of corruption as well as "capture" of the state by elites and private interests and it is in units of a standard normal distribution ranging from -2.5 (very poor quality) to 2.5 (very good quality); voice stands for voice and accountability index which captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, freedom of expression, freedom of association and a free media with range of standard normal distribution from -2.5 (very poor) to 2.5 (very good).

The variables *loggkf*, *loghumc* and *log(n + g + δ)* in (7) are motivated by the neoclassical growth theory and stand for the logarithm of gross capital formation, the logarithm of human capital and the logarithm of population growth which is adjusted for extrinsic technological advances, *g* and head extrinsic depreciation, *δ*. Gross capital formation has been measured in current US dollars, human capital is captured by the labor force with basic education, *n* is the population growth rate and *g + δ* has been approximated to 0.05 as in the study by Ding and Knight (2008). The rest of the variables in (7), that is; fdi which stands for foreign direct investment (net inflows, % of GDP); inf which stands for inflation (GDP deflator, annual %), $tradeopen$ which stands for trade openness measured by current account balance as a percentage of GDP; $lrate$ which stands for lending interest rate (%), all of these variables are motivated by the endogenous growth theory. μ_i, γ_t and $\varepsilon_{i,t}$ are as defined in equation (6).

Diagnostic Checks and Robustness Tests: The study performed necessary diagnostic checks prior to model estimation to examine the behavior of the data. Additionally, the study conducted robustness tests after model estimation to assess the reliability of the estimated model. Initially, the investigation assessed the normality of the dependent variable by constructing a histogram with a superimposed normal density that was appropriately scaled. Subsequently, an examination was conducted to determine if the resulting density plot significantly deviated from a normal distribution. Also, the study looked closely at multicollinearity, which is an important diagnostic step in linear regression analyses with more than one independent variable. This is due to the undesirable nature of explanatory variables exhibiting high linear correlations, as they have the potential to result in inefficient regression estimations. In the context of multicollinearity in multiple linear regression models, variables with correlation coefficients of more than +/-0.8 and p-values of less than 0.05

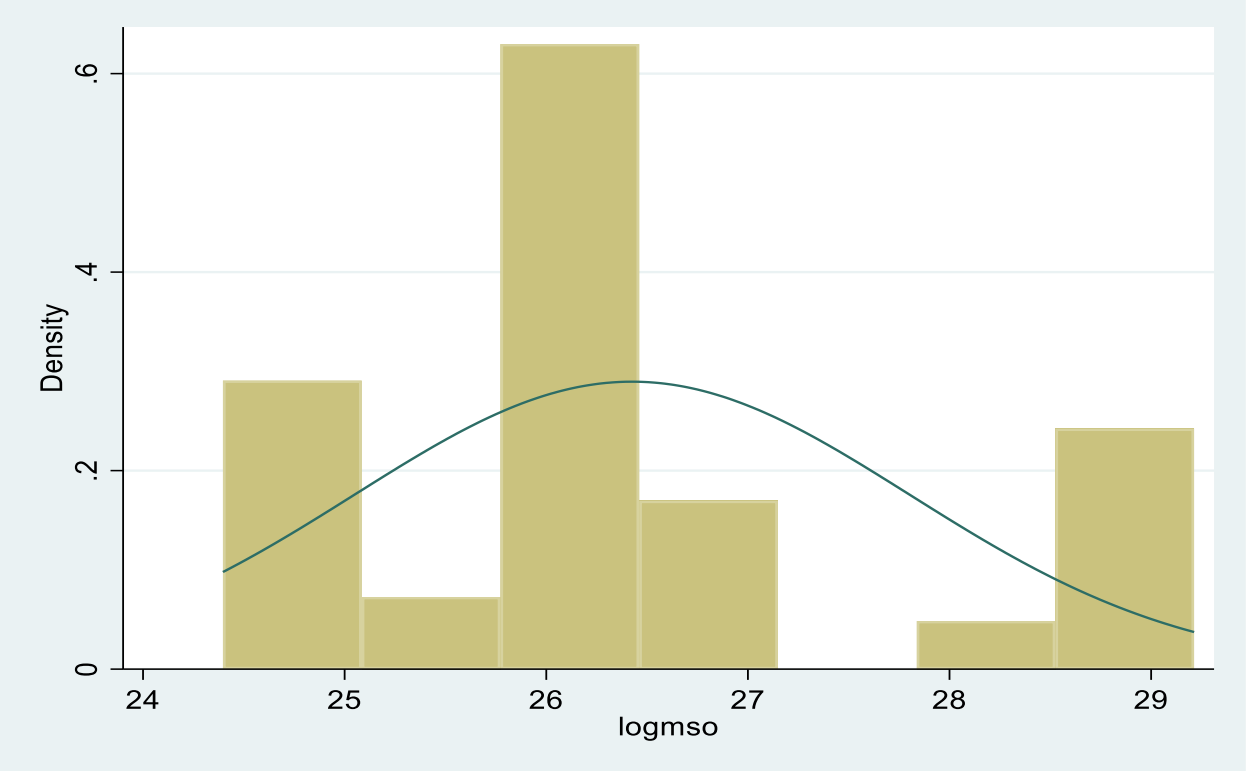
are thought to be a potential problem (Morrissey & Ruxton, 2018). This study did not prioritize the examination of stationarity and cointegration tests, as the main objective was not to analyze short-term and long-term relationships within the modeled model through the utilization of cointegration estimation techniques.

Concerning robustness tests, the study first did two significant post-estimation robustness tests for panel regressions in which one or more independent variables are determined endogenously. The first test was the Hausman specification test, which tries to find out if there is a systematic difference between the coefficients of the instrumental variable (IV) estimator (i.e., the D-GMM) and the ordinary least squares (OLS) estimator. The null hypothesis assumes that the difference in coefficients between the corresponding estimates from the two estimators is not systematic. The second test employed was *the over-identifying restrictions test*, specifically the Sargan test of over-identifying restrictions. This test assesses the joint validity of instruments employed in the D-GMM estimation under the null hypothesis that the instruments used are jointly valid. This study includes two additional robustness tests. The first test is the *Wald test*, which is used to assess the significance of the entire regression model. It involves testing both simple and composite linear *hypotheses*. The second test is the *Serial correlation test*, specifically the Arellano-Bond test (Arellano & Bond, 1991). This test is employed to detect the serial correlation of first-order and second-order residuals in the first-differenced residuals. In other words, it examines the presence of AR (1) and AR (2) after the D-GMM estimation.

4. Results

Normality Check Results on the Logarithm of Manufacturing Sector Output: The present study assessed the normal distribution of the dependent variables through the creation of a histogram that was overlaid with a properly scaled normal density. The nature of the normal plot generated from the normality check is depicted in Figure 1.

Figure 1: A Histogram with a Density Plot on the Logarithm of the Manufacturing Sector Output



Source: Generated by the author.

The density plot presented in Figure 1 demonstrates that the logarithm of manufacturing sector output (*logmso*) variables, which serve as the dependent variable in the empirical model, exhibits a distribution that

closely approximates a normal distribution. The normality assumption regarding the dependent variable indicates that the residuals of the regression model are expected to follow a normal distribution. This implies that any inferences made based on the model's estimates can be considered valid.

Multicollinearity Checks in the Explanatory Variables: The study conducted an estimation of a pairwise correlation matrix among the explanatory variables and analyzed the magnitudes of the estimated correlation coefficients between these variables. Table 1 presents the estimated correlation matrix.

Table 1: A Pairwise Correlation Matrix between the Independent Variables in the Empirical Model. Figures in Italics are P-Values

Variable	1	2	3	4	5	6	7	8	9	10	11
Government effectiveness	1.00										
Regulatory quality	0.199	1.00									
	0.1267	-									
Corruption control	0.599***	0.728***	1.00								
	0.0000	*0.0000*	-								
Voice and accountability	-0.202	0.579***	0.462***	1.00							
	0.1216	*0.0000*	*0.0002*	-							
Logarithm of gross capital formation	0.366***	-0.499***	-0.124	-0.732***	1.00						
	0.0041	*0.0001*	*0.3468*	*0.0000*	-						
Logarithm of human capital	0.425	-0.414***	0.076	-0.49***	0.783***	1.00					
	0.0007	*0.0010*	*0.5626*	*0.0001*	*0.0000*	-					
Logarithm of (n + g + δ)	0.098	0.358***	0.438***	0.477***	-0.180	0.081	1.00				
	0.4579	*0.0050*	*0.0005*	*0.0001*	*0.1686*	*0.5395*	-				
Foreign direct investment	-0.296**	0.024	0.052	0.076	0.0351	0.084	0.020	1.00			
	0.0215	*0.8576*	*0.6943*	*0.5620*	*0.7900*	*0.5239*	*0.8797*	-			
Inflation	-0.524***	-0.014	0.365***	0.124	-0.235*	0.264**	-0.119	0.133	1.00		
	0.0000	*0.9153*	*0.0042*	*0.3452*	*0.0704*	*0.0415*	*0.3668*	*0.3121*	-		
openness	-0.234*	-0.350***	-0.554***	-0.606***	-0.001	-0.251*	-0.572***	0.0738	-0.237*	1.00	
	0.0720	*0.0061*	*0.0000*	*0.0000*	*0.9976*	*0.0525*	*0.0000*	*0.5750*	0.0686	-	
Lending interest rate	-0.493***	0.251*	0.096	0.439***	-0.224*	-0.185	0.111	0.417***	0.157	-0.223*	1.00
	0.0001	*0.0532*	*0.4668*	*0.0005*	*0.0854*	*0.1560*	*0.3964*	*0.0009*	*0.2304*	*0.0864*	-

Source: Authors' compilation. *, ** & *** denote significance at 10%, 5% and 1% levels respectively. 1= Government effectiveness, 2= Regulatory quality, 3= Corruption control, 4= voice & accountability, 5= Logarithm of gross capital formation, 6= Logarithm of human capital, 7= Logarithm of (n + g + δ), 8=Foreign direct investment, 9=Inflation, 10=openness, 11=Lending interest rate.

Examining the pairwise correlation coefficients between the regressors in the empirical model, as shown in Table 1, shows that all the estimates of the pairwise correlation coefficient between the model's regressors have an absolute value below 0.8. This indicates that the inclusion of all the explanatory variables as outlined in equation (7) does not result in significant multicollinearity in the empirical model.

Descriptive Statistics on Key Model Variables: The study analyzed key model variables, specifically focusing on the growth of the manufacturing sector as the dependent variable. The independent variables of interest were the governance factors, namely government effectiveness, regulatory quality, control of corruption, and voice and accountability. Descriptive statistics were generated for these variables. Table 2 presents the

statistical measures, including the mean, standard deviation, minimum, and maximum values, for each of the primary model variables.

Table 2: Descriptive Statistics on Key Model Variable (all the 5 BRICS countries)

Variable	Obs	Mean	Std. Dev.	Maximum	Minimum
Manufacturing sector output (Current US $)	60	8.22E+11	1.29E+12	4.87E+12	3.94E+10
Government effectiveness	60	0.0098	0.3108	0.8407	-0.6015
Regulatory quality	60	-0.1695	0.2675	0.4464	-0.5599
Control of corruption	60	-0.3888	0.3338	0.1684	-1.0992
Voice and accountability	60	-0.2461	0.9153	0.7885	-1.6805

Source: Author's compilation.

The descriptive statistics presented in Table 2 demonstrate that all variables included in the analysis had a comprehensive set of observations in the panel, with each variable having 60 observations. The study period from 2010 to 2021 revealed that the average manufacturing sector output for the five BRICS nations was approximately 822 billion US dollars. Among these nations, China recorded the highest manufacturing sector output of 4.87 trillion US dollars in 2021, while South Africa had the lowest manufacturing sector output of 39.4 billion US dollars in 2020. The average government effectiveness index for the five BRICS nations was 0.0098. The highest government effectiveness index of 0.8407 was recorded in China in 2021, while the lowest index of -0.6015 was observed in Russia in 2010. The average index for the regulatory quality variable among the five BRICS nations during the period of 2010-2021 was -0.1695. The highest index value, indicating the best regulatory quality, was recorded in South Africa in 2011 with a value of 0.4464. Conversely, the lowest index value, indicating the worst regulatory quality, was observed in Russia in 2015 with a value of -0.5599. The average control of corruption index for the five BRICS nations during the period of 2010-2021 was -0.3888. The highest index value, indicating the highest level of cleanliness in terms of corruption, was recorded in Brazil in 2011 with a value of 0.1684. Conversely, the lowest index value, indicating the highest level of corruption, was observed in Russia in 2010 with a value of -1.0992. In relation to the voice and accountability index, the average value for the five BRICS nations during the period from 2010 to 2021 was -0.2461. The highest index value (indicating a very good level) of 0.7885 was observed in South Africa in 2021, while the lowest index value (indicating a very poor level) of -1.6805 was recorded in China in 2010.

Regression Estimates: The empirical model presented in equation (7) includes certain independent variables, specifically gross capital formation (previously referred to as private investment) and foreign direct investment, which are determined endogenously. The influence of these variables on the growth of the manufacturing sector is reciprocal, as an increase in manufacturing sector output can also attract and influence these variables. Therefore, there exists a simultaneous relationship between these variables and the growth of the manufacturing sector. The presence of endogeneity concerns arises in the model. The empirical model has been estimated using the first difference generalized method of moments (D-GMM) dynamic panel estimator. Table 3 presents a comprehensive overview of the model's estimates obtained through the D-GMM estimation method.

Table 3: Regression Estimates from D-GMM Estimation

Logarithm of manufacturing Sector output	Coef.	Std. Err. (Robust)	z	P>z	[95% Conf.	Interval]
Logarithm of manufacturing sector o/p						
L1.	0.151842*	0.0773070	1.96	0.050	0.0003227	0.3033605
L2.	-0.237049***	0.0715396	-3.31	0.001	-0.3772636	-0.0968337
Government effectiveness	0.267465***	0.0562724	4.75	0.000	0.1571727	0.3777564
Regulatory quality	-0.057210	0.0781981	-0.73	0.464	-0.210475	0.0960557
Control of corruption	-0.087404	0.0830305	-1.05	0.292	-0.2501411	0.0753323
Voice and accountability	0.082652	0.0984148	0.84	0.401	-0.1102380	0.2755409
Logarithm of gross capital formation	0.780160***	0.0642608	12.14	0.000	0.6542106	0.9061084
Logarithm of human capital	0.081404**	0.0319893	2.54	0.011	0.0187057	0.1441015
Logarithm (n+g+δ)	0.012371	0.0076989	1.61	0.108	-0.0027188	0.0274604
Foreign direct investment	0.009158	0.0061248	1.50	0.135	-0.0028461	0.0211628
Inflation	-0.006587	0.0036231	-1.82	0.069	-0.0136897	0.0005125
Openness	2.733255***	0.5874761	4.65	0.000	1.5818230	3.8846870
Lending interest rate	0.007131***	0.0018695	3.81	0.000	0.0034671	0.0107955
_cons	2.797785**	1.322129	2.12	0.034	0.2064604	5.3891100

Instrumentization

Instrumented variables: *Loggcf, fdi*

GMM-type Instruments for 1st difference eq.: $Logmso_{t-1}$, ge_{t-1}, $regq_{t-1}$, cc_{t-1}, $voice_{t-1}$, $Loghumc_{t-1}$, $Log(n+g+\delta)_{t-1}$, Inf_{t-1}, $open_{t-1}$, $Lrate_{t-1}$

Standard Instruments for 1st difference eq.: *Δge, Δregq, Δcc, Δvoice,, ΔInf, Δopen, ΔLrate,*

Instruments for the level equation: Constant

Robustness Tests

Wald Chi-sq. test for Ho: All slope coefficients are simultaneously zero: p>chi-sq. = 0.000

Arellano-Bond test for Ho: No AR(1) in first difference errors: p>Z = 0.1023

Arellano-Bond test for Ho: No AR(2) in first difference errors: p>Z = 0.1422

Jarque-Bera normality of residuals test for Ho: Normally distributed residuals: p>chi-sq. = 0.3301

Sargan test of over-identifying restrictions for Ho: instruments are jointly valid: p>chi-sq. = 0.1232

Hausman specification test for Ho: The difference in coefficients between the D-GMM estimator and the OLS is not systematic: p>chi-sq. = 0.0000

Source: Authors compilation after D-GMM estimation. *, ** & *** indicate significance at 10%, 5% and 1% levels respectively.

Effect of Governance Factors on the Manufacturing Sector Growth among the BRICS: Table 3 shows the results of the empirical model. Of the four governance factors looked at in this study, only government effectiveness has a statistically significant positive coefficient at a significance level of 5% (coefficient = 0.267465, p = 0.000). According to estimates, the coefficients of the remaining three governance variables, namely regulatory quality, control of corruption, and voice and accountability, are individually found to be statistically insignificant at a significance level of 5 percent. Moreover, it is worth noting that the factor of government effectiveness not only exhibits statistical significance but also demonstrates the anticipated direction of influence. Additionally, it exerts the most substantial marginal effect on the growth of manufacturing sector output among the BRICS nations. According to estimates, the governance factor of voice and accountability exhibited the anticipated sign on its coefficient. However, the factors of control over corruption and regulatory quality displayed unexpected signs.

The surprising variations in the coefficients of control of corruption and regulatory quality governance factors can be attributed to the consistently low index values of regulatory quality and control of corruption observed in the BRICS nations throughout the study period. Furthermore, these values exhibited a narrower range

compared to the other governance indicators that were analyzed. For example, the descriptive statistics revealed that the highest value observed for regulatory quality among the BRICS nations was merely 0.4464 (on a scale with a maximum possible value of 2.5). Similarly, the highest value observed for control of corruption among the BRICS nations was only 0.1684 (on the same scale). In addition to the impact of governance indicators, the model's estimations indicate that gross fixed capital formation, human capital, openness, and lending interest rates have a positive and statistically significant influence on the growth of the manufacturing sector within the BRICS nations. With the exception of the lending interest rate, the signs of the other three variables were as expected. The positive coefficient of interest rate can be attributed to the substantial government subsidies provided to the manufacturing sector in the majority of BRICS nations. Consequently, an increase in interest rates may be linked to an expansion in manufacturing sector output.

Results from Robustness Tests: The Wald Chi-square statistic rejects the null hypothesis of model insignificance at a 5 percent level of significance, suggesting that the entire model is significant statistically. The estimated Z-statistics from the Arellano-Bond test for AR(1) and AR(2) do not reject the null hypotheses of no serial correlation first order and second order respectively at a 5 percent level of significance, suggesting that the residuals from the estimated regression are not serially correlated of order and order two respectively. The Chi-square statistic from the Jarque-Bera does not reject the null hypothesis of normally distributed residuals at a 5 percent level, suggesting that the residuals from the estimated regression are normally distributed. The Chi-square statistic from the Sargan test does not reject the null hypothesis of no over-identifying restrictions at the 5 percent level, suggesting that the instruments used in the D-GMM estimation are jointly valid. The Chi-square statistic from the Hausman specification test rejects the null hypothesis, suggesting that the difference in coefficients between the D-GMM estimator and the OLS estimate is systematic, which is an indicator that the D-GMM estimator is preferred.

5. Conclusion

The objective of this study was to examine the impact of governance on the growth of the manufacturing sector within the BRICS countries during the time frame of 2010-2021. The study examined four governance factors, specifically government effectiveness, regulatory quality, control of corruption, and voice and accountability. The empirical model has been constructed, incorporating four governance variables as primary explanatory variables, alongside growth factors derived from exogenous and endogenous growth theories, serving as control variables. The estimation process has been accomplished through the utilization of the first difference generalized method of moments (D-GMM). According to estimates, among the BRICS nations, the factor of government effusiveness emerged as the most significant predictor of the growth in the manufacturing sector output, out of the four governance factors that were examined. According to the estimates, the governance factors of regulatory quality control of corruption, and voice and accountability do not exhibit a significant impact on the growth of manufacturing sector output among the BRICS nations. The findings of this study indicate that the BRICS nations have the potential to augment the growth of their manufacturing sector output through the enhancement of their respective governments' effectiveness, implementation of policies that promote capital formation, additional investments in human capital, and increased engagement in international trade. Therefore, BRICS countries should devote a sizeable portion of their resources to building solid mechanisms that make it easier for the implementation, oversight, and thorough reporting of government activities inside their manufacturing sector. This strategy could increase governmental effectiveness, which would encourage overall manufacturing sector growth.

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Determinants of Export Performance in Uganda (1989-2020)

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Abstract: The study is set to investigate the factors determining export performance in Uganda. The specific objectives of the study are to examine the relationship between Foreign Direct Investment net inflows, inflation, Real Exchange Rate and export performance from 1989 to 2020. The study adopted a longitudinal design and the analysis was based on stationarity tests, co-integration tests, ordinary least squares tests and finally diagnostic tests. The study results show that there is a significant relationship between foreign direct investments and export performance. Secondly, it was found that there was a relationship between inflation and export performance. The study also observed a significant relationship between inflation and export performance. Finally, it was found that the real exchange rate affects export performance. The study concludes that the development of foreign direct investments induces export performance; hence export performance can be generated through foreign direct investments. The study also concludes that the state of inflation reduction can be a general development of the export performance for the countries, while the real exchange rate is a key determinant for the export performance in Uganda from 1989 to 2020. The study recommends that there is a need for regulations and monitoring to ensure the proper form of foreign businesses in the country together with enhancing the management situation for the management of the business. Secondly, the policies intended to reduce inflation are needed to increase the capacity of businesses to operate and attain mechanisms for the reduction of inflation. Finally, the government should also embark on strong fiscal policy to reduce unnecessary money supply which can lead to inflation that negatively impacts on economy & reduces economic growth.

Keywords: *Export performance; Foreign Direct Investment net inflows; inflation; Real Exchange Rate; co-integration tests; Uganda.*

1. Introduction

Similar to many countries, Uganda's export performance varies according to discrepancies that occur in trade across the globe (Awolusi, 2021; Awolusi & Mbonigaba, 2020). For example, in February 2021, Uganda's exports increased by 11.5% to US $ 413.6 million from US$ 370.8 million recorded in January 2021. However, in March 2021 total exports decreased by 10.8 percent in January 2021 to US$ 370.8 million from $ 415.6 million recorded in December 2020 (UBOS, 2021). Uganda's current leading export commodities include gold, gold compound, coffee, fish and fish products, cocoa beans, maize and tea among others. The Uganda Bureau of Statistics monthly merchandise trade statistics bulletin (as of April 2021) indicated that the Middle East is the leading destination of Uganda's formal exports followed by the East African Community, the European Union, other Africa and Asia. According to Beleska-Spasova (2014), achieving effective Export Performance is at the core of the tactical legislative procedure for both businesses and other entities.

But also Safari & Saleh (2020) indicate that both internal and external forces influence the nature of the export performance of a given country. Therefore this study will look at determinants of export performance in Uganda from 1989 to 2019. Exports have been for decades regarded as a major source of foreign currency reserves and a significant driver of the economic growth of nations. Exports open up domestic industries to foreign markets thus improving the balance of payments position. The increase in potential market size can lead to increasing returns, economies of scale and increased capacity utilization. Exposure to world markets may also induce competitive pressures and may spur innovation and facilitate technological advancement and knowledge spillovers into the domestic economy, leading to efficiency gains in production and management practices. Exports also generate much-needed foreign exchange, which can be used to import superior capital goods and intermediate inputs that are critical to the domestic production of a country. Thus, an expansion of exports will have positive spillover effects on the rest of the economy (Angomoko, 2020).

In May 2019, the East African Community remained the major destination for Uganda's export followed by the Middle East, then the Rest of Africa. Exports to the EAC Partner States declined on an annual basis where whereas they increased on a monthly basis. Exports to the EAC fell from US$ 150.34 million in May 2018 to US$ 118.3 million in May 2019. Over the same period, exports to all EAC Partner States declined with Rwanda registering the biggest decline (Zahonongo, 2020). Uganda's dominant export product is and has for decades been coffee, but other goods and service exports have grown in importance. Whereas in the 1990s coffee exports were higher than all non-coffee exports combined, coffee's share of merchandise exports had shrunk to about 24% in 2013.1 Over the last decade, Uganda has begun to export significant amounts of fish, tobacco, tea, and cocoa, with shares of around 6% of merchandise exports each, depending on the year. While food commodities still make up the majority of the export basket, the share of non-food exports has grown, with a variety of non-food exports produced mainly by agri-business and light manufacturing industries (Kingori, 2021). This group of products includes cement, metal and steel, wood, chemicals, leather, and plastic products.

Overall it is much more fragmented and diversified within than the food-commodity group of exports. The biggest change in Uganda's export sector has come from the growth in services exports. In 1995, services made up about 15% of all exports, a value that has since risen to 42% (MoFPED, 2019). The fall in exports to Rwanda follows the closure of the Uganda-Rwanda border in recent months. In comparison with April 2019, exports to the EAC Partner States increased by 38.3% from US$85.53 million to US118.3 million in May 2019. This development is explained by an increase in exports to Kenya (MoFPED, 2019). Regardless of these forms, Uganda's merchandize trade deficit remained largely unchanged in February 2019 in comparison with the preceding month. The Merchandise trade deficit was USD 203.8 million in February 2019 compared to USD 203.6 million registered the previous month. Compared to February 2018, the merchandise trade deficit worsened by 9.3% from USD 186.5 million to USD 203.8 million in February 2019. This follows an increase in the import bill by 1.8% and a fall in exports by 2.7% (MoFPED, 2019). It is therefore considerably reasonable to identify the factors responsible for the low levels of exports and fluctuating export volumes as it is expected to facilitate the design of policies to curb the inconsistencies in Uganda's export sector. Exports represent a key aspect of the country's revenue systems; the export performance for Uganda is significant in the generation of the country's overall performance and productivity.

The system of production supports export performance which countries need to attain. The government of Uganda has attempted to promote the export sector through introducing various reforms in the economy such as liberalization of the export sector and establishment of various agencies to foster export growth by providing exporters with incentives and advice. However, the country has registered a reduction in the export base, with the trend being low. Since independence, coffee has been Uganda's leading export accounting for more than 50% of the total export earnings until, recently when it was over taken by non-traditional exports. Some of the traditional exports such as copper disappeared in 1997 and commodities like fish and maize, which previously were not among the traditional exports, emerged and presently constitute a significant proportion of total exports (Adeolu, 2007). According to the international trade Centre (2012), between 2007 and 2010, the value of Ugandan exports had increased by over 21%. Uganda is estimated to have exported nearly USD 2.2 billion in 2011, a 33% increase over 2010, indeed an ice progression only constrained by the worldwide economic crisis of 2009-2010. Bank of Uganda (2018) established that between 2013 and 2015.

Uganda's export earnings decreased from USD 2828.71 million to USD 2667.19 respectively and increased thereafter, the situation was made worse with the outbreak of COVID-19 in March 2021 which saw the total exports decrease by 10.8 percent in January 2021 to US$ 370.8 million from $ 415.6 million recorded in December 2020 (UBOS, 2021). Consequent to the above problem, the main objective of the research was to investigate the factors determining export performance in Uganda. However, the specific objectives are as follows: (i.) to examine the relationship between Foreign Direct Investment net inflows and export performance of Uganda from 1989 to 2020; (ii.) to establish the relationship between the inflation and export performance from 1989 to 2020; and (iii.) to examine the relationship between Real Exchange Rate and export performance from 1989 to 2020. The study therefore posits that foreign direct investment could come to the capital-importing country as a subsidiary of a foreign firm. It could also come by means of the formation of a company in which affirm in the investing company has equity holding or the creation of fixed assets in the other country by the nationals of the investing country (AgarwalJ, 1980). The research focus was on the determinants of export performance which included but were not limited to inflation rate, real gross domestic

product, real effective exchange rate and foreign direct investment net inflows for the period 1989-2019(world bank, 2020).

2. Review of Related Literature

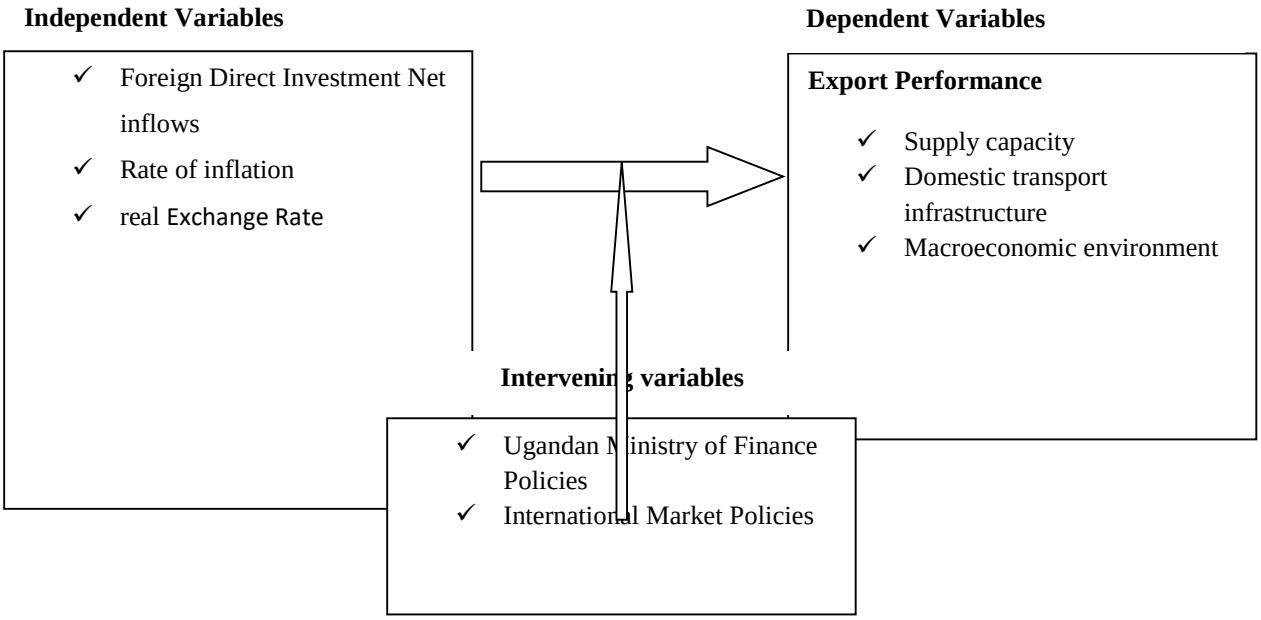
The present study was based on both the Export-Base Theory stated by Douglas C. North (born in 1920) and the North Theory (AgarwalJ, 1980; Agnihotri & Bhattacharya, 2015; Ahmed, Enjiang & Messinis, 2007). The theory puts an emphasis particularly on the development of export sectors which has the role of a multiplier (very stimulating field), and other fields in the region are more or less subject to the export field and secure its activities (AgarwalJ, 1980; Agnihotri & Bhattacharya, 2015). Export-base theory determines regional development by supporting export which is currently broadened in connection with the processes of economic integration as without export markets the expansion of the economy is not possible (Barrell & Nigel, 1998; Basu & Srinivasan, 2002). While North Theory states three basic pillars of North theory region should be defined as an area with a common export base, the economy´s development is determined by the success of its export sector, export-base, which is the main factor determining both absolute and relative income of the region, affects the development of services and the residential potential of the area. This study was based on both the Export-Base Theory stated by Douglas C. North (born in 1920) who in the 1950s refused gradualist theories of regional development and the North Theory stated by Blazek and Uhlir (2002). Export-Base Theory advocated a gradual transfer between primitive forms of economy to developed forms and advanced that the key role in the development of individual regions in the USA was played by the demand for the products that could be produced locally in the region (Onikoyi, Awolusi & Boyede, 2014; Awolusi, 2012).

The theory puts an emphasis particularly on the development of export sectors which has the role of a multiplier (very stimulating field), and other fields in the region are more or less subject to the export field and secure its activities (Eze & Awolusi, 2018). Export-base theory determines regional development by supporting export which is currently broadened in connection with the processes of economic integration as without export markets the expansion of the economy is not possible (Ahmed, Enjiang & Messinis, 2007; Appleton, 2000). While North Theory states three basic pillars of North theory region should be defined as an area with a common export base, the economy´s development is determined by the success of its export sector, export-base, which is the main factor determining both absolute and relative income of the region, affects the development of services and the residential potential of the area. North´s theory was criticized as this theory is based on the analysis of the development in the USA and new settlements- e.g. Australia, Canada and New Zealand (AgarwalJ, 1980; Agnihotri & Bhattacharya, 2015). North advanced that export plays a key role in the development of a region which states that the larger the region is the more likely it is that the key resources for its development are within its borders this was also criticized as the development to Europe was not significantly affected by export (AgarwalJ, 1980; Agnihotri & Bhattacharya, 2015).

Foreign market access**;** this represents the foreign market potential of a country and is broader than "market access". It relates directly to the characteristics of the trading partner countries, such as the size of their market and transport facilities, it also depends positively on the size of the export basket and the number of differentiated items and their prices, which in turn are affected by market entry conditions. Trans-border costs (including tariff and non-tariff barriers) have a negative impact on foreign market access (Adeleye, Adewuyi and Adeteye 2021). Supply capacity; supply-side constraints are one of the reasons why developing countries are often unable to take up opportunities for trade under preferential trading regimes, such as the generalized system of preferences (GSP). The main components of supply capacity are internal transport costs and factors affecting the cost of production. The latter is strongly related to the domestic market structure and the institutional framework. The macroeconomic environment including factors such as GDP also has an important role in shaping the supply capacity of the economy (Adeleye et al., 2021). Domestic transport infrastructure; the size and the growth of the supply capacity of a country depend critically on the availability of physical infrastructure, ranging from roads and ports to energy and telecommunications. The UNCTAD study used internal transport infrastructure as a proxy for infrastructure as a whole. The analysis therefore argued that internal transport infrastructures are likely to play an important role at the early stage of export sector development.

Most African countries are characterized by poor transport infrastructure and are found in all periods to be poor export performers. This indicates that African countries could raise their supply capacity by investing in transport infrastructure. Macroeconomic environment: The real exchange rate, which reflects the underlying relative movement of prices at home and abroad, has a significant effect on the export performance of the lowest performers. Results for all periods found that an overvalued real exchange rate is detrimental to export performance, while on average a 1 percent real depreciation could increase exports by 6 to 10 percent. This points to the important of the pursuit of productive gains to maintain external competitiveness the study found that an overvalued currency resulting from fixed exchange rates that are used as a nominal anchor to control inflationary pressures, translated into a direct loss of price competitiveness for exporting firms (Adeleye et al., 2021). Foreign direct investment: FDI is likely to affect export performance positively. This was true for most levels of export performance and every period under consideration. The experience in a number of countries suggested that FDI strongly contributes to the transformation of the composition of exports. For instance, FDI inflows into Singapore and China have helped to increase significantly the technological content of exports by strongly supporting the development of export supply capacity, including knowledge-based industries (Adeleye et al., 2021). The adopted conceptual framework is depicted in figure 1 below:

Figure 1: Conceptual Frame Work



Source: Wang, and Swain (1995) and UNCTAD (1999).

Trade statistics show that export earnings have increased during the post-reform period from 0.20 billion US Dollars in 1980 to 5.1 billion dollars in 2012 (UBOS, 2016). The development led to diversification in Uganda's exports which resulted in the emergence of non-traditional exports (NTEs) such as fish, simsim, maize, flowers, beans, etc. The NTEs have taken over traditional exports as a main source of foreign exchange. Their share of total formal export earnings increased slightly from 74.5% in 2014 to 75.0% in 2015 (UBOS, 2016). Among the NTEs commodities that attracted considerable earnings in 2015 were petroleum products (5.5%), fish products (5.2%), and maize (4%). However, merchandize exports fell by 1.3% to USD 300.41 million in February 2019 from USD 304.23 million in January 2019. Several exports registered decreased receipts following a decline in their respective volumes. Coffee receipts recorded the largest decline following a decline in both the quantity exported and value. Low global prices on account of higher supply from Brazil explain the fall in coffee receipts.

Foreign Direct Investment and Export Performance: Many empirical evidences are bound on FDI and Economic Growth (Jayaraman & Chee-Keong, 2006; Jin & Cho, 2018; Love, Roper & Zhou, 2016; Manzanares, 2019; Mohammed, Parker, Fand & made, 2011; Shirro, 2009; Morgan., Kaleka & Katsikeas, 2014;

Njinyah, 2018; Oseni & Enilolobo, 2011; Oura, 2016; Stoian, Rialp & Rialp, 2011; Wheeler & Mody, 1992; WTO, 1995; Yan, Brouthers & Mcnicol, 2008). Abel and Nikki (2011) examined the relative impact of macroeconomic variables and institutional factors on foreign direct investments in 30 Sub-Sahara African (SSA) countries between 1995 and 2008. They found that financial development, the size of the market, infrastructural development and urban accumulations are important factors that measure the inflows of FDI to the SSA region. Behname (2012) applied a random effects model to measure the impact of foreign direct investment on economic growth in Southern Asia. The investigation concluded that foreign direct investment has a positive and significant effect on economic growth. Manzanares (2019) and Shirro (2009) disaggregated the economy and employed a structural macro-econometric model consisting of four blocks namely: supply, private demand, government and external sectors to measure the impact of FDI on economic growth. The findings showed that FDI has a significant impact on the output of the economy; however, the growth effects of FDI differ across sectors in Uganda (Manzanares, 2019; Shirro, 2009; Njinyah, 2018; Oura, 2016). The study estimated the impact of FDI inflows on economic growth in Uganda. The study reported the extent to which FDI influences economic growth positively to limited human capital. Zakia and Ziad (2007) have also measured the effect of FDI on the economic growth of Jordan. The estimated regression results pointed to the existence of a bidirectional relationship between FDI and out-put.

The study developed an auto regressive distributed lag (ARDL) model. The model examines the long-run relationship between the variables and finds an absence of a long-run relationship between FDI and economic growth. Manzanares (2019) applied the rho's rank correlation and causality test in exploring the possible links between FDI and economic growth in Uganda. The outcome revealed that the link between FDI and economic growth in Uganda is positive but weak. Certainly, the series of articles reviewed for this study showed a unidirectional causality running from FDI to economic growth. Shirro (2009) and Oura (2016) investigated economic growth through FDI (Shirro, 2009; Njinyah, 2018; Oura, 2016) and Ugochukwu, Okore and Onoh (2013) identified bidirectional causality between growth and FDI (Manzanares, 2019; Shirro, 2009; Njinyah, 2018; Oura, 2016). However, there was no evidence of causality. According to the IMF and OECD definitions, direct investment reflects the aim of obtaining a lasting interest by identifying one economy (direct investor) in an enterprise that is resident in another economy (the direct investment enterprise). The "lasting interest" implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the latter. Direct investment involves both the initial transaction establishing the relationship between the investor and the enterprise and all subsequent capital transactions between them and among affiliated enterprises4, both incorporated and unincorporated (Fernando, Fitrianingrum & Richardson, 2017). Chugan and Singh (2015) analyzed the causal relationship between economic growth, exports and foreign direct investment in the European transition countries that are members of the EU (Chugan & Singh, 2015; Fernandez-Mesa & Alegre, 2015).

The results of this study indicate that the prospects for overall economic growth depend on the implemented policies to promote foreign direct investments. The author emphasizes that the most effective way to attract FDI is to focus on free trade zones, trade regimes, tax benefits, human capital in the host country, regulations of financial markets, financial system and the quality of infrastructure. For all developing countries, the impact of FDI on exports is also important in terms of defining the relevant strategies; FDI can strongly influence the growth of exports (Shen, 2013). Kaminski and Riboud warn that it is not disputed that higher potential economic growth attracts capital investment, but it should be kept in mind that these effects occur with a time lag, while this effect does not diminish their importance. Also, a negative impact on the current account is particularly present when FDI inflows are aimed at producing for the domestic market, particularly to bypass customs (Cardoza et al., 2016). According to Cardoza et al. (2016), FDI was found to have a strong dependence relationship with high-tech exports, with a much higher level of statistical significance. The results of analysis indicated a significant level of correlation between FDI and high-tech exports. The inflow of FDI is expected to increase production and productivity, encourage and stimulate local development and diffuse technology investment (Alfaroet al., 2006). It can be seen as a complement to international trade as long as the relative endowment and the remuneration of the factors of production are sufficiently different between countries (Büthe & Milner, 2008; Camarero & Tamarit, 2003).

Inflation and Export Performance: Examining factors affecting inflation in Jordan, Jaradat, Al-Zeaud and Al-Rawahneh (2011) used quarterly data from 2000 to the third quarter of 2010 by applying the concepts of

cointegration, Error Correction Model, analysis of Variance Decomposition and Impulse Response Function. The results indicated that the variables of national exports, imported inflation, credit facilities, GDP, money supply and inflation were integrated into order one. National exports, imported inflation and credit facilities had a positive long-run relationship with inflation. It was also noted GDP had a negative relationship with inflation while money supply had an insignificant effect on inflation in Jordan. The impulse responses and variance decomposition analysis also indicated that shocks on national exports, imported inflation, GDP, credit facilities and money supply influenced inflation from the second period in Jordan. Analyzing the determinants of high food prices in Pakistan by Joiya and Shahzad (2013) used the Autoregressive Distributed Lag approach and error correction model for long-run and short-run, respectively based on time series data for the period 1972-73 to 2009- 10. The findings of the study showed that food exports contributed to high food prices while food imports caused a reduction in food prices.

Similarly, Rehman and Khan (2015) in investigating the factors affecting food price inflation in Pakistan during 1990–2013 by applying econometric tests of Augmented Dickey-Fuller, Vector Error Correction model and Johansen co-integration test showed that all the variables were integrated of order one and that food exports had a positive and significant long-run impact on food price inflation in Pakistan. They concluded that because food inflation occurs due to high demand for food items only those products with excess supply should be exported. Although the studies employed different cointegration techniques for varying periods they consented to the positive effect of food exports on inflation. Exploring the determinants of inflation in Pakistan for the period 1971 to 2012 Jaradat, Al-Zeaud and Al-Rawahneh (2011) applied Johansen cointegration and Error Correction Model (ECM). The results showed that exports of goods and services had a significant negative effect on inflation because higher exports increased domestic production which led the firm to achieve economies of scale and cost of production decline. In the same way [22] analyzed the major determinants of inflation in Bangladesh using data for the period from 1978 to 2010. The findings based on correlation coefficients indicated a weak negative association between imports, exports, government revenue, money supply and inflation. On the other hand, long-run analysis indicated that exports had a negative effect on inflation in Bangladesh.

Even though the studies consented to the negative effect of exports on inflation, the lack of information on the direction of causality and how shocks in exports influence inflation given that causality, variance decomposition and impulse response analysis tests were not conducted makes the studies inconclusive on the relationship between exports and inflation. Olatunji, Omotesho, Ayinde and Ayinde (2017) examined the factors affecting inflation in Nigeria using time series data employed for the study. The use of unit root, cointegration and error correction analysis indicated that the study variables were normally distributed and integrated of order one. Total export, interest rate and crude oil exports were found to have a negative impact on inflation while total imports and food price index exerted a positive effect (Blazi & Awolusi, 2020). Total government expenditure had an insignificant effect on inflation with inflation in the short run correcting disequilibrium at the rate of 70% in the next period. The review of the study indicated that important relationship analysis techniques such as causality, variance decomposition and impulse response analysis tests were not utilized making the study findings inconclusive for analyzing the relationship between inflation and its determinants of exports, interest rate, crude oil imports and food price index.

Despite the fact that this study was similar to many empirical literature, the conclusions of many previous studies were based on past events and not the present leaving a time gap in the difference between changes that occurred then and now (Beleska-Spasova, 2014; Ayanwale, 2007). Therefore this study considered events and situations occurring in 2021 affecting determents of export performance in Uganda. Moreover, the literature reviewed was done in different geographical areas and not Uganda. With such differences in geographical scope come differences in environmental conditions which influence the interplay of the different variables like determinants of export performance (Ayanwale, 2007; Appleton, 2000). This influences the nature of the outcome. For example, some studies were conducted in developed countries where advanced technologies, among others, are used compared to what would be used in Uganda in exportation. Therefore the present study was conducted in Uganda and the findings were compared with those of the other countries. Lastly, much of the reviewed literature features different methodological approaches in terms of the research designs, population, study area, sample size and tools for data collection; with such methodology, findings will differ (Ayanwale, 2007; Adofu, 2009). Consequently, the adopted methodology in the present study was uniquely designed to fit Uganda's scenario.

3. Methodology

The research design flows from the objectives, questions or hypothesis being addressed by the present study and the methods used to collect data had the greatest practical utility in obtaining the information required. The study therefore adopted a statistical research design based on secondary data collected (1989-2020) from various sources, such as the Bank of Uganda Economic bullet, Uganda Economic Survey (2008), National Bureau of Statistics (NBS), IMF and World Bank websites.

Model Specification: The model is based on the Export-Base Theory stated by Douglas C. North (born in 1920) and the North Theory (Chugan & Singh, 2015). The theory puts an emphasis particularly on the development of export sectors which has the role of a multiplier (very stimulating field), and other fields in the region are more or less subject to the export field and secure its activities (Aina, Awolusi & Odunlami, 2015). Export-base theory determines regional development by supporting export which is currently broadened in connection with the processes of economic integration as without export markets the expansion of the economy is not possible (Bhagwati 1978; Bosscher & Smit, 1998). The theory focuses on factors of foreign Direct Investment, Exchange rate, Inflation rate and Terms of Trade as affecting the export performance of the countries. The present study used a multiple regression model. The general model is expressed as:

$Y=\beta 0+\beta 1X1+\beta 2X2+\beta 3X3+\beta 4X4+\beta 5X5+\beta nXn+\mu$……*equation (1)*

The underlying objective is to determine whether or not Foreign Direct Investment, Exchange rate, Inflation rate and Terms of Trade are significant determinants of the country's export performance. Therefore export is the dependent variable.

Thus Export Performance is a function of the following variables:

EXP= f (GDP, FDI, EXR, INF, TOT)……*equation* (2)

Estimation Model: To test the above relationship, the following estimation model was used.

$EXP = \beta 0 + \beta 1 FDI + \beta 2 EXR + \beta 3 INF + \beta 4 TOT + \mu$……*equation* (3)

Where,

EXP = Annual Export value from Uganda to the rest of the world in % change. (Traditional & Nontraditional Exports)

FDI = Measures the annual inflows of foreign direct investment to Ugandan in % change

EXR= Represent macro-economic environment measured by the annual average of Real Exchange for the period of analysis.

INF= Indicates the annual average of Inflation rate over the period of analysis

TOT=Annual average Terms of Trade over the period of study

μ represents an error term

The variables were transformed into natural logarithms to minimize the chance of committing specification errors. Hence the transformation can be expressed as:-

$Ln\ EXP= \beta 0 + +\beta 1\ ln\ FDI +\beta 2\ ln\ EXR + \beta 3\ ln\ INF + \beta 4\ ln\ TOT + \mu$……*equation (*4)

The estimation technique used was the Ordinary Least Square (OLS). This technique was chosen because of the nature of the dependent variable. Since this study is a time series in nature it also examined the time series characteristics of the variables to be modeled, testing for stationary and co-integration of the variables. It is important to test the order of integration of each variable in a model, to establish whether it is non-stationary and how many times the variable needs to be differenced to derive a stationary series. There are several ways of testing for a unit root. In this study, we applied the Augmented Dickey-Fuller (ADF). Philip and Perron (1988), propose a non-parametric method of controlling for higher-order serial correlation in a series.

Unlike ADF, the Philip-Perron test corrects the t-statistic of the dependent variables in the auto-regressive process to account for the serial correlation in random terms (Blazi & Awolusi, 2020). There was a need to know the underlying process that generates our time series variables: that is whether the variables are stationary or non-stationary. Non-stationary variables might lead to spurious regressions. In this case, the results may suggest statistically significant relationships between the variables in the model, when in fact this is just evidence of contemporaneous correlation. The ADF test assumes that the data generation process is

auto-regressive to the first order. This is done so that the autocorrelation in the error term does not bias the test. In testing for co-integration, the residual-based co-integration test (Chugan & Singh, 2015) and the likelihood ratio test of Johansen (1991, 1995) are the most used in applied econometrics. However, Engle-Granger is criticized because it assumes only one co-integrating relation between the variables. We therefore use the Johansen procedure which is based on a VAR model and assumes the possibility of more than one co-integrating relation between the variables. The Johansen co-integration test is a sequence of tests. The null hypothesis of rank (r) = 0 (i.e. no cointegration relationship) is first tested and, if rejected, subsequent null hypotheses (Ho: r = 1, Ho: r = 2, etc.) are tested until a null can no longer be rejected. The procedure implies enquiring whether any co-integrating relation exists at all, and in the affirmative finding out exactly how many can be identified. J-B test was used to ascertain whether the errors of regression are normally distributed.

The normal distribution has a skewness coefficient of zero and a kurtosis coefficient of three. J-B test is optimal in the sense that the Lagrange Multiplier test (LM) for the null hypothesis of normality against the maintained hypothesis is generated by the Pearson family of distributions. LM test has the maximum asymptotic power, which means that the departure of road infrastructure, education infrastructure, health infrastructure, labor, capital, interest rate and economic growth from the normal distribution except employment was suggested with the use of p-values associated with Jaque-Bera test statistics. Kurtosis variables are all less than three and the distribution of variables exhibits non-stationarity (Stock and Watson, 2006). The positive signs of the skewness for all the variables are indicative of variables with long tails. In this study, the Breusch Pagan Cook-Weisberg test for Heteroscedasticity was used to test if the residuals from the regression model are homoscedastic or not (Ayanwale, 2007; Appleton, 2000; Adofu, 2009). Lastly, the Breusch–Godfrey (BG) test used serial correlation, BG test was based on the Lagrange Multiplier principle chosen since other tests have drawbacks that made the BG test to be favored (Ayanwale, 2007). The decision rule was based on the p-value of 0.05 level of significance.

4. Results and Discussion of Findings

This section presents a review of the data with an empirical analysis concentrating on the major variables that were stated in the methodology. The study set to assess the determinants of export performance in Uganda (1989-2019). The study objectives were to examine the relationship between Foreign Direct Investment net inflows and export performance secondly to establish the relationship between the inflation and export performance and to examine the relationship between Real Exchange Rate and export performance. The study used a combination of graphical and empirical tools for carrying out the analysis to answer all the objectives that were inherently stated in the study.

Results: The first section of the analysis involves carrying out a comprehensive univariate analysis of each of the variables. This is intended to discover any forms and nature of trends in the data before carrying out an in-depth analysis. It involved the use of both descriptive statistics. Further presentations involve the analysis of association and the relationship between the variables. This is intended to discover any forms and nature of trends in the data before carrying out an in-depth analysis. It involved the use of both descriptive statistics and graphics for summarizing the data.

Descriptive Statistics of the Variables: Table 1 presents a summary of descriptive statistics for the variables considered for analysis namely exports, foreign direct investments, real exchange rate, inflation and terms of trade. It described the distribution of each variable with respect to mean, standard deviation, minimum and maximum values for the 32 observations.

Table 1: Descriptive Statistics of the Variables

	EXPORT	RER	INFLATION	TOT
Mean	12.93688	1936.400	6.763437	36.34313
Median	12.77000	1781.075	6.320000	36.03000
Maximum	24.28000	3727.000	15.12000	56.25000
Minimum	6.100000	3.040940	0.060000	26.04000
Std. Dev.	3.825880	999.5412	3.810256	6.608363
Sum	413.9800	61964.81	216.4300	1162.980

Observations	32	32	32	32

Source: Researcher estimation using E-views 10, 2022.

In the findings of descriptive statistics from the above table, the mean, median, maximum, minimum values and standard deviations of the considered variables are exposed. When this study compared the descriptive statistics among variables, trade openness had a high mean value of 36.34 while inflation had the lowest mean which was 6.7, the mean for export was 12.9 and that of the real exchange rate was 1936 (not percentage change). In terms of standard deviation, terms of trade had the highest standard deviation while the lowest was 3.82 and the real exchange rate was 999. Inflation had 3.8; the results imply that the data is descriptively structured based on the data with the variables revealing increase and decreasing trends.

Stationarity Test: To test the stationarity of the relevant variables and determine their order of integration, Augmented Dickey-Fuller (ADF) was used (Awolusi, 2021), and the results are reported in Table 2. The number of lags was determined based on a maximum lag of 10 sets based on the rule of thumb (Awolusi, 2021). It is noted that FDI and TRDOP were tested at lag 1, GDPPC was tested at lag 0, and GE was tested at lag 2. The test was performed on all the variables in their natural logarithm (ln) form to account for the possible presence of heteroskedasticity (Awolusi & Mbonigaba, 2020). The rejection criteria are that we reject the null hypothesis if the test statistic value is greater than their respective critical values of 0.05 level of significance and if the p-value is less than 0.05 (Awolusi & Mbonigaba, 2020b).

Table 2: ADF Stationarity Tests

Variables	**Stationary Order**	**ADF Test Statistic**	**Critical Values**			**P-Value**
			1%	**5%**	**10%**	
Export	I(I)	-6.09	-3.61	-2.96	-2.61	0.000
FDI	I(0)	-3.07	-3.67	-2.95	-2.62	0.039
RER	I(I)	-6.20	-3.61	-2.61	-2.61	0.000
Inflation	I(0)	-3.82	-3.66	-2.96	-2.61	0.006
ToT	I(I)	-5.39	-3.67	-2.96	-2.62	0.001

Source: Researcher estimation (2022) using Data from the World Bank.

Results in that variables are stationary in Logarithm are FDI and Inflation except for export performance, real exchange rate and terms of trade which is stationary in the first difference at a 5% level of significance, because their absolute values of the Test statistics were smaller than the values of the 5% critical value. The Stationarity of the variables was ascertained based on the test statistic value being more than the critical value at 5 percent. This Stationarity test gives the right to proceed with the cointegration test and estimation of the designed ordinary least square model.

Co-Integration Test: After establishing that all the variables are integrated of order one and determining the optimal lag length, it is appropriate to test for cointegration to discover if the relevant variables have a long-run relationship. Johansen cointegration test was employed to determine the possible number of cointegrating equations in the model (Awolusi, 2009). The decision criterion is that Trace statistics and max statistics are compared to their respective 5% critical value. If the trace statistics and max statistics are greater than the critical value, the null hypothesis of (no cointegration) is rejected and vice versa (Awolusi, 2021; Awolusi & Mbonigaba, 2020).

Table 3: Johansen Co-Integration Test

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.788285	86.73903	69.81889	0.0013
At most 1	0.486124	40.16359	47.85613	0.2167
At most 2	0.353351	20.19037	29.79707	0.4100
At most 3	0.210877	7.111839	15.49471	0.5647

At most 4	0.000228	0.006840	3.841466	0.9335

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values
Normalized cointegrating coefficients (standard error in parentheses)

EXPORT	FDI	RER	INFLATION	TOT
1.000000	-8.509392	-0.004211	-1.459819	1.935813
	(0.99331)	(0.00112)	(0.27436)	(0.27155)

Source: Researcher estimation (2022) using Data from the World Bank.

Results in Table 3 indicate the presence of a cointegration relation between the variables studied. The results of Trace and Maximum Eigenvalue tests indicate that at the 5% significance level with co-integrations. As seen from the Trace statistics which indicate that the variables are cointegrated. The guideline is that when the Trace statistics is more than 5 % percent Critical value, we reject the null hypothesis also, when the maximum Eigen value is more than the critical value at 5 percent, we reject the null hypothesis. The test indicates that not only are the trace statistics more than the critical level there is also a cointegration level. The null hypothesis of no co-integration equation is strongly rejected with a probability of 0.5 percent. Thus, the variables under study have long-run relationships among them.

Correlation Analysis between the Variables: The correlation analysis for the variables was performed and tests to determine whether there is a positive relationship between the variables (Awolusi, 2009). The results attained from the study are provided in the Tabulation provided in Table 4.

Table 4: Correlation Analysis between the Variables

	FDI	RER	INFLATION	TOT	EXPORT
FDI	1	0.2418610	-0.024233	0.569449	0.6700
RER	0.2418610	1	-0.325208	0.438566	0.5656
INFLATION	-0.024233	-0.325208		0.011622	0.0150
TOT	0.569449	0.438566	0.011622	1	0.77157
EXPORT	0.670025	0.565647	0.015060	0.771575	1

Source: Researcher estimation (2022) using Data from the World Bank.

From the table above, it is observed that all the variables are correlated positively. We are interested in the correlation of the variable beginning with exports and year which is going to be equal to 0.670 going on further we could see the correlation between export and year as export and GDP, and again we could look at the correlation between the other variables as indicated in the correlation matrix.

Relationships between Foreign Direct Investment Net Inflows and Export Performance from 1989 to 2020: The first objective of the study was to examine the relationship between Foreign Direct Investment net inflows and export performance. To test this, ordinary least square was employed to determine the relationship between foreign direct investments and export performance in Uganda from 1989 to 2020. The results attained are presented in Table 5 presented and interpreted below.

Table 5: Relationship between Foreign Direct Investment Net Inflows and Export Performance from 1989 to 2020

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	0.913405	0.345114	2.646673	0.0130
TOT	0.334167	0.074666	4.475502	0.0001
C	-1.862967	2.330014	-0.799552	0.4305
R-squared	0.674059	Mean dependent var		12.93688
Adjusted R-squared	0.651580	S.D. dependent var		3.825880
S.E. of regression	2.258306	Akaike info criterion		4.556167
Sum squared resid	147.8984	Schwarz criterion		4.693579

Log-likelihood	-69.89867	Hannan-Quinn criteria.	4.601715
F-statistic	29.98657	Durbin-Watson stat	1.738118
Prob(F-statistic)	0.000000		

Source: Researcher estimation (2022) using Data from the World Bank.

To determine the relationship between Foreign Direct Investment net inflows and export performance from 1989 to 2020, the results presented the R-squared value of 0.67, on the regression coefficient between the FDI and export performance in Uganda, the coefficient denotes a 67% change in export performance is caused by the foreign direct investment net flows, the adjusted r-square show that for this change to occur, the data of 0.651 data is accounted, in this case foreign direct investments determine the export performance by 65.5% of the data accounted. The findings from the above table indicate that all the coefficient of that is foreign direct investments is statistically significant at a 5% level of significance in explaining variations in the export performance of Uganda because their p-values of 0.0130 which is less than 0.05 other variables in the model, even terms of trade had 0.0001. This study therefore concludes that FDI had a significant determination on the export performance of Uganda from 2020. From the above regression table, the following equation can be derived;

$$Export\ Performance\ -1.862967 + 0.913405\ FDI$$

The interpretation of the above equation is that a unit increase in foreign direct investments increases the export performance units by 0.913. The findings also indicate that the p-value is less than a 5% confidence interval implying that the model is statistically significant at a 5% level of significance.

Relationships between Inflation and Export Performance from 1989 to 2020: The first objective of the study was to examine the relationship between inflation and export performance. To test this, ordinary least square was employed to determine the relationship between inflation and export performance in Uganda from 1989 to 2020. The results attained are presented in Table 6 and interpreted below.

Table 6: Relationships between Inflation and Export Performance from 1989 to 2020

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DINF	0.047326	0.022093	2.142144	0.0407
DTOT	0.727450	0.051258	14.19195	0.0000
C	-0.021012	0.032789	-0.640812	0.5267
R-squared	0.883633	Mean dependent var		0.056509
Adjusted R-squared	0.875608	S.D. dependent var		0.519188
S.E. of regression	0.183114	Akaike info criterion		-0.468354
Sum squared resid	0.972393	Schwarz criterion		-0.330941
Log-likelihood	10.49367	Hannan-Quinn criteria.		-0.422806
F-statistic	110.1056	Durbin-Watson stat		2.537325
Prob(F-statistic)	0.000000			

Source: Researcher estimation (2022) using Data from the World Bank.

To determine the relationship between inflation and export performance from 1989 to 2020, the results presented the R-squared value of 0.88, on the regression coefficient between the inflation and export performance in Uganda, the coefficient denotes an 88% change in export performance is caused by inflation, the adjusted r-square show that for this change to occur, the data of .87 data is accounted, in this case inflation determine the export performance by 87% of the data accounted. The findings from the above table indicate that all the coefficient of that is inflation is statistically significant at a 5% level of significance in explaining variations in export performance in Uganda because their p-values of 0.0407 which is less than 0.05 other variables in the model, even terms of trade had 0.000. This study therefore concludes that inflation has had a significant determination on the export performance of Uganda from 2020. From the above regression table, the following equation can be derived;

$$Export\ Performance\ -0.021012 + 0.047326\ Inflation$$

The interpretation of the above equation is that a unit decreases in inflation increases the export performance units by 0.047. The findings also indicate that the p-value is less than a 5% confidence interval implying that the model is statistically significant at a 5% level of significance.

Relationships between Real Exchange Rate and Export Performance from 1989 to 2020: The first objective of the study was to examine the relationship between real exchange rate and export performance. To test this, ordinary least square was employed to determine the relationship between real exchange rate and export performance in Uganda from 1989 to 2020. The results attained are presented in Table 7 presented and interpreted below.

Table 7: Relationships between Real Exchange Rate and Export Performance from 1989 to 2020

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RER	0.001077	0.000462	2.332953	0.0268
TOT	0.375256	0.069827	5.374040	0.0000
C	-2.786633	2.327236	-1.197400	0.2408
R-squared	0.659275	Mean dependent var		12.93688
Adjusted R-squared	0.635777	S.D. dependent var		3.825880
S.E. of regression	2.308952	Akaike info criterion		4.600525
Sum squared resid	154.6066	Schwarz criterion		4.737938
Log-likelihood	-70.60840	Hannan-Quinn criteria.		4.646073
F-statistic	28.05635	Durbin-Watson stat		1.799624
Prob(F-statistic)	0.000000			

Source: Researcher estimation (2022) using Data from the World Bank.

To determine the relationship between the real exchange rate and export performance from 1989 to 2020, the results presented the R-squared value of 0.65, on the regression coefficient between the real exchange rate and export performance in Uganda, the coefficient denotes a 65% change in export performance is caused by the real exchange rate, the adjusted r-square show that for this change to occur, the data of 0.63 data is accounted, in this case real exchange rate determine the export performance by 63% of the data accounted. The findings from the above table indicate that all the coefficient of that is real exchange rate is statistically significant at a 5% level of significance in explaining variations in the export performance of Uganda because their p-values of 0.0268 which is less than 0.05 other variables in the model, even terms of trade had 0.0000. This study therefore concludes that the real exchange rate had a significant determination on the export performance of Uganda from 2020. From the above regression table, the following equation can be derived;

$$Export\ Performance\ -2.786633 + 0.001077\ RER$$

The interpretation of the above equation is that a unit increases in real exchange rate increases the export performance units by 0.001. The findings also indicate that the p-value is less than a 5% confidence interval implying that the model is statistically significant at a 5% level of significance.

Determinants of Export Performance in Uganda (1989-2020): Here the researcher conducted a multiple regression analysis to assess the determinants of export performance in Uganda from 1989 to 2020. The findings based on the attained information are provided.

Table 8: Determinants of Export Performance in Uganda (1989-2020)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	0.939614	0.311208	3.019245	0.0055
RER	0.001291	0.000438	2.950945	0.0065
INFLATION	0.128882	0.103219	1.248635	0.2225
TOT	0.244432	0.073793	3.312397	0.0026
C	-2.049594	2.185168	-0.937957	0.3566
R-squared	0.753755	Mean dependent var		12.93688
Adjusted R-squared	0.717274	S.D. dependent var		3.825880
S.E. of regression	2.034295	Akaike info criterion		4.400777
Sum squared resid	111.7357	Schwarz criterion		4.629798
Log-likelihood	-65.41243	Hannan-Quinn criteria.		4.476691
F-statistic	20.66172	Durbin-Watson stat		2.038464
Prob(F-statistic)	0.000000			

Source: Researcher estimation (2022) using Data from the World Bank.

The findings from the above table indicate that all the coefficients of two independent variables determining export performance are statistically significant at a 5% level of significance in explaining variations in the export performance of Uganda because their p-values were 0.005 and 0.006 which is less than 0.05 other variables in the model inflation had 0.22 insignificant. This study therefore concludes that FDI and real exchange rate are significant determinants of export performance in Uganda for the period under review while the rest of the variables. From the above regression table, the following equation can be derived;
$Export\ Performance = -2.049594 + 0.939614$ FDI $+0.001291$RER

The findings also indicate that the p-value for the model is greater than 0.05 implying that the model is statistically significant at a 5% level of significance. Furthermore, the R-squared value shows that a combination of all the independent variables accounts for 75.1% changes in export growth in Uganda.

Diagnostic Tests

Variable Inflation Factor

Table 9: Variable Inflation Factor

Variable	Variance	VIF	VIF
FDI	0.096851	7.811154	1.483003
RER	1.91E-07	6.982449	1.432545
INFLATION	0.010654	4.927203	1.158665
TOT	0.005445	57.39715	1.781366
C	4.774958	36.92253	NA

Source: Researcher estimation (2022) using Data from the World Bank.

The diagnostic tests for the regression model show that there exist no instances of collinearity as the VIF statistics associated with each of the independent variables in the model were within the acceptable range. For instance, consumption (FDI = 1.4), RER (VIF = 1.43) and Real exchange rate (VIF = 1.15).

Normality Test: The results of our normality tests show that residuals are normally distributed (the probability of Jarque-Bera is 19 which is greater than 0.05 (5%) confidence interval, and is greater than the critical probability 5%). The confirmation of residual normality as shown by the table above implies that the estimated linear regression model has realistic predictive powers, and valid predictions can be drawn from its results.

Serial Correlation

Table 10: Serial Correlation

F-statistic	**0.688889**	**Prob. F(2,25)**	**0.5114**
Obs*R-squared	**1.671442**	**Prob. Chi-Square(2)**	**0.4336**

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 03/04/22 Time: 23:19
Sample: 1989 2020
Included observations: 32
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	-0.156286	0.356438	-0.438466	0.6648
RER	-0.000122	0.000458	-0.267387	0.7914
INFLATION	-0.042888	0.111155	-0.385837	0.7029
TOT	0.046866	0.091157	0.514122	0.6117

C	-0.741615	2.423595	-0.305998	0.7621
RESID(-1)	-0.118793	0.232884	-0.510094	0.6145
RESID(-2)	-0.250110	0.217320	-1.150884	0.2607

R-squared	0.052233	Mean dependent var	3.22E-15
Adjusted R-squared	-0.175232	S.D. dependent var	1.898519
S.E. of regression	2.058149	Akaike info criterion	4.472131
Sum squared resid	105.8994	Schwarz criterion	4.792761
Log-likelihood	-64.55409	Hannan-Quinn criteria.	4.578411
F-statistic	0.229630	Durbin-Watson stat	1.992118
Prob(F-statistic)	0.963044		

Source: Researcher estimation (2022) using Data from the World Bank.

The study results indicate that there is no serial correlation at larger order in the data between the determinants of export performance in Uganda from 1989 to 2020, the P-value for the study was 0.000 which is less than the 5% confidence interval. The results indicated that there is no serial correlation between the variables under the study.

Heteroskedasticity Test

Table 11: Heteroskedasticity Test

F-statistic	**0.331840**	**Prob. F(1,29)**		**0.5690**
Obs*R-squared	0.350712	Prob. Chi-Square(1)		0.5537
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.878334	1.567769	2.473791	0.0195
RESID^2(-1)	-0.106538	0.184944	-0.576055	0.5690
R-squared	0.011313	Mean dependent var		3.498016
Adjusted R-squared	-0.022779	S.D. dependent var		7.828576
S.E. of regression	7.917239	Akaike info criterion		7.038303
Sum squared resid	1817.798	Schwarz criterion		7.130818
Log-likelihood	-107.0937	Hannan-Quinn criteria.		7.068461
F-statistic	0.331840	Durbin-Watson stat		2.005674
Prob(F-statistic)	0.569022			

Source: Researcher estimation (2022) using Data from the World Bank.

The Breusch–Pagan Lagrangian multiplier test is conducted to test for the presence of Heteroscedasticity (Awolusi, 2021; Awolusi & Mbonigaba, 2020b). H0: Null = constant variance, homoskedasticity H1: ALT = non-constant, heteroscedasticity Since the corresponding probability value is less than 5% we reject the null and accept the alternative, which indicates that our variables are non-constant.

Discussion of Findings: The discussion is made with reference to other similar works done in previous studies. The section then concludes these discussions after which it offers its recommendations. This section was further organized into three subsections with respect to the research objectives that guided the study.

Relationship between Foreign Direct Investment Net Inflows and Export Performance: The study results show that there is a significant relationship between foreign direct investments and export performance. The results are in agreement with those of Behname (2012) applied the random effects model to measure the impact of foreign direct investment on economic growth in Southern Asia. The investigation concluded that foreign direct investment has a positive and significant effect on economic growth. The results agree with those of Ayanwale (2007) and Awolusi (2009). Both studies developed an autoregressive distributed lag (ARDL) model. The model examines the long-run relationship between the variables and finds an absence of a long-run relationship between FDI and economic growth. The results are in agreement with those of Freeman, Styles, and Lawley (2012) who analyzed the causal relationship between economic growth, exports and foreign direct

investment in ten European transition countries that are members of the EU (Freeman, Styles, & Lawley, 2012).

The results of this study indicate that the prospects for overall economic growth depend on the implemented policies to promote foreign direct investments. The authors emphasize that the most effective way to attract FDI is to focus on free trade zones, trade regime, tax benefits, human capital in the host country, and regulations of financial markets, financial system and the quality of infrastructure although not in agreement with those of Mitic (2016), FDI was found to have a strong interdependence relationship with high-tech exports, with a much higher level of statistical significance. The results of the analysis indicated a significant level of correlation between FDI and high-tech exports. The inflow of FDI is expected to increase production and productivity, encourage and stimulate local development and diffuse technology investment.

Relationship between Inflation and Export Performance: The study results show that there is a significant relationship between inflation and export performance. The study reveals that there is a significant connection between inflation and the export performance of the countries. The study is in agreement with those of Jarada, Al-Zeaud and Al-Rawahneh (2011) used quarterly data from 2000 to the third quarter of 2010 by applying the concepts of cointegration, Error Correction Model, analysis of Variance Decomposition and Impulse Response Function. It was also noted GDP had a negative relationship with inflation while money supply had an insignificant effect on inflation in Jordan. The findings are in agreement with those of Joiya and Shahzad (2013) used the Autoregressive Distributed Lag approach and error correction model for long-run and short-run, respectively based on time series data for the period 1972-73 to 2009- 10. The findings of the study showed that food exports contributed to high food prices and finally Rehman and Khan (2015) investigated the factors affecting food price inflation in Pakistan from 1990 to 2013 by applying econometric tests of the Augmented Dickey-Fuller, Vector Error Correction model and Johansen co-integration test showed that all the variables were integrated of order one and that food exports had a positive and significant long-run impact on food price inflation in Pakistan.

The findings also agree with those of Jaradat, Al-Zeaud and Al-Rawahneh (2011) applied the Johansen cointegration and Error Correction Model (ECM). The results showed that exports of goods and services had a significant negative effect on inflation because higher exports increased domestic production which led the firm to achieve economies of scale and cost of production decline. In the same way, Ayanwale (2007) analyzed the major determinants of inflation in Bangladesh using data for the period from 1978 to 2010. The findings based on correlation coefficients indicated a weak negative association between imports, exports, government revenue, money supply and inflation. The results are in disagreement with those of Olatunji, Omotesho, Ayinde and Ayinde (2017) examined the factors affecting inflation in Nigeria using time series data employed for the study. The use of unit root, cointegration and error correction analysis indicated that the study variables were normally distributed and integrated of order one. Total export, interest rate and crude oil exports were found to have a negative impact on inflation while total imports and food price index exerted a positive effect.

Relationship between Real Exchange Rate and Export Performance: The study results show that there is a significant relationship between real exchange rate and export performance. The study reveals that there is a significant connection between the real exchange rate and the export performance of the countries. The findings agree with many previous studies (Camarero & Tamarit, 2003; Cardoza et al., 2016; Chugan & Singh, 2015; Fernandez-Mesa & Alegre, 2015). Camarero & Tamarit (2003) and Cardoza et al. (2016) studied the impact of exchange rate volatility on exports in four East Asian countries (Hong Kong, South Korea, Singapore, and Thailand). Findings revealed that exchange rate volatility has negative impacts on exports in both the short-run and long-run periods. Ayanwale (2007) and Awolusi (2009) also observed that a competitive real exchange rate is associated with Nontraditional export success. Using time series, a study on Tanzania's nontraditional exports revealed a statistically significant relationship between real devaluation and nontraditional export growth. Although in disagreement with those of Ayanwale (2007) and Awolusi (2009) whose findings revealed that exchange rate volatility has negative impacts on exports in both the short run and long run periods.

The results are in agreement with those of Ayanwale (2007) and Awolusi (2009), a competitive real exchange rate is associated with Nontraditional exports success. Using time series, a study on Tanzania's nontraditional exports revealed a statistically significant relationship between real devaluation and nontraditional export growth. The study results are in agreement with those of Ayanwale (2007) while studying South Africa's export

performance, determinants of export supply found that exchange rate depreciation on average positively affects export performance. Results showed that export growth is not predominantly dependent on the economic prosperity of South 20 Africa's trading partners or their ability to compete in the export market based on price. Export volumes are determined by the profitability of export supply and factors which raise the output price and reduce the cost of production to enhance export performance. The impact of exchange rate volatility on exports in four East Asian countries (Hong Kong, South Korea, Singapore, and Thailand) revealed that exchange rate volatility has negative impacts on exports in both the short-run and long-run periods.

5. Conclusion, Recommendations and Implications

Conclusion: The study is set to investigate the factors determining export performance in Uganda. The specific objectives of the study are to examine the relationship between Foreign Direct Investment net inflows and export performance of Uganda from 1989 to 2020; secondly to establish the relationship between inflation and export performance and finally to examine the relationship between Real Exchange Rate and export performance from 1989 to 2020. The study adopted a longitudinal design and the analysis was based on stationarity tests, co-integration tests, ordinary least squares tests and finally diagnostic tests. The study results show that there is a significant relationship between foreign direct investments and export performance. Secondly, it was found that there was a relationship between inflation and export performance. The study also observed a significant relationship between inflation and export performance. Finally, it was found that the real exchange rate affect export performance. The study results show that there is a significant relationship between foreign direct investments and export performance. The study concludes that the development of foreign direct investments induces the export performance hence a conclusion that the export performance can be generated through foreign direct investments.

In addition, the study also observed a significant relationship between inflation and export performance. The study reveals that there is a significant connection between inflation and the export performance of the countries. The study concludes that low or reduction in inflation can generally induce the export performance of Uganda. The study concludes that the state of inflation reduction can be a general development of the export performance for the countries. The study concludes that the country's reduction of inflation is key in generating and increasing export performance. Lastly, the present study also observed a significant relationship between real exchange rate and export performance. The study reveals that there is a significant connection between the real exchange rate and the export performance of the countries. The real exchange rate is a key determinant of the export performance in Uganda from 1989 to 2020. The study concludes that the state of the real exchange rate reduction is fundamental and can be developed in the development of export performance. The state of exports can be significantly increased with the real exchange rate in the country.

Recommendations

Relationship between Foreign Direct Investment Net Inflows and Export Performance: The study on the first objective recommends that: The government should however put in place measures to limit FDI's from coming along with experts from their home countries but rather employ the local people this will reduce problems of retrenchment or lay off some workforce that comes along with privatization. This will also solve the problem of limited skills and lead to skills improvement among the people as well as reduce unemployment. There is a need for regulations and monitoring is adequately needed to ensure the proper form of foreign businesses in the country together with enhancing the management situation for the management of the business. There is a need for deliberate efforts to promote financial corporations including monetary authorities and deposit money banks, as well as other financial corporations like finance and leasing companies, money lenders, insurance corporations, pension funds, and foreign exchange companies.

In addition, Policies that encourage financial inclusion can also be implemented to increase access to finance. There is a need for the development of foreign direct investments needed to enhance the export performance of the countries. Policies that provide incentives to foreign businesses need to be provided to engineer and attract potential investments of value from foreigners needed in the generation of products and or services necessary for exports. The government needs to provide more land for the investors to enable them to have investments enhanced in the growth and sustainability of the businesses. The study recommends adequate and timely allocations of land to these investors so that their activities are less or not frustrated. All these are

intended to entice the investors in the establishment of production plants for the generation of exports. There is adequately need for an adequate policy on the development and management of the FDIs to avoid the negative effect of some trade of FDI nature, regulations and monitoring is adequately needed to ensure proper form of foreign businesses in the country together with enhancing the management situation for the management of the business for economic growth.

Relationship between Inflation and Export Performance: Secondly, Inflation needs to be reduced, the policies intended to reduce inflation as its presence presents negative effects on exports and the policies aimed at reducing inflation are needed to increase the capacity of the businesses to operate and attain mechanisms for the reduction of inflation. The increase in imports can be seen to be inflationary and thus measures must be implemented to combat the soaring import levels. This might be done to discourage imports in favor of domestically produced products. Such measures may include availing incentives and other schemes to domestic producers so that they remain competitive and produce quality products at affordable prices and costs. Moreover, measures and schemes can be used to promote imports of productive goods or goods that are strategic to the functioning of the economy. From the positive short-run relationship between gross savings and gross domestic product policy implications must therefore be designed in a manner that encourages individuals to save more.

As such can encompass increasing interest rates on deposits and lowering deposit fees. An increase in interest rates on savings deposits is therefore a means to continually lure customers to save more. This should be coupled with a reduction in the deposit fee. Measures are also recommended that steps be undertaken to promote economic growth by creating employment, investing in capital accumulation and technological advancement. Moreover, economic growth initiatives can be enhanced through strategic import promotion of capital goods that are pivotal to economic growth. Such imports of capital goods can be incentivized or can involve import schemes being given to strategically important industries. The government needs to refocus on investing more in the health systems to increase the system functionality and have it vibrant to generate economic growth improvement for the country, there is a need for more concerted efforts in improving the state of the health systems through increasing personnel, tools and infrastructure systems to enhance effectiveness in performance.

Relationship between Real Exchange Rate and Export Performance: The study recommends that there is a need to increase the value of the currency through the government embarking on industrialization, and modern techniques of agricultural production since this area can employ a large population resulting in high productivity hence economic growth including attaining the products and services for export. The government should also embark on strong fiscal policy to reduce the unnecessary money supply which can lead to inflation that negatively impacts on economy and reduces economic growth. A high rate of growth in exports is associated with periods of undervalued currencies. There is a need for if possible a policy on undervaluation which serves as a second-best policy to nullify the disproportional additional transaction costs the tradable sector suffers due to institutional weaknesses and market imperfections. The export expansion achieved through undervaluation, however, comes at a heavy price for Uganda. The net welfare effects of maintaining an undervalued real exchange rate through reserve accumulation therefore depend on the balance between the welfare losses that arise due to higher inflation and lower tradable absorption (because undervaluation removes tradable goods from the economy) versus the dynamic gains from higher growth that comes due to positive externalities generated by expansion of the tradable sector.

A reduction in domestic savings and investment due to undervaluation-induced inflation could be the other channel by which undervaluation may undermine growth. There is a need for identifying the channels, by which such adverse effects are felt, such as whether it is through distortionary taxation or its impact on the prices of non-tradable or a combination of them will provide important policy inputs. The competitiveness of the domestic market structure, as well as the supply and quality of infrastructural facilities and the skill base of the economy, are also important constraints that must be addressed to achieve a shift in export diversification. There is a need to streamline the policy on education to make it more skillful to encourage job creators for economic development. The budget of the education system was low and hence needs to be increased if human development can be improved to generate the country's growth. The development of the education sector could improve the state of the education sector performance necessary for improving the growth of the economies and development of appropriate means to the development of the economies for scale in the countries.

Implications and Contribution to Knowledge: The study aims to investigate the factors determining export performance in Uganda. The objectives were to examine the relationship between Foreign Direct Investment net inflows and export performance; the study established the relationship between inflation and export performance and finally examined the relationship between Real Exchange Rate and export performance from 1989 to 2020. The study results imply that export performance is affected by inflation, FDI and real exchange rate. It was However implied that FDI and exchange reductions had positive implications for export performance while the occurrence of increases in inflation generally led to an export performance in Uganda. The study based on the findings concludes that the three factors are sufficient in determining the export performance for Uganda. The study contributes to knowledge in this field by assessing the degree and extent to which inflation, real exchange rate and FDI contribute to or affect export performance.

This is clearly the notion and in agreement with Douglas and North's Theory by Blazek and Uhlir (2002) who stated that export performance is generally enhanced in the factors studied. However, the following limitations were observed during the present study. There is an expected difficulty in collecting data since the rates of the factors affecting the export performance levels in Uganda may not be acquired with ease. The scattered nature of the information may not be attained and compiled with ease. Despite all the above-anticipated challenges, the researcher made efforts to adequately address them so as not to compromise the findings of the study in any way and so that the outcome reflects the majority view of the entire population. During this study we have learned that no single study is exhaustive enough to show the determinants of export performance, therefore; further research can be done on the impact of FDI on Uganda's total tax revenue or even the balance of trade and capital structure in Uganda for the period of the study.

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Liquidity Management and Financial Performance of SACCOs in Bushenyi District

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Abstract: The main objective of this paper is to examine the association between elements of liquidity management and the financial performance of SACCOs in Bushenyi District. This research was conducted through a cross-sectional survey involving a sample of 72 Savings and Credit Cooperative Societies (SACCOs) located in the Bushenyi District. A sample of 61 SACCOs operating in Bushenyi was determined using Krejcie and Morgan's Table, with accountants, managers, and credit officers serving as the units of analysis, resulting in a total population of 183 respondents. The research instrument's validity was assessed using the content validity index, and its reliability was evaluated through Cronbach's alpha coefficient, a measure of the consistency in obtaining similar results from the same respondents when administering the instrument at different times. In accordance with the research objectives, inferential statistics, specifically correlation and regression analyses, were conducted. The findings reveal a statistically significant positive correlation between cash ratios, liquidity ratios and financial performance. Lastly, the research outcomes demonstrate a statistically significant positive relationship between the comprehensive liquidity management elements and financial performance. This suggests that any favorable change in the management of liquidity within SACCOs is associated with a positive change in financial performance. Therefore, enhancing liquidity management can aid in maximizing the use of cash on hand, while efficient cash budgeting can guarantee good planning and resource allocation. Due to their weakly positive associations with liquidity management, debtor management, as well as bank reconciliation statements, must also be considered; this will improve the financial performance of SACCOs.

Keywords: *Liquidity management, financial performance, SACCOS, Bushenyi district.*

1. Introduction

The central focus of concern for business practitioners across diverse organizational types, including Savings and Credit Cooperatives (SACCOs), has undeniably revolved around financial performance due to its profound implications on the overall well-being and, ultimately, the longevity of these entities (Mmari & Thinyane, 2019). Within the realm of micro-financing institutions, Savings and Credit Cooperative Societies (SACCOs) assume a pivotal role in the mobilization of financial resources earmarked for various developmental endeavors (Mumanyi, 2014). The fundamental mission of SACCOs resides in facilitating the empowerment of their members by means of aggregating savings and disbursing credit (Ofei, 2001). In essence, the overarching objective underpinning the establishment of SACCOs is to propagate savings while concurrently furnishing the capacity to extend loans at interest rates that undercut those levied by alternative financial service providers to their constituent members. To bolster the expansion and sustainability of SACCOs within the Ugandan landscape, the government introduced initiatives such as the Project for Financial Inclusion in Rural Areas (PROFIRA) and the Uganda Cooperative Alliance (UCA) (Muriithi, 2014).

However, these efforts have left a lot to be desired as the financial performance of SACCOs across the country remains a great challenge (Flosbach, 2015; UCA Annual Report, 2016). A similar scenario appears to exist in other Eastern African nations. For instance, Ondieki et al. (2017) noted that SACCOS in Kenya encountered a multitude of challenges, including issues such as deficient record-keeping, a high illiteracy rate among their members, loan backlogs, insufficient capital, and outstanding audit fees. In Tanzania, SACCOs also grapple with challenges such as inadequate management, a lack of operational capital, instances of embezzlement, elevated loan delinquency rates, and subpar business performance (Mwakajumulo, 2011; Maghimbi, 2010). The existing body of literature highlights that persistent subpar financial performance within SACCOs may be attributed to suboptimal liquidity management practices (Mvula, 2013; Flosbach, 2015). Researchers such as Kimathi

(2014), Gryglewicz (2011) and Ibe (2013) have collectively defined liquidity management as the organization's capacity to ensure the availability of funds for meeting its short-term obligations. Furthermore, prior studies expound upon the imperative for financial institutions to uphold adequate reserves of cash, readily convertible assets, and potential credit lines to fulfill both expected and unforeseen liquidity requirements (Campello et al., 2011). Furthermore, Campello et al. (2011), and Abioro (2013) concur that the principal yardsticks for evaluating liquidity management encompass metrics like capital ratio, cash ratio, quick ratio, and investment ratio.

Nonetheless, it is worth noting that SACCOs exhibit distinctive structural and philosophical characteristics, thereby necessitating an altered approach in assessing their performance compared to conventional financial institutions such as banks. This study diverges somewhat from prior literature by concentrating on appraising the influence of liquidity management practices on the financial performance of SACCOs. Specifically, it delves into evaluating the repercussions of liquidity planning, as exemplified by cash budgets, on the financial performance of SACCOs. Additionally, it scrutinizes the ramifications of liquidity monitoring and control, encompassing aspects like operating cash flow management, bank reconciliation, and debtors' management, on the financial performance of SACCOs. Furthermore, the current study will focus on SACCOs in the Bushenyi district, one of western Uganda's districts where literature is extremely scarce. According to Njeru, (2016), to effectively and efficiently enhance their financial performance, SACCOs have to pay greater emphasis on proper management of their liquidity levels and positions, hence the current study.

Context: Uganda is recognized as a prominent nation in the cooperative movement, as acknowledged by the (ACCOSCA, 2011), boasting a network of 10,800 SACCOs and engaging approximately 6 million members. These SACCOs operate under the regulatory framework of the Uganda Cooperatives Act of 1992, which governs all cooperatives in the country. The responsibility for maintaining a registry of cooperatives and overseeing their operational stability is vested in the Ministry of Trade, Tourism, and Industry (MTTI) as mandated by the CGAP report (2005). This sector accounts for 31% of the total national savings and contributes approximately 46% to the national GDP (Ochanda, 2013). Within Uganda, SACCOs continue to play a pivotal role in the provision of financial services, boasting a wider outreach compared to, many other financial institutions (ICA, 2005). They function as financial organizations offering products similar to, if not the same as, banks, with many of them having been established long before most commercial banks (Gathurithu, 2011).

In June 2010, Bushenyi District was recognized as the district with the most successful Savings and Credit Cooperative Organizations (SACCOs) in the country, boasting a total of 72 SACCOs characterized by their superior savings, high share capital, and high loan portfolios. Notably, SACCOs in Bushenyi exhibited noteworthy average savings amounting to sh350 million each, in contrast to SACCOs in Acholi and Lango (sh80 million) or Buganda (sh200 million). Among the leading SACCOs in Bushenyi, Kitagata Financial Services Cooperative Society Ltd stood out with a share capital of sh322 million, voluntary savings of sh327 million, and a loan portfolio of sh698 million from 2,833 members. Additionally, Bugongi SACCO in Sheema, encompassing 2,257 members, registered sh22 million in savings, share capital of sh330 million, and a loan portfolio of sh626 million, while Bunyaruguru, with 2,060 members, accumulated savings of sh174 million and maintained a loan portfolio of sh289 million (Madinah, 2023). It is noteworthy that in 2010, Sheema and Bunyaruguru (Rubirizi) were subsequently separated from Bushenyi District to become independent districts (Tabaro, Katusiimeh & Molenaers, 2018).

According to a study by the Association of Microfinance Institutions of Uganda (2014) on the missing Savings and Credit Cooperative Organizations (SACCOs) and Micro-Finance Institutions (MFIs) from the Tier 4 institution census conducted in 2005/2006, the majority of SACCOs in Western Uganda, specifically in the Bushenyi district, had collapsed primarily because of mismanagement and misappropriation of funds by SACCO management. This mismanagement significantly impacted the performance of SACCOs in the Bushenyi district, resulting in a loss of confidence among members and increased defaults. Additionally, the compromising of institutional policies and procedures by board members, who engaged in excessive borrowing without repayment, exacerbated the situation. Furthermore, some SACCOs remained dormant due to high member defaults and a lack of available funds for lending, causing these SACCOs to temporarily suspend operations as they sought to recover funds from defaulters. The question arises as to whether the mismanagement and

misappropriation of funds in Bushenyi SACCOs can be attributed to deficiencies in liquidity planning, monitoring, and control. Consequently, the need for this investigation is evident.

2. Literature Review and Hypothesis Development

Liquidity Management and Financial Performance: Liquidity refers to a business entity's capacity to meet its cash payment obligations on time (Kimathi, 2014). Various financial ratios and methodologies have historically been employed to assess liquidity (Islam et al., 2017). For instance, in research conducted by scholars Khokhar (2015) and Bolek (2013), liquidity was gauged through liquidity ratios, including the current ratio and quick ratio, where the primary components of these ratios were current assets and current liabilities. Maqsood et al. (2016) analyzed data extracted from the financial statements of eight distinct banks, covering the period from 2004 to 2015. Their primary objective was to investigate the influence of liquidity management on the performance of the banking sector. The research utilized regression and correlation techniques as analytical methods. Liquidity was measured using the current and cash ratios as independent variables, while performance was assessed using the return on assets as the dependent variable. The findings of this study unequivocally demonstrated that liquidity management had a significant impact on the banking industry's performance. Salim and Bilal (2016) initiated a comprehensive investigation with the primary aim of examining the ramifications of liquidity management on the financial performance of the Omani banking sector. Over five years, spanning from 2010 to 2014, they meticulously collected financial data from the statements of four banks. The researchers applied multiple regression analysis to efficiently analyze and evaluate this dataset. They identified statistically significant correlations among the bank's metrics, including ratios such as liquid assets to deposits, liquid assets to short-term liabilities, and return on equity. Additionally, their investigation exposed a strong connection between the bank's ratios, such as loans to total assets, deposits to short-term liabilities, loans to client deposits, and return on assets. Nevertheless, it is essential to highlight that the study did not uncover any statistically significant relationship between the liquidity positions of Omani banks and the net interest margin (NIM).

Khan and Mutahhar Ali (2016) have produced clear evidence that confirms a favorable and significant association between liquidity and financial performance. In their thoroughly researched study, liquidity was evaluated using the current ratio and quick ratio, and performance was examined using measures like the gross profit margin and net profit margin ratios. The data for this analysis was sourced from the annual accounts of HABIB Bank Limited, spanning five years from 2008 to 2014, with the data subjected to thorough statistical analysis using SPSS. Ismail (2016) undertook a study to evaluate how liquidity management affected the performance of Pakistani companies that make up the KSE 100 Index. Data for this study came from balance sheet studies of companies' audited annual reports from 2006 to 2011 and audited annual reports of corporations conducted by the State Bank of Pakistan. The regression analysis's findings demonstrated that a greater current ratio was linked to better return on assets (ROA) performance, proving that the current ratio had a statistically significant and favorable impact on the ROA of the tested firms.

Priya and Nimalathasan (2013) conducted a thorough investigation to determine the influence of changes in liquidity levels on the profitability of Sri Lankan manufacturing enterprises. They included listed manufacturing enterprises in Sri Lanka in their investigation, which lasted five years, from 2008 to 2012. These researchers used correlation and regression techniques to analyze the data, and their findings showed a strong and significant correlation between liquidity and profitability among Sri Lanka's listed industrial businesses. Al Nimer, Warrad & Al Omari (2015) identified a significant relationship between bank profitability and liquidity within Jordanian banks. They specifically employed the quick ratio as an independent variable to measure liquidity, while return on assets (ROA) served as the dependent variable to assess profitability. Data from 15 Jordanian banks listed on the Amman Stock Exchange (ASE) over five years, ranging from 2005 to 2011, contributed to this investigation. The researchers analyzed the data using simple regression analysis, and the results indicated that liquidity had a noteworthy impact on the profitability of Jordanian banks. Similarly, Alshatti (2015) conducted a study aimed at assessing the impact of liquidity management on the profitability of Jordanian commercial banks.

The research findings revealed a mix of positive and negative effects. To be more specific, the study utilized the Return on Equity (ROE) metric to evaluate the influence of the investment ratio and quick ratios on profitability,

while the Return on Assets (ROA) metric was employed to assess the positive impact of the capital ratio on profitability. Nevertheless, it is essential to highlight that the study also indicated adverse effects of the remaining independent variables on both measures of profitability, namely ROE and ROA. In a similar vein, Lartey, Antwi & Boadi, (2013) looked into the connection between profitability and liquidity in banks listed on the Ghana Stock Exchange. Using time series analysis, the study found that between the years 2005 and 2010, the profitability and liquidity of the listed banks both showed a deteriorating tendency. Additionally, the study discovered a very slight positive association between profitability and liquidity in Ghana's listed banks. In their research, Akter and Mahmud (2014) looked at the relationship between liquidity and profitability in Bangladesh's banking sector. The return on assets ratio was used to determine profitability, whereas the current ratio was used to determine liquidity. The study gathered income statements and balance sheets from specific commercial banks, which were publicly accessible on the institutions' official websites. The sample consisted of twelve specific banks. Various analytical techniques, including correlation, regression, and descriptive statistics, were employed to analyze the data using SPSS version 16.0. The primary findings of the investigation indicated the absence of a significant relationship between profitability and liquidity across all categories of Bangladeshi banks. From the literature above, it is clear that the management of cash no doubt impacts positively on the survival and growth of firms. In other words, for a firm to effectively manage its liquidity there should be good knowledge of cash budgeting plus liquidity monitoring and control, two key components to financial stability and solvency that are essential to the financial performance of a business.

Cash Budgets and Financial Performance: Cash budgets can be described as forecasts of an organization's cash flow or a comprehensive plan outlining the acquisition and utilization of cash resources over a specified period. According to ACCA (2012), a cash budget provides a summary of expected cash inflows and outflows for a firm over a defined timeframe. Similarly, Brigham and Houston (2014) define a cash budget as a table that presents cash flows, including receipts, disbursements, and cash balances, for a firm over a specific period. In essence, a cash budget identifies all components of cash receipts and includes a schedule to track cash payments to suppliers in relation to purchases. Consequently, the preparation of cash budgets is a reliable means of assessing a firm's liquidity over time, ultimately contributing to improved financial performance. Numerous studies have examined the connection between cash budgeting and financial performance. For instance, Akande, Olusola, and Oluwaseun (2014) examined the impact of budgeting systems on the success of entrepreneurial enterprises, with a specific focus on the perspectives of small business proprietors in Lagos, Nigeria. 4,585 SMEs were registered in Lagos State as of March 2014, hence 120 business owners were chosen for the study from that pool using a multi-stage random sampling methodology. In the course of the research, which involved the administration of well-constructed questionnaires, descriptive statistical techniques including basic percentages were employed.

Additionally, non-parametric statistical assessments such as the Chi-square test were utilized to evaluate the formulated hypotheses. The study's outcomes revealed a statistically significant and positive relationship between budgeting processes and the financial performance of micro and small enterprises. In a different context, Mulani, Chi, and Yang (2015) explored the implications of budgeting on the performance of small and medium-sized enterprises (SMEs) in India. The study conducted an exhaustive analysis to evaluate the repercussions of budgeting on firm performance. Employing questionnaires and a gamut of statistical tools for data analysis, the study assembled a sample of 168 firms culled from the SME sector in India, representing districts in Mumbai, Pune, and Solapur. The research brought to light that the performance of Indian SMEs was subject to the nuances of budgetary goals, and heightened clarity in these objectives contributed to an upswing in performance. Mohammed and Ali (2013) unveiled a statistically significant and positive relationship between budgeting and company performance in their research titled "The Relationship between Budgeting and Performance of Remittance Companies in Somalia." According to their findings, a one-level improvement in budgeting effectiveness was associated with a 0.514 increase in business performance, as indicated by a correlation coefficient of 0.514. The likelihood of this link occurring by accident was calculated to be 0.00.

Onduso (2013), who investigated the topic of "The Impact of Budgets on the Financial Performance of Manufacturing Companies in Nairobi County," The research employed a cross-sectional survey approach and administered questionnaires to gather data from a sample of 18 manufacturing companies listed on the Nairobi Securities Exchange. The results of the study indicated that the proficiency of management and the effective utilization of budgets significantly influenced financial performance, as assessed by the Return on Assets (ROA)

metric. These results are consistent with what the current study found. In alignment with the findings of Wijewardena and De Zoysa (2001), it becomes apparent that the level of implementation can impact how planning and budgetary control affect performance differently across diverse organizations. Their study centered on two critical financial metrics: sales growth and return on investment (ROI), utilizing data from a sample of 2000 manufacturing SMEs in Australia. The results unveiled a substantial and positive correlation between effective budget management and both budget planning and sales growth.

Notably, no discernible disparities were observed between budget planning and ROI, as well as budgetary control and ROI. The researchers hypothesized that, although businesses with extensive planning or control practices reported increased sales growth, these enhanced revenues did not necessarily lead to higher profitability due to inherent internal inefficiencies. Mutegi (2012), sought to determine how budgetary restraints affected the financial performance of construction enterprises in Kenya between 2008 and 2010. A sample of 26 construction firms was chosen for the study from a population of 47 construction businesses. The analysis used a linear regression model with secondary data. The study's main finding was that budgetary limitations had a big impact on how financially successful Kenyan construction companies performed. Consequently, within the current study's context, it is expected that any enhancement in liquidity planning through cash budgeting will be positively associated with an improvement in financial performance. Hence, the hypothesis postulates that:
H1: There is a positive impact of cash budgets on the financial performance of SACCOs.

Liquidity Monitoring and Financial Performance: Liquidity monitoring within credit institutions has become a prominent topic of discussion among regulators, particularly in the banking sector, following the onset of the liquidity crisis in August 2007. Numerous authors have concentrated their efforts on macro stress test exercises in this context (Otieno, Nyagol & Onditi, 2016; Song'e, 2015). However, there is a notable scarcity of literature addressing the frameworks implemented by central banks and financial regulators for monitoring liquidity risk at the level of individual banks (Kamuinjo, 2021). According to Stragiotti (2009), some tools were put in place to monitor the liquidity of any financial institution and these include, operating cash flow management, Bank reconciliation statements and debtor's management to enable tracking cash movements and financial performance as well as liquidity risks. The Liquidity monitoring tools are intended to assist supervisors in the assessment of a financial institution's liquidity management and financial performance (Pohl, 2017). These are explained further below;

Operating Cash Flow Management and Financial Performance: Efobi (2008) emphasizes the significant role that cash flow management plays in a company's operations and financial performance. According to Uwonda and Okello (2013), cash flow management serves as the core element for both short-term and long-term survival, as well as for achieving financial objectives. Essentially, cash flow management entails the determination and assessment employed by firms to monitor, summarize, and optimize net cash receipts while minimizing cash disbursements and expenditures. It is typically facilitated through the preparation of a cash flow statement, which provides insights into the operating and financing activities of a company (Bhandari & Iyer, 2013). Many businesses prepare cash flow statements for internal liquidity management (Owolabi, & Obida, 2012). Several studies have explored the relationship between cash flow and financial performance, including Yahaya & Lamidi (2015) initiated an inquiry into the association between cash flow and the financial performance of banks listed in Nigeria. Their investigation encompassed an analysis of the relationships between cash flow from operational activities and post-tax profits, cash flow from investment activities and post-tax profits, as well as cash flow from financing activities and post-tax profits. This study spanned nine years, extending from 2005 to 2013, and involved the examination of a sample comprising four banks listed on the Nigerian Stock Exchange (NSE).

Correlation analysis was employed to unveil the strength of these relationships. The outcomes of this analysis revealed a robust and statistically significant correlation between cash flow from operational activities and the performance of the selected institutions. Conversely, the link between bank performance and cash flow from investment and financing activities exhibited a negative and insufficient relationship. Aghaei and Shakeri (2010) conducted a study to assess the role of cash flow capability and earnings accruals in predicting cash flow for established companies listed on the Tehran Stock Exchange during the period from 2003 to 2007. In their research, they employed a causal research methodology and utilized a multiple regression model to

evaluate secondary data, which included variables such as earnings, cash flow, and accrual components. Their findings shed light on the predictive capabilities of accrual components, earnings, cash flow, and cash flow for future cash flow. Notably, the models built around accruals and cash flow demonstrated stronger predictive abilities than the one centered on earnings. Furthermore, their study uncovered that liquidity ratios lacked the capacity to forecast future cash flows. Ghodrati and Abyak (2014) undertook an inquiry into the correlation between operational cash flow and shareholder returns, utilizing a dataset comprising 54 companies listed on the Tehran Stock Exchange from 2005 to 2011.

Their study employed regression analysis to explore this relationship by employing cross-sectional data and employing a descriptive-analytic random statistical sample. The outcomes of their research divulged a significant correlation between stockholder returns and the profitability associated with operational cash flow. This relationship was influenced by increased profitability and the information asymmetry related to cash flow, particularly in terms of its association with the economic effectiveness of stockholder returns. Darabi, Adeli & Torkamani, 2012) delved into an exploration of the consequences of cash flow shocks on capital and asset structure, drawing upon data from the Tehran Stock Exchange. This research adopted a descriptive, applied, and regression-based approach. Basic linear regression and Pearson correlation were the analytical tools employed to scrutinize data from a sample comprising 57 listed firms, spanning the years 2005 to 2010. Their findings uncovered a positive correlation between operational cash flows, investments, and dividends. Moreover, the conclusions drawn from their research indicated that financial constraints had minimal impact on the sensitivity of cash flow. Al-Debi'e (2011) launched an analysis of the relative predictive capabilities of current operating cash flows and current earnings in predicting future operational cash flows within service and industrial shareholding businesses listed on the Amman Stock Exchange in Jordan from 2000 to 2009.

The research methodology employed a straightforward regression model applied to panel data, situated within the context of descriptive research. The research outcomes definitively indicated that operational cash flows exhibited superior predictive power in forecasting future operational cash flows, particularly over projection periods of 1 to 3 years. Habib (2011) did an examination focused on assessing the influence of immediate cash flow, sustained profitability, and growth prospects on stock returns, with a specific emphasis on the Australian Stock Exchange. The primary objective of their research was to elucidate the connections between immediate cash flow, enduring profitability, and expansion opportunities. Their analysis encompassed a comprehensive evaluation of 7,229 companies listed on the Australian Stock Exchange, spanning from 1992 to 2005. The data analysis was meticulously executed through the utilization of a multiple regression model. The research findings unequivocally indicated that companies with greater growth potential and unencumbered free cash flow experienced elevated stock prices. In contrast, profitability exhibited a short-term impact, whereas operating cash flow manifested a favorable correlation with stock returns. Mong'o (2010) conducted a study to explore how cash flow influenced profitability in the context of Kenyan commercial banks from 2005 to 2009. Their research involved the examination of operational, financing, and investing cash flow components as independent variables, while bank earnings, as measured by post-tax profit, constituted the dependent variable.

Multiple regression analysis served as the analytical tool for the secondary data they gathered. The research outcomes unveiled a significant increase in commercial banks' earnings during the research period. To be more precise, the study found that cash flow from investing and financing activities positively contributed to bank profits, whereas operational cash flow had a detrimental effect on them. Nwanyanwu (2015) researched the influence of operating cash flow activities on organizational performance in Nigeria's hospitality and print media sectors. The goals included evaluating how operating cash flows and organizational performance relate to one another, figuring out how loan processing affected organizational performance, and figuring out how equity investments affected organizational success. A questionnaire was used to gather information for the study, which included a sample of 45 hotel and print media companies. The data were examined using descriptive statistics, while inferential statistics made use of correlation analysis. The conclusions showed that operating activities had a big impact on profitability. Therefore, it is essential to analyze cash flows and monitor liquidity to minimize potential losses that could negatively affect SACCOs' financial performance (Omino, 2014). Accordingly, the hypothesis posits that:

H2: There is a positive effect of operating cash flow management on financial performance.

Bank Reconciliation Statement and Financial Performance: In accordance with Otley (2002), the process of cash/bank reconciliation entails a systematic method for comparing two sets of interrelated cash/bank accounts or records sourced from different systems and diverse origins, to identify and scrutinize disparities and instituting requisite adjustments. Prior research endeavors exploring the ramifications of bank reconciliation on financial performance encompass Muthama's (2016) exploration into the repercussions of employing bookkeeping as a cash management practice on the operational efficacy of public hospitals. This particular study embraced a descriptive survey research design conducted within Kisii County. Its findings illuminated the notable emphasis placed by public hospitals on executing daily cash disbursements and diligently reconciling cash and bank accounts, thereby fostering a climate of accountability. Soaga (2012) initiated an investigation of the fundamentals of cash management in relation to objectives for financial management and financial reporting. The study examined the complex relationships and influences of cash management on the areas of financial management and financial reporting using a descriptive research methodology. The inquiry unearthed a substantive imprint of cash management on corporate viability, its intricate interplay with virtually every facet of financial reports, its catalytic role in augmenting shareholders' wealth, and its pivotal role in enriching liquidity.

Additionally, the study underscored the significance of utilizing net cash flows as a performance yardstick, with an accentuated emphasis on the pivotal role of cash/bank reconciliation in the realm of effective cash management. Cheptumo (2010) delved into an investigation of the response mechanisms to challenges stemming from fraudulent activities confronted by Barclays Bank of Kenya. The study brought to light those proactive fraud detection techniques, encompassing data analysis and continuous auditing methodologies, could efficaciously identify instances of fraudulent conduct entangled with cash reconciliation deficiencies by identifying aberrations, trends, and risk indicators within extensive transactional datasets. In a parallel vein, Onuoha and Amponsah (2012) espoused in their research that proactive fraud detection measures, comprising data analysis and continuous auditing techniques, could adeptly discern fraudulent undertakings entwined with cash reconciliation discrepancies. Moreover, the study underscored that any delays in transaction clearance could potentially engender significant financial losses for the organization, manifesting as interest charges or opportunity costs. Furthermore, such delays could precipitate the erosion of goodwill, bearing severe repercussions on the entity's business relationships. The study, while acknowledging the existence of various approaches to conducting bank reconciliation, ultimately underscored the indispensability of the bank reconciliation process as an instrument for averting losses stemming from lapses in competence exhibited by personnel at either the focal organization or the bank.

Wanjala et al. (2014) investigated the impact of accounting management practices on the operational performance of micro and small-scale butcher enterprises located in the Kimilili sub-county, Kenya. The research unearthed that the majority of these enterprises grappled with suboptimal bookkeeping management practices, attributable to their limited educational attainment and a dearth of accounting acumen. Notably, the study divulged a robust affirmative correlation between operational performance and the employment of bookkeeping management methodologies, thereby culminating in the inference that these practices exerted a profound influence on operational efficacy. Consequently, the efficient and timely administration of bank reconciliation activities was unveiled as a key driver, empowering management to proactively identify and rectify issues that could precipitate inaccuracies in financial reporting records (Onwonga et al., 2017). Thus, we propose the hypothesis that:
H3: There is a positive effect of bank reconciliation statements on the financial performance of SACCOs.

Debtors Management and Financial Performance: In East Africa, service provision by Microfinance Institutions (MFIs) is closely linked to Savings and Credit Cooperative Organizations (SACCOs). MFIs primarily engage in extending microfinance loans and other financial services to individuals willing to pay due to the benefits of not requiring collateral (Gaurav, 2011). Managing debtors is crucial for mitigating the risks associated with bad debts, as defined by Charitou et al. (2010), who describe debtors' management as the strategy involving the design of policies governing credit extension to customers and monitoring those systems. An effective debt collection policy should ensure that the costs incurred do not exceed the amount originally advanced, as exceeding this amount would indicate business inefficiency (Otley, 2008). Numerous preceding studies have explored the impact of debtors' management on financial performance, including: Ayodele et al. (2014) conducted a study to examine the influence of credit policy on the performance of Commercial Banks

in Nigeria, with a specific focus on Zenith Bank. Their research illuminated the fact that robust credit policies can effectively mitigate the occurrence of bad debts.

Byusa & Nkusi (2012) conducted a research study to investigate the consequences of credit policy on the performance of selected Rwandan Commercial banks. The results of their study unveiled that these banks expanded their customer bases, increased their accounts, and strengthened their financial indicators, ultimately leading to higher profits. Dong and Su (2010) engaged in an exploration of the impact of strategies related to debtors' management on the financial performance of enterprises listed on the Vietnam Stock Exchange. Their investigation revealed a negative correlation between debtors' management and profitability, indicating that an extended cash conversion cycle significantly impacts profits. Alshatti (2015) conducted a comprehensive analysis of the effects of credit management on the financial performance of Jordanian commercial banks from 2005 to 2013. The study's results highlighted the influence of credit management on financial performance, as indicated by the Return on Assets (ROA) metric. Gweyi, Olweny, & Oloko (2018) aimed to establish a connection between the management of debtor risk and the financial performance of microfinance banks in Kenya. Their research unveiled a notable negative correlation between debtor risk management and the performance measure of Return on Assets (ROA).

Kimotho & Gekara (2016) investigated the effects of credit management on the financial performance of Kenyan commercial banks. Their study unveiled a negative correlation between profitability and the practices of credit management. Drawing upon the wealth of insights gathered from this extensive literature review, it becomes abundantly clear that effective debtors' management plays a pivotal role in enhancing the financial performance of financial institutions. However, prior research has primarily focused on evaluating the impact of credit management on the financial performance of MFIs, neglecting the critical need to establish robust debtors' management frameworks. Consequently, a significant gap exists in empirical research regarding the influence of debtors' management on the financial success of SACCOs in Uganda. This study embarks on a comprehensive effort to address this gap. As a result, the hypothesis proposed for this study posits that:
H4: There is a positive effect of debtor's management on the financial performance of SACCOs.

3. Methodology

Design, Population and Sample: In this study, a cross-sectional survey design was employed, focusing on a population of 72 SACCOS located in the Bushenyi district (Uganda Cooperative Alliance Report, 2017). To establish the sample size, 61 SACCOs were selected following the criteria outlined by Krejcie and Morgan (1970). The unit of analysis encompassed individuals serving in roles such as manager, accountant, and credit officer, resulting in a total population of 183 potential respondents. Ultimately, the study obtained 151 complete and usable responses, yielding a response rate of 82.5 percent. An examination of the respondents' profiles (Table 2) reveals that the majority of participants were male (56.3 percent, n=151), while the remaining respondents were female (43.7 percent, n=151).In addition, the majority of the respondents were single (49.7 percent, n=151), these were followed by married ones (46.4 percent, n=151) and only 4 percent were divorced. In terms of Age bracket, the majority of the respondents were between 20-30 years (41.1 percent, n=151) these were followed by those between 30-40 years (39.1 percent, n=151) and 19.9% were between 40-50 years of age. Furthermore, in terms of education, the majority of the respondents were diploma holders (50.3 percent, n=151), these were followed by bachelor's degree holders (30.5 percent, n=151) and the least group were certificate holders (19.2 percent, n=151). In terms of the unit of analysis (SACCOs), the majority of the SACCOs employ 10-30 employees (41.0 percent, 61), these were followed by those that employ less than 10 (31.1 percent, 61) and the least group were employing more than 30 workers (27.9 percent, n=61) and finally most of the SACCOs had spent less than 10 years (44.3 percent, n=61), these were followed by those which had spent 10- 30 years (39.3 percent, n=61) and the least had spent more than 30 years (16.4 percent, n=61). Survey participants were requested to express their degree of concurrence with survey items using a five-point Likert scale. The scale ranged from "strongly disagree" (1) to "disagree" (2), "neutral" (3), "agree" (4), and "strongly agree" (5).

Measurement of Variables Required: The independent variable (liquidity management was measured using Cash Budgets, Liquidity monitoring, Operating Cash flow management, Bank reconciliation statement and Debtors Management as suggested by (Islam et al., 2017; Brigham and Houston, 2014; Stragiotti 2009;

Muthama, 2016; Gaurav, 2011). The dependent variable, financial performance, was evaluated in terms of ROA, ROE, Portfolio yield, and Operating Self Sufficiency as outlined by Yenesew (2014). The research instrument's validity was evaluated by employing Cronbach's (1951) alpha coefficient, ensuring that it consistently yielded similar results when administered to the same respondents over a short timeframe. Furthermore, the research instrument's content validity was assessed using a content validity index. The results, as presented in Table 1, indicated that the instrument exhibited both validity and reliability, surpassing the 0.7 threshold (Nunnally, 1978). In terms of data management and analysis, the data was thoroughly examined for completeness before analysis. Version 21 of the Statistical Package for Social Scientists (SPSS) was used for the analysis. Inferential statistics, such as correlation and regression analyses, were performed in accordance with the research objectives to evaluate the relationships between the study variables and the ability of the independent variables to predict the dependent variable, respectively.

Table 1: Validity and Reliability Results

Variables	CVI'S	Cronbach's alpha	No. of items
Cash Budget	0.83	0.859	6
Liquidity ration	0.76	0.907	6
Financial performance	0.91	0.765	8

Table 2: Descriptive Statistics of the Unit of Inquiry and Analysis

Items	Frequency	Percent
Gender		
Male	85	56.3
Female	66	43.7
Marital Status		
Married	70	46.4
Single	75	49.7
Divorced	6	4.0
Age Bracket		
20-30	62	41.1
30-40	59	39.1
40-50	30	19.9
Level of Education		
Certificate	29	19.2
Diploma	76	50.3
Bachelors	46	30.5
Age of the SACCO		
Less than 10	27	44.3
10-20	24	39.3
Above 30	10	16.4
Number of Employees		
Less than 10	19	31.1
10-30	25	41.0
More than 30	17	27.9

4. Results and Discussion

Descriptive Statistics: The descriptive statistics results are presented in Table 3. The means and standard deviations, as explained by Field (2009), were derived from the observed data. Means serve as a summary of the data, while standard deviations indicate the degree of dispersion around the mean. The mean score for the dependent variable (financial performance) is 3.41, its standard deviation is 0.56. This implies that on average, the financial performance of SACCOs was average. On the other side, the mean of the independent variable (Liquidity management) is 3.59 and its standard deviation is 0.861 this also implies that there was proper management of liquidity among SACCOs. Finally, the indicators of liquidity management (Cash budgets and liquidity ratios) have a mean of 3.57 and 3.618 respectively and their standard deviations were 0.874 and 0.861 respectively.

Table 3: Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Cash Budgets	151	1.00	5.00	3.5751	.87405
Liquidity Ratios	151	1.67	5.00	3.6181	.86122
Liquidity Management	151	1.67	5.00	3.5966	.83384
Financial Performance	151	1.88	4.75	3.4147	.56039

Correlation Analysis Results: Pearson's Correlation analysis was employed to evaluate the strength of the relationship between liquidity management indicators and the financial performance of SACCOs in Bushenyi District, denoted as "r." The results presented in Table 4 demonstrate a positive and statistically significant relationship between cash ratios and financial performance ($r = 0.205^{**}$, $p < 0.01$). Furthermore, the findings also reveal a positive and statistically significant relationship between liquidity monitoring and the financial performance of SACCOs ($r = 0.505^{**}$, $p < 0.01$). When examining the connection between operating cash flow management and SACCOs' financial performance, the results similarly indicate a positive and statistically significant relationship ($r = 0.346^{**}$, $p < 0.01$). Similarly, in assessing the relationship between bank reconciliation statements and financial performance, the analysis unveils a positive and statistically significant association ($r = 0.419^{**}$, $p < 0.01$). Concerning the association between debt management and financial performance, the investigation reveals a positive and statistically significant relationship ($r = 0.491^{**}$, $p < 0.01$). These findings collectively indicate that any positive change in the aspects of liquidity management corresponds to a favorable shift in financial performance, thereby providing support for the study's hypotheses. Lastly, the analysis demonstrates a positive and statistically significant relationship between the comprehensive variable of liquidity management and financial performance ($r = 0.642^{**}$, $p < 0.01$). This suggests that any positive alteration in the management of liquidity within SACCOs aligns with a favorable change in financial performance. Furthermore, the results also indicate a positive and statistically significant relationship between the number of employees in SACCOs and financial performance ($r = 0.613^{**}$, $p < 0.01$).

Table 4: Pearson's Correlation analysis

Variables	1	2	3	4	5	6	7
Cash Budgets-1	1						
Liquidity monitoring-2	.257**	1					
Operating Cash Flow Management-3	.079*	.219**	1				
Bank reconciliation statement-4	.578**	.117**	.241**	1			
Debtors Management-5	.482**	.226**	.098*	.334**	1		
Liquidity management-6	.756**	.576**	.487**	.701**	.683**	1	
Financial performance-7	.205**	.505**	.346**	.419**	.491**	.613**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Ordinary Least Square Analysis: To examine the explanatory power of the dimensions of liquidity management (Cash Budgets, Liquidity monitoring, Operating Cash flow management, Bank reconciliation statement and Debtors Management) on the financial performance of SACCOs in Bushenyi District, we specified the following regression model: $FP = \beta_0 + \beta_1 CB + \beta_2 LM + \beta_3 OCF + \beta_4 BR + \beta_5 DM + \varepsilon_i$ The results are presented in Table 5. Dependent variable: Financial performance; R2 = 0.562, Adj R2 = 0.559; F-stat = 166.261; and sig. = 0.000. The regression results show that both dimensions of liquidity management matter when it comes to predicting the financial performance of SACCOs. Overall, the model explains 55.9 percent of the variance in financial performance, implying that the remaining 44.1 percent is explained by factors not considered in this study.

Table 5: Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.146	.131		1.115	.265
	Cash Budgets	-.318	.033	-.343	-9.754	.000
	Liquidity monitoring	.389	.026	.421	15.153	.000
	Operating Cash flow management	.151	.029	.146	5.280	.000
	Bank reconciliation statement	.390	.033	.395	11.940	.000
	Debtors Management	.376	.027	.415	13.830	.000
R	.750[a]					
R Square	.562					
Adjusted R Square	.559					
F	166.261					
Sig.	.000[b]					
n	61					

a. Dependent Variable: Financial performance

Discussion: For the financial performance of SACCOs to improve, the management of liquidity is very crucial. This can be done through maintaining proper cash budgets because these help managers work with the planned budgets. This is a result of the study done by Mulani, Chi, and Yang (2015), who conducted a thorough analysis to examine how budgeting affected the performance of SMEs in India. Their research attempted to evaluate how budgeting affected firm performance in these SMEs. The findings indicated that cash budgets are very important in improving the financial performance of financial institutions. In addition, monitoring of liquidity available is very important since without proper monitoring, more cash may be given out and the customers may not find any money or less money may be given to the borrowers and either of the two may limit the financial performance of SACCOs. This is in line with (Pohl, 2017) who indicated that Liquidity monitoring tools are intended to assist supervisors in the assessment of a financial institution's liquidity management and financial performance. Managers of SACCOs need to ensure that there efficient cash flow management since with proper cash flow, there will proper management and thus improving the financial performance of SACCOs. The results coincide with Efobi (2008) emphasis on the essential role that cash flow management plays in the operations of a company and financial performance.

Uwonda and Okello (2013) also highlighted the critical role cash flow management plays in ensuring a company entity's short- and long-term survival while also aligning with its financial goals. To ensure that the cash at the bank balances with cash at hand, SACCO managers must ensure that there is proper bank reconciliation since this enables SACCOs to maintain the right amount of liquid and enable the smooth running of the SACCO activities thus improving financial performance. The findings align with a research study conducted by

Muthama (2016), who explored the impact of bookkeeping as a cash management technique on the operational performance of public hospitals. Muthama's study employed a descriptive survey methodology and was carried out in Kisii County. Effective debt management is of paramount importance, as it ensures the availability of sufficient funds for lending to other customers, thereby fostering the sustainability of adequate liquidity within the SACCO. As a consequence, this leads to an improvement in its financial performance. These findings align with the results obtained by Ayodele & Arogundade (2014), who investigated the impact of credit policy on the performance of Nigerian Commercial Banks, with a specific emphasis on Zenith Bank. They collected primary data through questionnaires distributed to sixty (60) respondents within the bank. The outcomes of their study emphasize the substantial influence of debt management in enhancing financial performance.

5. Conclusion and Recommendations

The findings obtained from this study support the already existing literature and bring new knowledge to the academia with liquidity management as the largest contributor to financial performance meaning that all the activities related to cash budget management and liquidity ratios should be handled properly to alleviate financial performance. There is a need also to put much emphasis on liquidity management in terms of cash budgeting since it enhances financial performance. It is recommended that the company prioritize Cash Budgets and Liquidity Management, which have the highest positive correlation. Enhancing liquidity management can aid in maximizing the use of cash on hand, while efficient cash budgeting can guarantee good planning and resource allocation. Due to their weakly positive associations with liquidity management, debtor management, as well as bank reconciliation statement, must also be taken into account. Given their strong associations, these suggestions ought to have a beneficial impact on overall Financial Performance However, other factors, like liquidity monitoring and operating cash flow management, should not be completely disregarded since they also show favorable connections with a number of financial management-related factors.

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Telecommuting and Normative Commitment of Employees in a Technology Firm: After Effects of Covid-19 Pandemic

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Abstract: The recent trend in the world of work has made it expedient for organizations to adopt various flexible work practices such as telecommuting and this is affecting the normative commitment of employees. The study examined telecommuting and the normative commitment of employees in a technology firm. The study adopted the descriptive survey research design. The population of the study is (160) one hundred and sixty and using the Krecjie and Morgan sample size determination formula the sample size of (113) one hundred and thirteen was arrived at. One hundred and thirteen copies of the questionnaire were distributed, purposive sampling techniques were used and three hypotheses were tested using person-product moment correlation and multiple regression using S.P.S.S 27.0 version. The findings revealed that there is a 39.1% weak relationship between remote work and normative commitment and a 97.8% strong relationship between telework and normative commitment. The study further revealed that remote work and telework account for 95.6% of normative commitment. The study concluded that telework is the most significant variable driving normative commitment. However the study recommended among others that management should make it expedient for their telecommuter employees to report to their agency worksite frequently to prevent physical and psychological isolation and there should be constant engagement between the telecommuter employees by putting in place effective online tracking mechanisms to monitor them, also management should give them a sense of belonging, this will help discourage moonlighting.

Keywords: *Telecommuting, Normative Commitment, Remote Work, Telework.*

1. Introduction

The global pandemic that ravaged the world recently has made it imperative for organizations and businesses to face some realities by adopting flexible working practices in their work environment. In recent times several technologies have been developed to make remote work more efficient than the routine office arrangement and traditional work life. Tracy and Lara (2020) posit that telework is one of the most precious tools that makes work propinquity fortified and more effective by allowing remote employees to stay productive. Businesses that have adopted telecommuting has a mode for operating since the era of the pandemic, having been able to cut down their running cost. However, this is also affecting the normative commitment of their employees as their feeling of obligation and responsibility is gradually eroding. Telecommuting offers the prospect to employees to stay wherever they wish and operate from there. The statistics indicators benchmarking the information society SIBIS (2013) posits that the teleworkers employed in European Union member states are 13% on average with the same index in the United States of America showing 25% (Twenty-five percent). Porter (1974) opined that the concept of telecommuting has revealed a tremendous development in the enterprise as it assists in reducing costs and enhancing the productivity of workers. Numerous issues sway telecommuting agreements. The organization's staff are free to engage in it on a full or part-time basis and formally or informally. It is evident that when telecommuting is done on a full-time basis, workers operate in secluded places different from the office and this often helps realize the goals of regional economic and employment objectives. It is on this note that this study seeks to examine the link between telecommuting and normative commitment.

Statement of the Problem: Current events in the world of work have made telecommuting inevitable for the seamless and efficient operation of businesses globally. However, despite its continuous development, it is perceived to be having a negative effect on the normative commitment of employees thereby eroding their feelings of obligation to their organization, employees are no longer loyal to their organizations as they should. Previous studies Fay and Kline 2012; Giant, Wallace and Spurgoon, 2013) revealed that the development of

telecommuting is perceived from different perspectives. It offers potential advantages to employees over traditional employment arrangements, including better work-life balance, schedule flexibility, job satisfaction, autonomy, and shorter travel times. However, telecommuting is also linked with negative effects such as psychological and physical isolation which often disconnect an employee from others, and lacks anticipated social and influential association that is expedient for understanding and ensuring all forms of interaction are fulfilled. According to a number of studies (Golden and Veiga 2005; McCloskey and Igbariq 2003), psychological isolation can be bad for workers, leading to outcomes like low morale at work, high turnover rates, and even poor health, whereas physically isolated workers tend to feel underappreciated and have fewer opportunities for advancement. Also, because they are socially and physically isolated, telecommuters frequently feel untrustworthy, lonely, and have a weaker sense of identity with the company. They also find it difficult to build meaningful relationships with coworkers. Based on the above-mentioned this study seeks to examine telecommuting and normative commitment in a technology firm.

Objective of the Study: The main objective of the study is to examine telecommuting and normative commitment. Other specific objectives include

- To examine the relationship between remote work and normative commitment.
- To investigate the relationship between telework and normative commitment.
- To ascertain the joint effect of remote work and telework on normative commitment.

Research Questions

- To what extent is the relationship between remote work and normative commitment
- What is the relationship between telework and normative commitment
- What is the joint effect of remote work and telework on normative commitment?

Research Hypotheses

- **T**here is no significant relationship between remote work and normative commitment.
- There is no significant relationship between telework and normative commitment.
- There is no significant joint effect of remote work and telework on normative commitment.

2. Literature Review

Conceptual Review: When using the right technologies, telecommunicating is a flexible work arrangement that enables employees to switch their usual working hours from the office to home or client sites. Potters (2003) posits that telecommuting has contributed immensely to the development of business. As it aids in reducing costs and also improves workers' productivity. It is a situation whereby employees work remotely using the right technology. Numerous factors affect telecommuting it can be done in a part-time or full-time formal or informal method. It is perceived as an innovation that is targeted at improving employee efficiency and also providing them with some reasonable comfort. Thus when is practiced fully employees work in a remote location different from their offices with no two-way communication with their colleagues or superiors. However, those who work part-time will perform a particular part of their work remotely.

Normative Commitment: Commitment has been visualized in various ways by diverse researchers. The concept of commitment has been viewed from different perspectives such as dedication put to work, loyalty to the organization and employees' state of engrossment and involvement with the organization. According to Lamber, Hogan and Griffen (2001), commitment is the situation in which a worker's sense of loyalty to their particular organization is in line with its objectives and ideals. According to Porter, Steers, Mowday, and Bovlian (1974), commitment is the inverse of a person's identification with and participation in a specific organization. They outlined the three components of commitment as follows: an employee's acceptance of and belief in the company's values and goals; an employee's readiness to work towards achieving those goals; and an employee's strong desire to stay on as a member of the organization. The three elements of organizational commitment that Meyer and Allen (1991) identified are affective, continuance, and normative. Employees who perceive their devotion to their employer as normative do so because they believe it to be morally right. However, Meyer, Allen and Smith (1993) posit that the three types of commitment are a psychological state that makes up employees' relationship with the organization**.**

Pandemic and Telecommuting: Because of the epidemic COVID 19 across the globe, many organizations mandated that employees work from home. When the WHO declared COVID-19 to be a pandemic, most businesses found it more practical to allow employees to work from home. To ensure social isolation and stop the infection from spreading, this became vital. Working from home might balance employee health and well-being because it would lessen the likelihood that they would have symptoms associated with a pandemic, according to reports from a paper published in a national law review (2020). Steward and Menon (2020) posit that going digital is beyond applying the rough technology because it also involves ensuring that employees possess the capacity and apply the technology. It is also important to foster a culture of inclusion, the fact that it is virtual to ensure that employees and managers are focused and avoid distractions.

Theoretical Review: The following are some of the theories examined:

- Social exchange theory(1961) By George Homans
- Herzberg two factor theory (1959)By Fredrick Herzberg

Social Exchange Theory: The social psychological and sociological approach known as social exchange theory explains social development and stability as a process of negotiated trade between parties. The social exchange theory holds that subjective cost-benefit analysis and the appraisal of options are the foundations of human relationships. The theory is based on sociology, psychology, and economic theory. Social exchange theory is frequently used in the business world to indicate a two-sided, reciprocally contingent, and rewarding process including transactions or simply exchange. It also shares many of the fundamental principles of structuralism and rational choice theory. Self-interest and interdependence are two key components of social interaction, according to Homans, who thought that the theory was founded on reinforcement principles. When two or more actors have anything of value to one another, they must decide whether and how much to exchange. Three basic sorts of interaction take place. Homans uses the idea of individualism to define individual self-interest as a combination of psychological and economic needs.

Pursuing one's interests is typically the rule in the economic realm of the social exchange theory, where competition and greed can be widespread. Self-interest is not a bad thing in social trade; rather, when it is acknowledged, it will serve as the driving force behind interpersonal connections for the benefit of both parties. Models of social exchange also assume that interactions and decisions are influenced by costs and rewards and that both parties in a social trade are reliant on and responsible for one another. A partner's shortcomings and the time and effort needed to maintain a relationship are examples of relationship life's low perceived value elements that are referred to as "the cost of relationship life" (costs can be time, money, effort, etc.).Rewards are the facets of a relationship that have positive value. (Among other things, rewards include feelings of approval, aid, and camaraderie. To help structure individual behavior based on benefits and costs, Homans (1961) proposed five basic premises.

The fundamental principles of social exchange theory as applied to humans are embodied in this group of theoretical concepts.

- The initial premise According to the success proposition, people will frequently repeat actions that have positive results.
- The stimulus hypothesis, which is the second claim, holds that if a person's behavior has been rewarded in the past, they will likely continue to act in that way.
- The third claim: The value statement contends that behavior is more likely to take place if the outcome is deemed desirable to the individual.
- The fourth claim is in clause IV. According to the deprivation satiation hypothesis, a reward's value will decrease if a person receives it multiple times.
- The fifth premise explores how emotions are triggered by various reward scenarios. Those who are pleased and behave favorably are those who either obtain more than they expected or do not incur the anticipated consequence.

Herzberg developed a theory of labor motivation during his 1950s Pittsburgh research. He thought it was critical to comprehend what motivates people and what they want from their professions. He invited workers to tell him about times when they thought their occupations were especially enjoyable or unpleasant. Herzberg

says that although extrinsic elements are hygienic considerations that prevent an employee from being dissatisfied and are satisfiers, inner factors tend to stimulate. Herzberg claimed that extrinsic and internal influences could be further separated into two groups, which he gave code names for. i. Motivations ii, Health-Related Factors: Motivators are the innate factors that influence or enhance job satisfaction and motivate employees. i. Appreciation, ii. Accomplishment, iii. The work itself, IV. Responsibility, and v. Personal development**.** The hygiene factors are outside variables; they are elements of a job whose absence or inadequacy causes unhappiness. They relate to the milieu of the workplace (work setting). They relate more to the environment in which people work than to the nature of labor itself. The improvement of the hygiene component won't inspire the workers; rather, it will merely protect them from being dissatisfied. They consist of: I. Corporate policies, ii. The caliber of supervision, iii. The physical environment at work, iv. The wage, v. The relationship with pears, and the study reviewed two theories that are pertinent to this research work; however, the social exchange theory was chosen to provide an explanatory framework because it assumes that reward and cost drive relationship decisions and that both parties in social hexane take responsibility for one another and rely on one another. Costs can take the shape of time, effort, etc.; rewards might take the form of approval and support. The stimulus proposition and the social exchange hypothesis both contend that when people are rewarded for their activities, they tend to repeat them. If someone has been rewarded for their behavior in the past, they will likely continue to do so. The social exchange theory typically implies the idea of a two-sided, mutually contingent, and rewarding process encompassing transactions or simply exchange.

Empirical Review: For example, in a study on telecommuting conducted by Abilash and Siju (2021), several empirical investigations have been conducted to explore telecommuting and employee committee men. A convenience sample approach was used, and a total of 112 responses were collected for this empirical research on work performance, work satisfaction, and employees' commitment amid pandemic situations. According to the study, telecommuting increases employee dedication to work and can also have an impact on some personal events because it allows people to work from home. Further investigation found a tepid association between staff engagement and productivity. Wang, Albert, and Sun (2019) investigated employee isolation and telecommuter organizational commitment. The descriptive survey research method was utilized in the study, 446 people took part in it, and the structural equation model was used to analyze the data. According to the findings of the study, psychological isolation is adversely linked to emotional commitment and positively linked to continuation commitment, however, psychological association is not linked to normative commitment.

Wang, Albert and Sun (2019) conducted research on the organizational commitment of telecommuters and employee isolation. 446 participants took part in the study, which used the descriptive survey research methodology. Data were analyzed using a structural equation model. According to the study, psychological association is unrelated to normative commitment, psychological isolation is positively connected with continuous commitment and inversely associated with emotional commitment. In a study by Forgacs (2010), management experiences and attitudes related to telework were examined. The population of the study is (500) five hundred, and a straightforward random sample procedure was utilized. The study used a survey research methodology. The research showed that the majority of businesses that had turned down telework were unable to provide a good enough justification for doing so; these misgivings were caused by a lack of interest in telework as well as a dearth of reliable information about it. The study concluded that while setting plans for regional economic development and developing employment strategies, it is worthwhile to take into account the creation of an economic climate favorable to the spread of telework.

3. Method

This research is limited to Fintrak Software Limited in Lagos State, Nigeria due to the nature and scope of the study. The study used a survey research methodology, with questionnaires used to gather the data and a 4-point Likert scale used to formulate the results. The adoption of the purposeful sampling technique was made possible by the human resource officer's assistance in survey distribution. Grant, Wallace, Spurgeon, Tramoniano, and Charalampous (2018) as well as Meyer, Allen, and Smith (1993) were used as the basis for the electronic work-life scale's normative commitment component. A reliability coefficient of 0.75 was obtained after the instrument underwent pilot testing utilizing the test-retest procedure. A sample size of one hundred and thirteen (113) was determined using the Krejie and Morgan sample size determination algorithm for the study's population, which consisted of 160 permanent employees. One hundred and thirteen (113)

copies of the survey were given out; 102 of those copies were duly filled out and returned, but 11 of them were unusable. In the analysis of data using SPSS 27.0, multiple regression and Pearson Product Moment Correlation were used in the study.

4. Results and Discussion

Table 1: Correlations

		Remote work	Normative commitment
Remote work	**Pearson Correlation**	**1**	**.391****
	Sig. (2-tailed)		.000
	N	102	102
Normative commitment	Pearson Correlation	.391**	1
	Sig. (2-tailed)	.000	
	N	102	102

**. Correlation is significant at the 0.01 level (2-tailed).

The first hypothesis describes how normative commitment and remote employment interact. The findings indicate that there is a poor association between normative commitment and remote employment, with a relationship between the two being just 39.1% of the time. The outcome supports that of a prior study by Wendy, Leslie, and Qin (2019), which discovered a substantial link between employee isolation and organizational commitment to telecommuting.

Table 2:Correlations

		Normative commitment	Telework
Normative commitment	Pearson Correlation	1	.978**
	Sig. (2-tailed)		.000
	N	102	102
Telework	Pearson Correlation	.978**	1
	Sig. (2-tailed)	.000	
	N	102	102

**. Correlation is significant at the 0.01 level (2-tailed).

The second hypothesis describes the connection between normative commitment and telework. The findings showed that there is a 97.8% correlation between normative commitment and telework. The outcome also demonstrates that normative commitment and telework are closely related. The outcome supports Forgacs' (2010) research, which showed a significant correlation between commitment and telework.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.978[a]	.956	.955	.23354

a. Predictors: (Constant), Telework, Remote work

Table 4: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	117.747	2	58.874	1079.411	.000[b]
	Residual	5.400	99	.055		
	Total	123.147	101			

a. Dependent Variable: normative commitment
b. Predictors: (Constant), Telework, Remote work

Table 5: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	.258	.229		1.124	.264
	Remote work	.033	.031	.024	1.069	.288
	Telework	.937	.022	.968	42.328	.000

a. Dependent Variable: normative commitment

Hypothesis three shows the combined effect of the indicators of telecommuting on the normative commitment of employees. The findings revealed that there is a direct and positive relationship between telecommuting and the normative commitment of employees. The result further revealed that telecommuting accounts for 95.6% of normative commitment. This signifies that telecommuting has a significant joint effect on employees' normative commitment to Fintrak Software Limited. The result further establishes that the composite effect of telecommuting did not occur by chance as it gave the f-ratio value of 1079.4 which signifies the strength of the two indicators as potent predictors of normative commitment in Fintrak Software Limited Company. Table five reveals at a glance the relative effect of the two independent variables (remote work and telework) on normative commitment. The result in the table shows that telework is the most significant variable driving employees normative commitment, B = 937), + = 42.32, P < 0.05). The result corroborates the findings of the previous study. Abilash & Meiju (2021), found out that telecommuting influences employee commitment.

Discussion of Findings: Hypothesis one reveals the interaction between remote work and the normative commitment of employees. The result shows that there is a weak relationship between remote work and the normative commitment of workers. This implies that employees who work remotely from their homes permanently that is (100%) of the time and their official duty station is their home have lesser feelings of obligation and responsibility to their organization. This is so because they hardly have any form of contact with their colleagues and the management staff. Interpersonal relationship, social grouping and team spirit is lacking as well as physical and psychological isolation, all these could make them engage in other jobs, which will ultimately affect the normative commitment of employees. The result corroborates with the findings of the previous study by Wendy, Leslie, & Guin (2019) which found a substantial connection between employee isolation and telecommuter organizational commitment.

Hypothesis two shows the relationship between telework and normative commitment. The result reveals that telework has a strong relationship with normative commitment. The implication of this is that the opportunity given to teleworkers to report to their agency work site at least two times per pay period, makes them have a feeling of obligation which makes them more responsible to their organization. The little contact they have with, their colleagues and management staff increases their level of normative commitment to the organization. The findings collaborate with a previous study by Forgacs (2010) who found a strong relationship between telework and commitment. Hypothesis three shows the combined effect of the indicators of telecommuting on normative commitment. The finding revealed that there is a direct and positive connection between telecommuting and the normative commitment of employees in Fintrak Software Limited. The result collaborates with a previous study by Abilash & Siju (2021) which found that telecommuting has a positive influence on workers' normative commitment.

Implications for Management: The findings from this study justify why the management of organizations must prioritize the normative commitment of their telecommuter employees to make them more responsible for their organization and avoid moonlighting. To achieve this there is a need for the management of organizations to make it mandatory for their telecommuter employees to report to their work station often to prevent physical and psychological isolation which could eventually affect their normative commitment to the organization.

5. Conclusion and Recommendations

According to the results of this investigation. The study's two indicators for telecommuting were found to be effective indicators of the independent variable, it was determined. The study concluded that remote workers

are less normatively committed to their organization, because of the nature of their jobs having to work (100%) hundred percent from home which makes them physically and psychologically isolated, which could also lead to moonlighting of employees.

Recommendations: The study's conclusions led to the following suggestions.

- Management of organizations should make it expedient for their telecommuter workers to report to their agency worksite often to prevent physical and psychological isolation of employees.
- There, should be regular and constructive communication and engagement between the telecommuting employees and management to give them a sense of responsibility and belonging and discourage moonlighting.
- Organizations should encourage teamwork, and social grouping to foster group Cohesion among the telecommuter employees.
- Finally, organizations should put in place effective online tracking mechanisms to monitor the activities of their telecommuter employees.

Suggestion for Further Study: Further studies should be conducted to find out the effect of telecommuting on the physical and psychological isolation of employees using other indicators of commitment for example (continuance and affective commitment).

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