

Erasmus University of Rotterdam

MSc in Maritime Economics and Logistics

2022/2023

Comparison Between Angolan Ports Regarding Imports and Exports of Containers A Case Study

by

Elenise Clara Carvalho dos Santos Pinto



Acknowledgments

I would like to express my heartfelt gratitude to all those who have supported and guided me throughout the journey of completing my master's thesis. MEL program was a real challenge in my career, it has added knowledge and technical wisdom that will help me achieve my future goals.

First and foremost, I extend my deepest appreciation to my thesis advisor, Dr. Bart Kuipers, for his valuable mentorship and continuous support. His expertise, patience, and dedication played an instrumental role in shaping this research and my academic growth. I am truly fortunate to have had the privilege of working under his guidance.

I am also grateful to the members of MEL office, Renee, Martha and Felicia, who provided me full support throughout this journey, without whom we all could not complete this excited and memorable experience.

My heartfelt thanks go to my Mom Sonia, Dad Victor, brothers Elaine e Enrique, aunt Mina, friends, colleagues and professors for their unwavering support and encouragement throughout this academic endeavor. Your belief in me has been a constant source of motivation, and I am profoundly grateful for your sacrifices and understanding during this challenging period.

I am profoundly grateful to the individuals who generously dedicated their time and expertise to participate in the interviews that were crucial to the completion of this thesis. Their willingness to share their insights and experiences has been invaluable. Each interviewee brought a unique perspective to my research, shedding light on the intricate nuances of the subject matter. Their candid responses, thoughtful reflections, and professional guidance were instrumental in shaping the depth and breadth of this study.

I want to acknowledge the financial support I received in the form of scholarships and grants from Sogester company that made it possible for me to pursue my master's degree and this thesis research. Your investment in my education has been deeply appreciated.

To all those mentioned and to many others who may not be named here but have contributed in various ways, I extend my heartfelt thanks. Your collective support and encouragement have been pivotal in this academic endeavor. I am deeply grateful for the opportunities, guidance, and inspiration you have provided me along this academic journey.



Abstract

The ports of Angola serve as crucial conduits that facilitate the nation's commerce activities, functioning as essential links that connect the country to the worldwide economic network. Gaining a comprehensive understanding of the many dynamics and problems inherent at these ports is crucial in order to effectively optimize import and export operations. This study report provides a thorough analysis of the import and export efficiency of several ports in Angola, focusing specifically on container operations. This research endeavors to explore the intricacies associated with these ports, with the objective of providing insight into the challenges they encounter and the potential advantages they provide. Furthermore, the objective is to build correlations with the preexisting corpus of information within the realm of port management and trade dynamics.

In order to accomplish the study aims, a systematic technique was used. The process of data collecting included the acquisition of pertinent information from many sources, such as port authorities, trade statistics, academic publications, and interviews. A comparative study was undertaken, with a specific emphasis on several prominent ports in Angola, including Luanda, Cabinda, Lobito, Namibe, Soyo, and Porto Amboim. The objective of this investigation was to ascertain and investigate patterns, disparities, and shared characteristics across these ports, therefore offering useful perspectives into their operational difficulties and advantages. The study methodology also took into account several internal and external elements that have an impact on port performance, such as trade volumes, infrastructure, and management practices.

The study's results provide a complete perspective on the problems and possibilities faced by ports in Angola in relation to their import and export operations. Various challenges, including congestion, inadequate infrastructure, administrative difficulties, and limited port depth, were seen at many port locations. The identified issues were seen to exhibit interconnections with external variables, such as trade quantities, as well as internal ones, like management practices. The comparative research conducted revealed subtle distinctions in the operational challenges encountered by each port, hence emphasizing the need for customized solutions.

Hence, this scholarly article offers significant contributions by shedding light on the intricate nature of Angolan ports, with a particular focus on the need to tackle operational obstacles in order to optimize the effectiveness of import and export processes. The pragmatic suggestions include initiatives to enhance the efficiency of customs clearance, modernize infrastructure, cultivate human capital, adopt technological advancements, and ensure financial resources, provide a strategic trajectory for enhancing port performance and improve imports and exports activities in the country. These recommendations may serve as a framework not just for ports in Angola but also for ports in comparable developing contexts globally.



Table of Contents

| Acknowledgments | i |
|---|-----|
| Abstract | iii |
| List of Figures | ix |
| List of Abbreviations | ix |
| Chapter One: Introduction | 1 |
| 1.1: Background | 1 |
| 1.2: Relevance of the Topic | 3 |
| 1.3: Personal Motivation | 5 |
| 1.4: Research Questions (Main question and sub-questions) | 5 |
| 1.5: Thesis Structure | 6 |
| Chapter Two: Literature Review | 7 |
| 2.1 Introduction | 7 |
| 2.2: The Quality of Port Infrastructure and Trade Operations | 7 |
| 2.3 Overview of Angola's Import and Export Operations | 9 |
| 2.3.1 Angola's Economy and Trade Landscape | 9 |
| 2.3.2 Role of Ports in Import and Export Activities | 10 |
| 2.3.3 Major Import and Export Commodities | 11 |
| 2.3.3.1 Exports | 11 |
| 2.3.3.2: Imports | 12 |
| 2.4 Challenges Faced by Angolan Ports in Container Import and Export Operations | 13 |
| 2.4.1 Inadequate Port Infrastructure | 13 |
| 2.4.2 Limited Capacity and Efficiency | 14 |



| 2.4.3: Inefficient Customs Processes | 15 |
|---|----|
| 2.4.4: Regulatory Barriers | 16 |
| 2.4.5 Lack of Diversification in the Economy | 16 |
| 2.5 Trade Connectivity and Relationships of Angolan Ports | 17 |
| 2.5.1 Comparative Analysis of Ports in Angola | 18 |
| 2.5.2 Trade Relationships with Neighboring Countries | 18 |
| 2.5.3 Regional Integration Initiatives | 20 |
| 2.6: Conclusion | 22 |
| Chapter Three: Methodology | 22 |
| 3.1: Methodology | 23 |
| 3.2: Research Approach | 23 |
| 3.3: Research Design | 24 |
| 3.4: Data Collection Methods | 24 |
| 3.5: Sampling Strategy | 25 |
| 3.6: Analysis Techniques | 26 |
| 3.7: Limitations | 27 |
| 3.8: Conclusion | 27 |
| Chapter Four: Analysis and Result | 29 |
| 4.1: Introduction to Qualitative Analysis | 29 |
| 4.2: Thematic Analysis | 29 |
| Steps Involved in Thematic Analysis | 30 |
| 4.3 Emergent Themes | 32 |
| Theme 1: Port Infrastructure and Connectivity Challenges | 32 |



| Theme 2: Bureaucracy and Communication Issues | 32 |
|--|----|
| Theme 3: Geographic Advantage and Trade Potential | 33 |
| Theme 4: Efforts for Modernization and Efficiency Improvement | 33 |
| Theme 5: Future Development and Expansion Plans | 34 |
| Theme 6: Diverse Professional Experience | 34 |
| Theme 7: Challenges Specific to Individual Ports | 35 |
| Theme 8: Impact of Expertise on Port Development | 35 |
| Theme 9: Focus on Export and Trade Management | 35 |
| Theme 10: Human Resource and Resource Management Challenges | 36 |
| 4.4: Challenges in Import and Export Operations | 36 |
| 4.4:1: Alignment with Research Objectives | 38 |
| 4.5 Perspectives of Key Stakeholders | 39 |
| 4.6: Validity and Trustworthiness of Findings | 40 |
| 4.6:1: Ensuring Credibility of Analysis Results | 40 |
| 4.6:2: Researcher Involvement in Peer Debriefing and Discussions | 40 |
| 4.6:3: Maintaining Validity Throughout the Analysis Process | 41 |
| 4.7: Chapter Summary | 41 |
| Chapter Five: Result Discussion | 43 |
| 5.1 Introduction | 43 |
| 5.2: Port-Specific Analysis | 44 |
| 5.2:1: Port of Luanda | 44 |
| 5.2:2: Port of Cabinda | 44 |
| 5.2:3: Port of Lobito | 45 |



| 5.2:3: Other Ports: Namibe, Soyo, and Porto Amboim | 45 |
|--|----|
| 5.3: Challenges and Opportunities | 46 |
| 5.3.1: Challenges | 46 |
| 5.3.1.1: Infrastructure and Connectivity Challenges | 46 |
| 5.3.1.2: Bureaucracy and Documentation | 47 |
| 5.3.1.3: Technology and Modernization | 48 |
| 5.3.2: Opportunities | 49 |
| 5.3.2.1: Strategic Positioning and Geographic Advantage | 49 |
| 5.3.2.2: Diversification Efforts | 49 |
| 5.3.2.3: Historical Significance and Infrastructure Development | 50 |
| 5.3.2.4: Hinterland Connectivity | 51 |
| 5.4: Comparative Analysis across Different Ports | 52 |
| 5.4:1: Challenges Faced by Prominent and Lesser-Known Ports in Angola | 52 |
| 5.4:2: Similarities and Differences in Operational Difficulties | 53 |
| 5.4:3: Potential Reasons Behind Variations in Challenges | 53 |
| 5.5: Overcoming Challenges for Import and Export | 54 |
| 5.5:1: Customs Clearance: Addressing Bureaucracy and Delays | 54 |
| 5.5:2: Infrastructure Rehabilitation: Upgrading Ports for Enhanced Performance | 54 |
| 5.5:3: Human Resource Management: Skills Development and Recruitment | 54 |
| 5.5:4: Technological Modernization: Integration of Digital Solutions | 55 |
| 5.5:5: Investment Strategies: Funding for Port Improvement Initiatives | 55 |
| 5.6: Recommendations for Improvement | 55 |
| 5.7: Implications for Future Research | 57 |



| 5.7:1: Potential Avenues for Further Research | . 57 |
|---|------|
| 5.7:2: Emerged Topics or Dimensions During Analysis | . 58 |
| 5.7:3: Contribution to Future Studies | . 58 |
| 5.8: Chapter Summary | . 59 |
| Chapter Six: Conclusion | . 61 |
| 6.1: Introduction | . 61 |
| 6.2 Reflection | . 61 |
| 6.3: Implications for Future Research | . 65 |
| 6.4: Chapter Summary | . 67 |
| References | . 68 |
| Appendixes | . 74 |



List of Figures

Figure 1. A map identifying Angola as one of the major exporters of Petroleum

Additionally, import and export operations are pivotal components of Angola's economic growth and development.

Figure 2: The LPI ranking and score in Angola

Figure 3. Bar graph showing Angola's crude oil exports in billion US dollars over the years (Kamer, 2023)

List of Abbreviations

AI – Artificial Intelligence

BRI - Belt and Road Initiative

COMESA - Common Market for Eastern and Southern Africa

DRC - Democratic Republic of Congo

DWT – Deadweight Tonnage

EDI – Electronic Data Interchange

FIDI – Federation Internationale des Demenageurs Internationaux

ICGLR - International Conference on the Great Lakes Region

ICT – Information and Communication Technology

IMF - International Monetary Fund

IoT – Internet of Things

ITF – International Transport Forum

JUP – Janela Unica Portuária (Single Port Window)

LPI – Logistic Performance Index

PPP - Public-Private Partnerships

SACU - Southern African Customs Union

SADC – Southern African Development Community

TEU – Twenty-foot Equivalent Unit

UNCTAD - United Nations Conference on Trade and Development



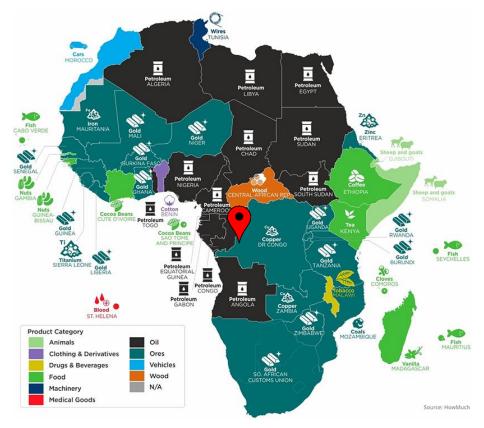
Chapter One: Introduction

1.1: Background

Angola, which is located in the southwestern part of Africa, has historically been blessed with enormous natural resources, the most notable of which are oil and diamonds, which have been the primary drivers of its economy (Neto & Jamba, 2006). However, the nation was engulfed in a protracted and bloody civil war from 1975 to 2002, which had a significant negative influence on the country's infrastructure as well as its economic growth (Rosie, 2020). Since the conclusion of the war, Angola has been making strenuous efforts to achieve stability and rebuilding. The country's efforts have been concentrated on postwar recovery, the attraction of international investment, and the diversification of its economy outside the oil industry (Le Billon, 2001).

The natural resources of Angola will likely continue to be a significant factor in the country's economic development. Even while the nation has made headway in diversifying its economy, it still has to make more steps to sustainably tap into the potential of its agricultural sector and other resources. Angola has the potential to create a more secure and prosperous future that makes full use of the country's abundant natural resources if it implements sound economic policies, encourages investment in essential sectors, and fosters good governance. (Report by the World Bank, 2021).





Source: Author based on visual capitalist

Figure 1: A map identifying Angola as one of the major exporters of Petroleum

In addition, Angola's economic expansion and development are greatly facilitated by the country's trade activities, both import and export. According to Trading Economics (2023), the country places a significant amount of reliance on imports in order to satisfy the demand for consumer goods and capital equipment. The country's primary exports consist of oil, diamonds, minerals, agricultural products, and seafood. Angola's ports, such as Luanda, Lobito, Namibe, and Soyo, are very important to the country's economy since they serve as gateways for international commerce. This makes the flow of commodities easier and connects Angola to foreign markets.

However, Angola's operations to import and export goods encounter substantial hurdles that must be overcome. According to Hutson, 2023, the infrastructure of the nation's ports is often insufficient and is in need of renovation in order to meet growing trade volumes. Congestion and delays in the processing of goods might result from inadequate port capacity, which would have an adverse effect on the efficiency of commerce. Trade bottlenecks may also be caused by inefficient customs operations and legislative



impediments (Alves, 2013). These factors might make it more difficult to clear products through customs in a timely manner. In addition, Angola's economy is highly dependent on oil exports, which makes it susceptible to shifts in the price of oil on the world market (Wolf, 2017). Therefore, the country has to diversify its economy in order to lower the likelihood of negative economic outcomes.

Taking action to overcome these obstacles is very necessary for Angola's economic development. According to Milner et al. (2008), if a government makes investments in port infrastructure development projects and expands capacity, it may increase the ease with which it facilitates commerce and attracts further investments. Streamlining the procedures involved in commerce and reducing the amount of time and money spent on operations related to import and export are both possible outcomes of improvements in customs procedures and regulations. Last but not least, according to Meyer and Auriacombe (2019), diversifying the economy beyond oil may improve its resistance to shocks and generate long-term development that is sustainable.

Therefore, Angola's ability to successfully import and export goods is essential to the country's continued economic expansion and development. The nation has been taking steps to tackle these issues, despite the fact that it faces hurdles in port infrastructure, capacity limits, customs procedures, and economic diversification. Angola is working to improve its trade competitiveness, boost economic growth, and establish deeper linkages with the global economy and neighboring nations via a variety of infrastructure development projects, trade facilitation measures, and regional integration initiatives.

1.2: Relevance of the Topic

The issue of activities involving import and export in Angola is of great interest because it has the potential to have a dramatic influence on many different parts of the economic landscape of the nation. Angola's total economic growth and development may be directly attributed to the country's well-functioning import and export markets, which play a critical part in the process. These activities may stimulate local businesses, generate job opportunities, and attract foreign investments, all of which lead to a stronger and more resilient economy (Pigato & Tang, 2015). This is accomplished by allowing the seamless movement of products into and out of the nation.



An import and export system that is well-managed may help facilitate trade diversification, which in turn enables Angola to lessen its reliance on certain sectors of the economy or certain types of goods. This diversity makes the nation more resistant to shifts in international markets and reduces the potential hazards associated with an over dependence on a narrow range of products (Sigam, 2012). Angola's position in the international trade arena may be further strengthened by the country's adoption of a wider variety of trade partners and goods. This can also help to stimulate innovation and increase market competitiveness.

Thirdly, the establishment of solid infrastructure is very necessary in order to facilitate commerce in an effective manner. According to Sakyi et al. (2017), updating and upgrading port infrastructure, transportation networks, and logistics services may greatly improve the processes of importing and exporting goods, resulting in a reduction in both prices and the amount of time needed for delivery. These kinds of investments not only boost Angola's ability to compete in international commerce, but they also help to the country's general economic growth by making the climate more welcoming to companies and investors.

In conclusion, putting an emphasis on import and export activities may be a significant factor in the promotion of regional integration and the consolidation of trade links with nations in the surrounding area. Angola is able to uncover new market prospects, develop its export base, and boost collaboration on multiple economic fronts if it fosters partnerships and trade agreements within the area (Tuluy, 2016). This partnership has the potential to result in the creation of regional supply chains, which will further promote economic development and stability.

It is possible to increase one's trade competitiveness, attract investment, drive economic diversification, and create regional cooperation by gaining an understanding of the obstacles encountered in import and export operations and finding solutions to such issues. Angola is in a position to improve its standing in the global market, the quality of its trade routes, and the rate at which its economy grows if it makes the most of the prospects that have been uncovered. This study has the potential to influence policy reforms, infrastructure investments, and trade facilitation measures, leading to a more



favorable climate for business and benefitting many stakeholders engaged in import and export activity. In addition, this research has the potential to inform policy changes.

1.3: Personal Motivation

The evident significance of ports in determining the general economic landscape of countries is what prompted this line of inquiry to be undertaken in the first place. As someone who is intensely interested in both international commerce and economic development, investigating how well Angolan ports handle container traffic is a chance to make a significant contribution to the body of information that underpins both fields. By shedding light on the current state of these ports and their potential for improvement, this research aims to assist policymakers and stakeholders in making informed decisions to enhance trade efficiency.

1.4: Research Questions (Main question and sub-questions)

Main Question

What are the key challenges faced by Angolan Ports regarding container import and export operations?

Sub Questions

- 1. How do the different ports in Angola compare in terms of their trade connectivity and relationships with their trade partner countries?
- 2. How can Angola enhance its collaboration with neighboring countries to improve import and export activities?
- 3. Which policies and regulatory reforms are necessary to create an enabling environment for import and export operations in Angola?
- 4. What are some potential strategies and interventions that can be implemented to overcome the challenges faced by Angola in import and export operations?
- 5. How can Angola improve its export capabilities to enhance economic diversification and reduce dependency on imports?
- 6. To what extent have Angolan ports effectively responded to the growing demand for imports and exports as an external factor for economic growth?



1.5: Thesis Structure

The thesis structure of the research paper is comprised of five different chapters. The import and export activities of Angola are investigated in Chapter 2, which is a literature study. The chapter focuses on the economy, main ports, and commodities that are engaged. Methodology, which is covered in Chapter 3, provides an overview of the study approach, data gathering methods, sampling strategy, and analysis techniques that were used. The analysis and results are presented in Chapter 4 and chapter 5, which also investigates potential avenues of cooperation with neighboring nations, as well as policy and regulatory changes, tactics for overcoming obstacles, and ways to improve export capacities. In addition to this, the chapters analyzes how Angolan ports have responded to the rising demand for imports and exports. In the chapter 6, "Conclusion," a review of the results, major recommendations, implications for economic development, and proposals for further study are presented.



Chapter Two: Literature Review

2.1: Introduction

The purpose of the literature review section of this research paper is to provide as comprehensive an analysis as possible of the import and export operations that take place in the ports of Angola. In this chapter, relevant scholarly articles and studies will be subjected to critical analysis in order to gain a better understanding of the current state of Angola's trade landscape, the role of ports in facilitating import and export activities, the primary commodities that are traded, and the challenges that Angolan ports face when it comes to handling containerized goods. In addition, the evaluation will investigate the ways in which Angolan ports engage with the economies and societies of their neighboring countries, as well as the ways in which they participate in efforts to integrate their regions. As a consequence of this, this part will be divided into four sections:

- 2.2 The Quality of Port Infrastructure and Trade Operations
- 2.3 Overview of Angola's Import and Export Operations
- 2.4 Challenges Faced by Angolan Ports in Container Import and Export Operations
- 2.5 Trade Connectivity and Relationships of Angolan Ports

Therefore, with the assistance of this review, this research study will conduct a comprehensive examination of the literature in order to offer an insightful analysis and a deeper comprehension of the potential and difficulties faced by Angolan ports while handling containerized products for both import and export activity. This will be accomplished by conducting a thorough examination of the literature. The review will serve as the jumping off point for the subsequent phases of the study, which will offer empirical data and analysis to give a comprehensive comparison of the container import and export activities at Angolan ports.

2.2: The Quality of Port Infrastructure and Trade Operations

The standard of a nation's port infrastructure is one of the most important factors determining its level of economic competitiveness and its rate of GDP development. The importance of the relationship between the quality of port infrastructure and business operations has been the subject of a great number of studies. According to Arvis et al.



(2023), for instance, the Logistics Performance Index (LPI) is a critical indicator that evaluates the effectiveness of a nation's trade logistics, and it mostly depends on the quality of port facilities. This was found in the authors' research. In addition, according to Humphreys, (2023), ports are essential nodes in the global supply chain because they enable the movement of goods over national borders and continental boundaries. Ports that are effective and well-maintained foster commercial links, reduce the costs of transportation and increase overall commercial performance. Mlambo, (2021) found evidence that confirmed the positive influence that port performance has on commerce for a select set of African countries. This finding highlights the necessity of high-quality port infrastructure in supporting the expansion of trade.

According to Munim and Schramm (2018), the quality of port infrastructure and logistics performance has a significant influence on economic development owing to the mediating role of seaborne commerce. This information is in support of the information that was presented before. Countries that have efficient port systems see higher levels of trade volume, which leads to improved opportunities for economic expansion. In addition, Wagner et al. (2022) offered further evidence in support of this theory by demonstrating that improving the quality of port infrastructure has a positive influence on shippers' choices. This is due to the fact that efficient ports attract increased commerce and investment.

According to Campos, (2023b), the infrastructure of Angola's port has a direct impact on the degree to which the nation is able to compete within the Southern African Development Community (SADC). It is possible that the country's increased port facilities would be beneficial not only to the country's own economic activity but also to the country's position as an important trade center within the SADC region. In addition, the United States Department of Commerce, in its report from the year 2022, acknowledges the significance of Angola's marine technology and sea ports, highlighting the potential for expansion and development within the industry. Angola has the potential to improve its trade connections, increase the amount of investments it receives, and propel regional economic expansion if it makes investments in and upgrades to its port infrastructure. This would not only be beneficial for Angola, but it would also have a positive effect on the SADC countries that are nearby.



2.3: Overview of Angola's Import and Export Operations

2.3.1: Angola's Economy and Trade Landscape

As stated previously, Angola is blessed with a rich supply of natural resources, such as oil, diamonds, and other minerals. Historically, the oil sector has been the primary engine of the nation's economy, which has helped to position it as one of the top oil exporters in Africa. According to the International Monetary Fund (2023), in recent years, oil has accounted for almost ninety percent of the country's total exports. The revenue that has been generated from oil exports has been essential in maintaining the current level of government spending and fostering economic growth. However, because of the economy's significant reliance on oil, it is vulnerable to worldwide swings in the price of crude oil, which makes it subject to external shocks and financial instability. This is because of the economy's heavy dependence on oil.

Realizing the necessity for economic diversification, the Angolan government has been actively campaigning for reforms and steps to promote non-oil businesses, such as agriculture, manufacturing, and services. This is part of the government's effort to strengthen the non-oil industry. In spite of these measures, diversification has proven to be difficult in the nation, and sectors other than oil have not yet reached their full potential. In line with this, the export of oil accounted for around 88% of Angola's total export income in 2022 (IMF, 2023), whereas non-oil exports such as diamonds and other minerals accounted for just 12% of Angola's total export revenues. Diversifying Angola's economy away from its reliance on oil is essential if the country is to have a more robust economy that is less susceptible to external shocks.

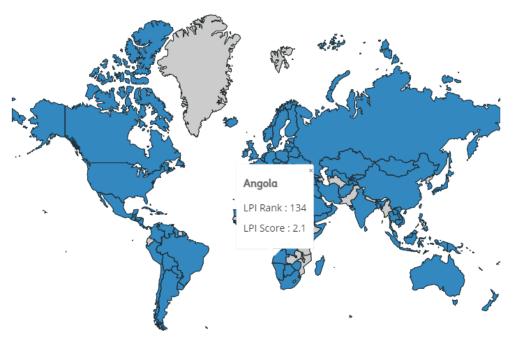
The trading environment in the nation is shaped by the export-oriented economy of the country, which places a heavy emphasis on exports as a primary means of generating profits in foreign currency. In this particular scenario, China, India, the United States of America, and Spain are some of the most important export target markets for Angola. The nation's trade balance is strongly in favor of exports because of its dependence on oil exports. This creates a trade imbalance, which shows how important it is to grow non-oil businesses and diversify the economy in order to reduce risks.



2.3.2: Role of Ports in Import and Export Activities

Considering it has such a long coastline along the Atlantic Ocean, Angola has the potential to play a large role in the global economy. The ports of the country are vital to the functioning of the country's import and export industries. They serve as key access points for international commerce and connect Angola to more consumer markets. As a result, the ports of Luanda, Lobito, and Namibe, which are all significant marine hubs, are responsible for the majority of the containerized cargo and other commodities that are handled (UNCTAD, 2018).

These ports provide a crucial function as logistical centers, allowing for a continuous flow of both imports and exports of goods. The overall economic growth of the nation as well as the viability of its commercial sector are both dependent on the efficiency and comprehensiveness of the nation's port infrastructure. However, there are problems with both efficiency and capacity associated with its port infrastructure. According to the World Bank's Logistics Performance Index (LPI), Angola rated 126th place out of 160 countries in 2016, indicating that there is room for improvement in trade facilitation and port efficiency. Since 2016, Angola's position on the LPI has dropped from 126 to 134, as seen in Figure 2, according to a study that was provided by Arvis et al., (2023).



Source: Author based on World Bank

Figure 2: The LPI ranking and score in Angola

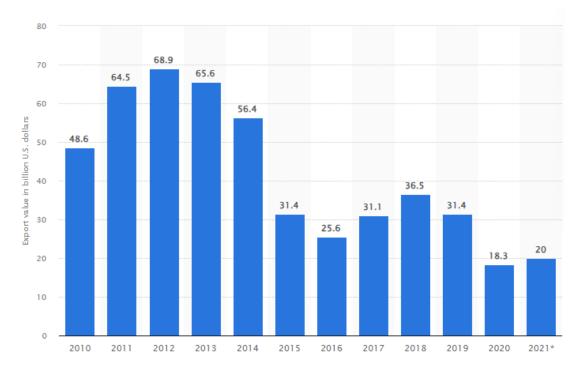


2.3.3: Major Import and Export Commodities

2.3.3.1: Exports

Angola's export profile is predominantly dominated by the oil sector, with crude oil acting as the primary commodity exported from the country. As a result of this, the nation has been one of the most important oil-producing countries in Africa and a prominent oil exporter all over the globe. Therefore, as a consequence of the nation's oil resources, particularly its offshore reserves in the Atlantic Ocean, there has been a huge rise in the amount of investment coming from outside the oil industry. Because of this, the importance of oil exports to the economy of Angola cannot be overstated under any circumstances. According to Garcia-Rodriguez et al. (2015), the money from oil has been one of the key sources of foreign currency gains for the nation, which accounts for a considerable portion of the government budget. As a direct consequence of this, the revenues from oil exports have been of critical importance in terms of supporting the financing of significant development initiatives, social programs, and infrastructure projects.





Source: Author based on Statista

Figure 3: Bar graph showing Angola's crude oil exports in billion US dollars over the years (Kamer, 2023)



The historical trend of Angola's crude oil exports between the years 2010 and 2021 is shown in the figure above labeled "Figure 3." The graph in the image illustrates an unpredictable pattern in oil exports, which are influenced by the fluctuations in the price of oil and production levels around the globe. These factors can be shown to have an effect. For example, the amount of oil exported by Angola reached an all-time high in 2012, reaching around \$68.9 billion in total value. Since that time, it has been erratic and has been following a declining trend in terms of exports as a consequence of shifts in oil prices and production capacity.

Despite this, diamonds and a variety of other minerals are key exports for Angola in addition to oil. Diamonds are an exceptionally valuable natural resource for the country, and the mining industry's ability to profit from their exports has been critical to the sector's continued growth. Angola is one of the leading producers of diamonds in the world because of the extensive diamond mining operations that take place inside the country. According to statistics from across the globe, the nation was the sixth-greatest producer of diamonds in the world in 2022, and its production had grown by 6% from the previous year (kgi-admin, 2023). In conclusion, the variety of Angola's exports comprises not only gold but also other commodities like iron ore and other metals. Iron ore in particular has become increasingly well-known in recent years as a result of the establishment of new mining operations. As a result of this, the immense geological endowment of Angola is reflected in the country's exports of minerals, which provides opportunities for the mining sector to continue growing and improving.

2.3.3.2: Imports

The nation imports a diverse range of goods, which is reflective of the nation's growing economy as well as the increase in the demand for goods produced inside the nation. Commodities such as machinery, equipment, vehicles, electronic products, consumer goods, and food items are among the most common types of goods imported. The nation imports the most machinery and other types of equipment out of all of these different types of goods. According to Kamer (2023), the growing industrial and infrastructure sectors of the nation need the importation of a wide variety of different types of equipment. Importing equipment is absolutely necessary if one hopes to boost productivity, advance industrialization, and contribute to efforts to diversify the economy.



As a last point of interest, a large portion of Angola's imports are also made up of vehicles, such as automobiles and trucks. According to Kamer (2023), the demand for vehicles is being driven by factors like as population growth, increasing urbanization, and the want for more efficient transportation infrastructure. As a last point of interest, consumer goods, food, and electronic goods make up a significant portion of Angola's overall imports. The increasing consumer demand for a range of products is being fueled by rising income levels and evolving customer preferences, both of which are contributing factors to the increase in the importation of consumer goods and technology. This desire is a reflection of the growing consumer demand for a variety of items. Importing food is important not just to meet the requirements of local consumption but also to increase agricultural production in the area (Kamer, 2023).

2.4: Challenges Faced by Angolan Ports in Container Import and Export Operations

The ports of Angola are strategically significant entrances for international commerce and play a critical part in the facilitation of container import and export operations. However, there are a number of challenges that prevent them from being as successful as they may be and preventing them from meeting the ever-increasing trade needs. This section goes into further depth on the most significant challenges that Angolan ports confront when it comes to the processes of importing and exporting containers.

2.4.1: Inadequate Port Infrastructure

One of the most significant challenges that Angolan ports need to overcome is the lack of suitable infrastructure inside the ports. Even though there have been efforts to modernize and expand port infrastructure, the rise in trade volume has outpaced the development of port infrastructure. As a direct consequence of this, there is a chance that the existing infrastructure won't be able to keep up with the growing demand for containerized freight. The Port of Luanda, which serves as the primary entry point for imports and exports into Angola, has run into challenges with congestion and capacity as a consequence of its aging infrastructure. This has caused the port to become more congested. Inadequate container handling equipment, such as cranes and handling machines, makes the already



challenging task of properly managing containerized commodities much more problematic (Africa Ports, 2020). Inadequate container storage may also lead to bottlenecks in the processing of goods, which contributes to further delays and increases operational expenditures.

According to a study published by the United Nations Conference on Trade and Development (UNCTAD) in 2018, the expansion of Angola's port infrastructure has not sufficiently kept pace with the country's growing trade volumes. According to UNCTAD, (2018), it was stressed that increased investment in port infrastructure is essential in order to successfully meet the expanding trade volumes. This was stated as a need.

To address this difficulty in an efficient manner, large expenditures are required to improve and expand port infrastructure. This incorporates the adoption of modern procedures at container ports, the improvement of cargo handling equipment, and the expansion of storage capabilities, among other things. The expansion of port infrastructure in Angola has the potential to improve operating efficiency, reduce the likelihood of delays, and successfully meet the growing demands of international commerce.

2.4.2: Limited Capacity and Efficiency

The restricted capacity of the ports in Angola and the inefficiency of their operations are both contributing factors to the enormous issues that they are now facing. It is possible that congestion and delays in vessel berthing and cargo handling will occur as a consequence of the growing amount of containerized cargo combined with the limited capacity of port infrastructure. This tendency might result in longer times needed for ships to complete their turnarounds and higher demurrage costs for businesses that import and export goods. According to the Logistics Performance Index (LPI), Angola's level of logistics efficiency placed it at the 126th position out of a total of 160 nations (World Bank, 2021). The LPI evaluated how efficient the customs clearance processes were, as well as the quality of the infrastructure, the ease with which shipments could be coordinated, and the level of expertise provided by the logistics services. This lower ranking shows that improvements in both the capacity and efficiency of Angola's ports are required in order to meet the demands of the country's growing economy.

The Port of Lobito, another significant port in Angola, has also run into issues due to its limited capacity in the same way that other ports in the country have. According to



UNCTAD (2018), despite the fact that the port has seen an increase in the number of containers passing through it over the course of time, its capacity has not yet caught up to the level of demand that is now being met. It is very necessary to participate in strategic planning and to allot expenditures toward the growth of port infrastructure in order to improve the capacity as well as the efficiency of the port. In order to increase the total capacity of Angolan ports, it is important to adopt specific steps such as expanding the number of docks, increasing the amount of area dedicated to container yards, and modernizing the equipment used for processing cargo. In addition, improving port operations by promoting increased communication among different port stakeholders, such as terminal operators and customs officials, has the potential to improve operational efficiency and decrease the amount of time it takes for vessels to complete their turnarounds.

2.4.3: Inefficient Customs Processes

Container import and export activities in Angola face significant challenges on account of the existence of cumbersome bureaucratic procedures and ineffective customs processes. Delays that occur during the process of customs clearance may result in increased demurrage charges for importers and exporters alike, in addition to extended transit times for the item. According to the findings of the FIDI Customs Guide, the typical amount of time needed to pass customs at Angolan ports is around 15 days (ANGOLA Import – FIDI Customs Guide.Pdf, 2023.). This information was discovered. The lengthy customs clearance process reduces the efficiency of commercial transactions and adds to the costs of doing business in Angola.

In order to meet the demands of this obstacle, it may be possible to generate major improvements in the expediency and effectiveness of customs operations via the use of electronic customs clearing systems and the upgrading of existing customs processes. Customs authorities now have the ability, thanks to the introduction of modern customs technologies like electronic data interchange (EDI) and single-window systems, to increase the efficiency of the procedures involved in the clearing of cargo and to reduce the administrative complications that are encountered by merchants. In addition, increasing the level of cooperation and coordination between customs agencies in



neighboring countries has the potential to significantly increase the efficiency of both international commerce and the transit of commodities over international boundaries.

2.4.4: Regulatory Barriers

Container import and export operations in Angola may encounter obstacles in the form of regulatory barriers, which encompass intricate trade regulations and burdensome administrative procedures. The presence of regulations that are inconsistent or ambiguous can give rise to uncertainties for traders and logistics providers, thereby impacting their investment decisions and trade flows.

According to the World Bank Ease of Doing Business Report for 2020, Angola's Ease of Doing Business Index indicates the existence of areas that could benefit from enhancements in order to establish a more favorable business environment. The attraction of increased foreign investment and promotion of international trade in container import and export operations within a country can be facilitated through the reduction of regulatory barriers and the enhancement of transparency in the regulatory framework (World bank, 2020).

In order to tackle this challenge, it is recommended that the Angolan government implements regulatory reforms aimed at streamlining trade procedures, minimizing administrative complexities, and improving transparency and predictability within the regulatory framework. By cultivating an environment that is conducive to business activities, Angola has the potential to attract greater levels of investment and enhance its trade competitiveness. This, in turn, can have a positive impact on the efficiency of container import and export operations within the country.

2.4.5: Lack of Diversification in the Economy

The lack of economic diversification in Angola is one of the persistent problems that has a considerable influence on the way container operations are carried out in that country's import and export trade. Because of the nation's overwhelming reliance on oil exports, which makes it vulnerable to shifts in the price of oil on the world market, the economy of the country is sensitive to shocks from the outside and economic instability. Oil exports accounted for nearly 88% of Angola's overall export profits in 2022. These revenues made up the bulk of Angola's total export earnings. In contrast, non-oil exports, which include



diamonds and other minerals, took up a relatively modest amount of around 12% of total exports (IMF, 2023). Angola's economy is very vulnerable due to its heavy reliance on oil income, which highlights the urgent need for the country to diversify its economy in order to lessen its dependency on oil and strengthen its economic resilience.

To encourage container import and export operations in a way that is more ecologically and economically sustainable, the promotion of economic diversification will permit the emergence of new chances for trade and investment in areas other than oil. This will allow for the formation of fresh trade and investment opportunities. Not only would the diversification of sectors, such as agriculture, manufacturing, and services, contribute to an increased variety of items that are exportable, but it will also help to function as a means to reduce the nation's dependency on commodities that are imported.

It is vital that the government of Angola establish policies that permit investment and develop innovation within industries other than oil in order to promote economic diversification. This will allow Angola to move beyond its reliance on oil as its primary source of revenue. This includes the execution of a variety of policies such as providing incentives to local companies, dedicating resources towards education and the upgrading of skills, and encouraging trade and investment in industries that are not tied to oil. Angola's economic diversification would not only lessen the country's vulnerability to shocks from the outside world, but it will also improve the trade competitiveness of the country's ports, making it easier to process a larger variety of goods and contributing to the nation's overall economic growth and development.

2.5 Trade Connectivity and Relationships of Angolan Ports

The connectedness of trade routes and the existence of effective port infrastructure are two factors that have a considerable impact on the ease with which international commerce and economic growth may be accomplished. The importance of Angola's ports in enabling trade links at both the regional and global levels becomes more remarkable when seen in the perspective of the country of Angola, which is endowed with a wealth of natural resources and is now undergoing economic expansion. A comparative study, trade linkages with neighboring countries, and involvement in regional integration initiatives are some of the topics that will be covered in this portion of the literature review, which aims to investigate the connectivity and relationships involving Angolan port commerce.



2.5.1: Comparative Analysis of Ports in Angola

Angola has a significant expanse of coastline along the Atlantic Ocean, resulting in the establishment of several seaports. The aforementioned ports all play an important part as significant entrance sites for the nation's incoming and outgoing goods, and as such, they are an integral component of the nation's growing economy and its participation in international trade operations. The enhancement of these ports' efficiency as well as their capacity is very necessary if one wants to achieve the goal of a continuous and effective flow of products. Within the framework of the SADC, the purpose of the research that was carried out by Campos, (2023) was to investigate the infrastructure and competitiveness of the ports in the country of Angola. The author highlights the relevance of port infrastructure in connection to trade facilitation and regional integration, stating that its quality and capacity directly impact these characteristics (Campos, 2023a). This assertion is made in response to the author's belief that the quality and capacity of port infrastructure directly influence these elements. The research indicates possible areas of improvement, such as the modernization of port infrastructure and the use of cutting-edge technology to raise the level of operational efficacy. This indicates that, despite the potential that already exists, there is the opportunity for further development and improvement of Angolan ports in order to more efficiently serve the commerce needs of the area. This is the case even though the potential already exists.

In addition, Carine (2015) highlights the relevance of operating efficiency in container ports located in sub-Saharan Africa, focusing especially on certain ports in the country of Angola. According to the results of the study conducted, increasing operational efficiency has been found to result in a reduction in the expenses associated with trade as well as an increase in the volume of trade. This highlights the need to promote resources toward the upgrading of port management and infrastructure in order to support economic growth and encourage increasing commerce.

2.5.2: Trade Relationships with Neighboring Countries

Due to its strategic geographical location and abundant natural resources, Angola assumes a pivotal role in shaping regional trade dynamics. The establishment and maintenance of robust trade relationships with neighboring countries are imperative for



the promotion of mutual economic development and the preservation of regional stability. Furthermore, the strategic positioning of Angolan ports can function as crucial transit hubs for landlocked neighboring nations, affording them the opportunity to connect with global markets.

In his study, Habiyaremye, (2013) investigates the trade agreements between Angola and other African nations, analyzing their impact on the emergence of African lion economies. This study highlights the significance of advocating for intra-African trade as a means to stimulate economic growth and diminish reliance on foreign markets. Angola has forged substantial trade partnerships with various neighboring nations. An example of growing trade can be observed between Angola and Namibia, as both nations are participants in the Southern African Customs Union (SACU) and SADC (Bösl et al., 2014). The establishment of this regional trade partnership has effectively facilitated the exchange of goods and services across borders, thereby making a significant contribution to the overall economic growth observed within the region.

Moreover, Kiala, (2010) conducted a research that examines the diplomatic connections between Angola and Zimbabwe, emphasizing the pursuit of regional alliances. The available research suggests that the augmentation of trade relations between Angola and Zimbabwe has the potential to yield reciprocal advantages, including expanded market accessibility and enhanced economic diversification. Angola and Zimbabwe have engaged in collaborative efforts pertaining to trade and economic endeavors, encompassing bilateral accords and involvement in regional economic alliances such as the Common Market for Eastern and Southern Africa (COMESA) (Ndlovu-Gatsheni, 2012). The trade relationship between these two nations has significantly contributed to the advancement of economic integration and development.

Lastly, besides Namibia and Zimbabwe, Angola has also enhanced its trade partnerships with the Democratic Republic of Congo (DRC). The two nations possess a substantial border and have actively participated in cross-border commerce and economic collaboration, which has been facilitated by their membership in regional entities such as the SADC and the International Conference on the Great Lakes Region (ICGLR) (Ndlovu-Gatsheni, 2012). The trade relationship between the two countries has proven to be mutually advantageous, fostering economic expansion and advancement in both nations.



2.5.3: Regional Integration Initiatives

As African nations realize the potential benefits of economic cooperation and growth via collaborative regional partnerships, the relevance of regional integration projects in Africa has experienced a considerable rise, and this has contributed to an increase in the initiatives' overall significance. Because of its advantageous geographical location and plentiful availability of natural resources, Angola has actively participated in several regional integration projects. These activities seek to boost trade connections and develop new avenues for economic progress. Angola's favorable geographical position and ample availability of natural resources are two of the reasons for this.

Angola's participation in regional integration was motivated by the country's awareness that collaborative efforts and reciprocal collaboration had the ability to generate common prosperity and growth. This understanding led to Angola's decision to participate in regional integration. According to Tuluy (2016), regional economic integration helps to enable the growth of trade flows, the improvement of infrastructure, and the development of member states' access to markets. As a direct result of this, this helps to contribute to the continued progress of economic growth and stability within the area.

Angola's membership in the SADC is indicative of its prominent position within the regional bloc. SADC efforts enable improved cooperation among its member states, which in turn mitigates poverty, promotes economic progress, and facilitates regional integration (Meyer & Auriacombe, 2019). Angola's participation in the SADC has provided the country with the opportunity to build economic linkages within the region and strengthen its existing commercial relationships with the governments that are immediately next to it. A key effect of the regional economic cooperation provided by the SADC has been the encouragement of cross-border trade and investment, which has helped to economic development in member countries (Bosl et al., 2014).

In addition, it is important to point out that Angola is an active member of the COMESA, which is an initiative for regional integration that aims to establish a single market that is characterized by decreased trade hurdles and more economic cooperation (Ndlovu-Gatsheni, 2012). Because Angola is a member of COMESA, the country is able to make use of a larger market for the sale of its products and services. As a result, the country's chances of engaging in commerce and investment with other member states are



significantly improved. The measures done by COMESA to coordinate trade policies and reduce non-tariff barriers play a vital role in building an environment that is conducive to trade and supporting economic growth within the region. COMESA's actions were taken in order to eliminate non-tariff obstacles.

In addition, Angola plays an active role in the International Conference on the Great Lakes Region (ICGLR), which is a regional organization that places a premium on economic cooperation, peace and security among its member states (Ndlovu-Gatsheni, 2012). The participation of Angola in ICGLR aims to deepen the country's resolve to support economic growth and maintain stability across the region. The efforts that the organization is making to promote peace and security in the Great Lakes area create an environment that is suitable for commerce and investment, which in turn stimulates economic integration and development.

Angola has the ability to actively engage in policy dialogues and decision-making processes that impact regional trade and economic development if it takes part in integration projects that are being pursued at the regional level. Angola has the potential to advocate for its interests and play a role in establishing regional policies that have a beneficial influence on its economy and enhance trade connectivity by actively engaging in these organizations (Tuluy, 2016). This opportunity is afforded to Angola since it actively participates in these organizations.

It is necessary to accept that regional integration projects also provide obstacles, such as the need to overcome differences in economic growth among member countries, achieve harmonization of trade rules, and guarantee the fair distribution of benefits (Tuluy, 2016). It is also vital to note that it is imperative to acknowledge that regional integration initiatives also face challenges. Despite this, Angola has the ability to position itself as an important player in the trade dynamics of the area if it takes an active role in the initiatives being discussed and makes concerted efforts with others to find solutions to the problems being raised. This would not only contribute to the promotion of economic development and prosperity inside the borders of Angola, but it would also contribute to the promotion of such growth and prosperity throughout the whole of the African continent.



2.6: Conclusion

In conclusion, container import and export activities in Angolan ports are critical in influencing the country's trading environment and economic growth. The importance of ports like as Luanda, Lobito, and Namibe as logistics centers cannot be overstated, since they assist Angola's integration into worldwide markets. However, these ports confront a number of obstacles that limit their efficacy. Congestion, delays, and increasing operational expenses have come from insufficient port infrastructure, restricted capacity, inadequate customs procedures, regulatory impediments, and a lack of economic diversification.

To overcome these limitations and improve Angolan ports' competitiveness the pot calls for a strategic investment. Improving port infrastructure, extending container terminals, and upgrading cargo handling equipment can all help to increase capacity and operating efficiency. Also, implementing electronic technologies and encouraging regional collaboration to improve customs operations can result in speedier cargo clearance and fewer delays. Lastly, regulatory measures aimed at fostering a favorable business climate can also attract foreign investment and boost trade competitiveness.

On the other hand, since the Angola's economy is heavily reliant on oil exports, it is vulnerable to variations in oil prices. Diversification measures have been launched to encourage non-oil businesses in order to strengthen economic resilience. However, more major progress is required to reduce dependency on oil earnings and promote economic stability. Furthermore, Angola's strategic geographical location and abundant resources afford it a crucial role in shaping regional trade dynamics. Strengthening trade relationships with neighboring countries, such as Namibia, Zimbabwe, and the Democratic Republic of Congo, is vital for economic expansion within the region. Lastly, engaging actively in regional integration initiatives like the SADC, the COMESA, and the ICGLR presents opportunities for Angola to enhance its trade alliances and assert its interests within the regional context. By addressing port-related challenges and taking steps towards economic diversification and regional trade collaboration, Angola can bolster its trade environment and foster sustained economic growth.

Chapter Three: Methodology



3.1: Methodology

This chapter provides a comprehensive overview of the research approach, design, data collection methods, sampling strategy, analysis techniques, and limitations employed in the study. The study's objective is to investigate the primary challenges encountered by Angolan ports in relation to container import and export operations. The predominant research methodology employed in this study is qualitative in nature, wherein interviews are conducted with key stakeholders who are actively engaged in the Angolan port industry. Therefore, methodology enables the acquisition of significant insights and a comprehensive comprehension of the topic at hand. Lastly, the stakeholders regarding this research will be selected by using the criteria of the employees working directly in the Ports of Angola, partners that work with the ports and people from the Sogester's container terminal. These stakeholders will allow me conduct at least 15 interviews which will provided the relevant data for analysis in this research.

3.2: Research Approach

The chosen research methodology for this study is qualitative, as it is deemed appropriate for investigating intricate matters pertaining to import and export activities within Angolan ports. Qualitative research facilitates an in-depth exploration of the experiences, perceptions, and perspectives of individuals who are directly engaged in the port industry, thereby offering a comprehensive comprehension of the difficulties they face (Tenny et al., 2023). The utilization of open-ended questions during interviews is intended to acquire comprehensive and thorough responses that can provide insights into multiple facets of import and export procedures.

Qualitative research enables the comprehensive examination of the intricacies and contextual elements that potentially impact import and export operations within Angolan ports. This encompasses the comprehension of the cultural, economic, and regulatory factors that influence the functioning and trade dynamics within the port sector (Busetto et al., 2020). Furthermore, the chosen research methodology promotes a dynamic and iterative approach to gathering data, enabling us to delve into emerging patterns and unforeseen revelations that may emerge during the interview process.



3.3: Research Design

The present study employs an exploratory research design to examine the challenges encountered by Angolan ports in relation to container import and export operations. The objective is to investigate these challenges without imposing any preconceived notions or hypotheses. The primary objective of our exploratory design is to acquire novel insights and expand our understanding of the intricate and multifaceted nature of import and export operations within the specific context of Angola.

The exploratory research design is well-suited for comprehending a relatively underexplored subject matter, such as the distinct obstacles encountered by ports in Angola. This design facilitates the development of a comprehensive understanding of the problem, taking into account various perspectives and factors that may impact the import and export processes (SMstudy, 2016). The utilization of semi-structured interviews in the research design facilitates the attainment of comprehensive data by striking a balance between consistency and flexibility. This approach ensures that a wide range of information is captured while also accommodating the distinct responses provided by each participant.

3.4: Data Collection Methods

The primary method of data collection utilized in this study involves the use of semi-structured interviews. Semi-structured interviews aim to achieve a middle ground by combining the structured nature of interviews with the flexibility inherent in unstructured interviews. This approach contains the key to gaining detailed and first-hand information from the important parties and professionals involved in the import and export procedures at Angolan ports. We will obtain a thorough grasp of the intricate processes and dynamics affecting container imports and exports in each port by interacting with port authorities, customs officers, shipping firms, logistics managers, and other pertinent professionals. The interviews will provide insightful information, illuminating each port's particular setting, as well as its distinctive qualities, infrastructural capabilities, and regulatory frameworks that have a substantial influence on the movement of containers (Doyle, 2022). Additionally, the adaptability of the interviewing technique enables researchers to modify their questions based on replies obtained, exploring any unique characteristics that



emerge throughout the interviews, and assuring a thorough examination of the issue. Interviews provide a holistic understanding of the difficulties and possibilities encountered by Angolan ports by capturing the human viewpoint of individuals who are directly involved in the operations of the ports.

The approach will also be used to confirm and justify any quantitative results, enhancing the validity of the comparative analysis conducted as part of the research. Researchers may offer focused and practical recommendations for improving the import and export procedures at Angolan ports by using the interviewing approach to immediately identify issues and possible areas for change (Dovetail Editorial Team, 2023). Additionally, interviews may assist fill in any information gaps and explain any unclear data points in order to provide a comprehensive and trustworthy study output. Although there are some drawbacks, such as subjectivity and resource intensity, researchers can address these issues by strategically combining the interviewing method with other research approaches, building a solid foundation for an insightful and worthwhile comparison between the import and export of containers through Angolan ports (McNamara, 2022). The interviews will be conducted through two modes: face-to-face interactions or video conferencing. The choice of mode will depend on the geographical location of the participants and their availability. Face-to-face interviews possess the benefit of incorporating non-verbal cues and fostering a more intimate interaction. Conversely, video conferencing enables interviews with stakeholders situated in disparate regions, thereby facilitating a wider and more diverse participant pool.

3.5: Sampling Strategy

The research study will employ a purposive sampling strategy in order to carefully select participants for the interviews. The focus of this study will be on the import and export operations within Angolan ports, which require specialized knowledge and expertise in the port industry. Therefore, the key stakeholders involved in these operations will be specifically targeted for the purpose of this research (Palinkas et al., 2015a). This may encompass individuals representing port authorities, customs authorities, shipping enterprises, freight forwarding agencies, importers, and exporters.

The sample will encompass a range of ports in Angola, encompassing both prominent and lesser-known ports, in order to capture the diverse array of challenges and practices



that exist across different geographical locations. By incorporating participants from diverse ports, a comprehensive analysis can be conducted to ascertain both shared and distinct challenges encountered within the Angolan port industry. Furthermore, the selection of participants will be predicated upon their respective roles and responsibilities within the import and export procedures, thereby guaranteeing a comprehensive representation of diverse perspectives.

In order to achieve a comprehensive and varied sample, our objective is to incorporate participants from various sectors of the economy, including manufacturing, agriculture, and oil and gas. This approach is motivated by the expectation that these industries possess unique import and export demands. Furthermore, our objective is to incorporate individuals who possess expertise in both maritime and land-based transportation domains, in order to acquire comprehensive insights into the entirety of the logistics chain associated with import and export activities.

3.6: Analysis Techniques

Thematic analysis, a widely recognized qualitative analysis technique, will be applied to the data obtained from the interviews. Thematic analysis encompasses the process of discerning, examining, and presenting recurring patterns or themes within the collected data (Braun & Clarke, 2012). The analysis will be performed through a manual approach, wherein interview transcripts will be meticulously examined and categorized to identify recurring themes, viewpoints, and obstacles pertaining to container import and export activities in ports of Angola.

Thematic analysis facilitates the systematic organization of data into coherent themes that align with the research questions and objectives. Through the process of identifying and analyzing these recurring motifs, a comprehensive comprehension of the obstacles encountered by Angolan ports can be attained. This approach facilitates the establishment of connections between the collected data and the research inquiries at hand (Palinkas et al., 2015b).

In order to augment the robustness of the analysis, the research team will actively participate in discussions and engage in peer debriefing at various stages of the coding process. By implementing this approach, it will guarantee that the interpretations are



adequately substantiated and that the outcomes faithfully reflect the viewpoints of the individuals being interviewed.

3.7: Limitations

While the selected methodology provides valuable insights into the challenges encountered by ports in Angola, it is important to recognize and acknowledge its inherent limitations. One potential limitation of this study is the presence of response bias, wherein participants may exhibit a tendency to provide answers that are socially desirable or withhold sensitive information during the interviews. In order to address this issue, proactive measures will be taken to establish a positive relationship and cultivate a sense of trust with the participants, thereby creating an environment conducive to open and candid sharing of their experiences.

Furthermore, it is important to note that the qualitative nature of the research conducted in this study may impose limitations on the extent to which the findings can be generalized beyond the specific context of Angolan ports. The interviews provide valuable insights into the challenges encountered by these ports. However, it is important to exercise caution when extrapolating these findings to other port environments.

An additional potential constraint lies in the potential oversight of specific challenges or perspectives, which may arise from the inherent subjectivity inherent in qualitative research. In order to overcome this constraint, a meticulous and methodical methodology will be implemented for the purpose of the analysis, guaranteeing comprehensive examination and inclusion of a wide range of perspectives and themes.

Furthermore, it is important to note that the study's scope may be constrained to the viewpoints of primary stakeholders who have direct involvement in the port industry. In order to enhance the comprehensiveness of the study, it is recommended that future research incorporate perspectives from additional stakeholders, including policymakers, trade partners, and representatives from neighboring countries.

3.8: Conclusion

This chapter provided a comprehensive explanation of the methodology employed in the research paper. It utilizes qualitative research methods, specifically semi-structured interviews, to investigate the primary obstacles encountered by Angolan ports. The

Center for Maritime Economics and Logistics Erasmus University Rotterdam



chosen research methodology is exploratory in nature, facilitating a comprehensive examination of the topic at hand. The data collection methods employed in this study prioritize purposive sampling and thematic analysis, while also acknowledging the inherent limitations associated with the chosen methodology. The study activities offer significant insights that can enhance import and export operations in Angolan ports by employing these methodologies.



Chapter Four: Analysis and Result

4.1: Introduction to Qualitative Analysis

The analysis phase has significant relevance as it serves as the link between the core approach of the study and its conclusions. This chapter starts the process of analyzing the gathered data to reveal the difficulties faced by Angolan ports in their container import and export activities. Through a thorough exploration of the unprocessed data, this phase seeks to integrate significant patterns, themes, and conclusions that specifically address the study inquiries and provide insights into the complexities of the Angolan port business. The process of analysis is a methodical and systematic undertaking that encompasses many phases. The process begins with a thorough and systematic arrangement and cleaning of the data, so guaranteeing its dependability and precision (Pickell, 2021). Afterward, the data undergoes a range of analysis processes to reveal concealed insights. The aforementioned procedure encompasses the identification of repetitive patterns, the extraction of significant themes, and the development of perceptive judgments (Hillier, 2021). Therefore, this analysis process will shed light on the difficulties and opportunities that are present within the import and export procedures of Angolan ports, through connecting the data to the research objectives.

Furthermore, the fundamental basis of the Qualitative analysis process was laid out by the research questions, which determined the direction and scope of the investigation. The research questions function as a navigational tool, orienting the investigation towards certain facets of the data that are relevant to the difficulties encountered by ports in Angola. By maintaining a constant alignment between the analysis and the research questions, this section guarantees that the conclusions obtained are directly pertinent to the overall objectives of the study. As a result, the correlation between the research inquiries and the analysis of data will lead to a thorough and focused investigation of the topic at hand.

4.2: Thematic Analysis

Thematic analysis is fundamentally characterized by the methodical examination of qualitative data to identify patterns, trends, and recurrent themes. This analysis approach uncovers the hidden meanings and complexities inherent in participants' replies



by delving deeper into the data (Dawadi, 2020). This methodology facilitates the identification and analysis of the many aspects of the difficulties encountered by ports in Angola, as well as the varied viewpoints of the players involved in import and export activities.

The selection of thematic analysis as the qualitative analysis approach was based on its intrinsic compatibility with the exploratory character of the study. Thematic analysis is a method that provides both flexibility and structure to get a complete knowledge of the issues faced by Angolan ports. This tool enables researchers to explore the intricacies of the data and extract thematic insights that directly pertain to the research inquiries. Thematic analysis is a valuable method for identifying and examining various difficulties in the operations of ports in Angola. It offers a comprehensive framework that allows for the discovery of both expected and unexpected results, making it a powerful tool in this context.

Steps Involved in Thematic Analysis

The thematic analysis process involved a series of interconnected stages, whereby every stage contributed to the systematic identification of themes that included the difficulties encountered by Angolan ports in their container import and export activities. These stages are as follows:

Familiarization with Data: The research process started engaging in an in-depth analysis of the extensive dataset obtained from conducted interviews. This phase involved doing several readings of the interview transcripts, which facilitated the development of a comprehensive understanding of the material. Academic researchers diligently analyze the unprocessed data, actively acknowledging and appreciating its intricate details and small variations. This immersion facilitated the recognition of preliminary patterns, concepts, and prospective themes that may emerge from the narratives provided by the respondents (Damyanov, 2023). The familiarization process provided a thorough understanding of the perspectives held by the participants, thereby establishing the necessary foundation for succeeding analytical phases.

Searching for Themes: During this stage, the data was subjected to rigorous analysis as researchers conducted a thorough investigation. Each line, phrase, and paragraph undergoes meticulous examination to find repeating patterns, common thoughts, and



different opinions. The primary purpose of this active inquiry is to extract relevant insights and identify emerging themes that are of relevance within the framework of the study objectives. The procedure entails the examination and juxtaposition of replies, facilitating the emergence of themes in a natural manner (Mortensen, 2020). With each successive round of qualitative analysis, experts make incremental progress in comprehending the complex and diverse array of issues encountered by ports in Angola.

Reviewing Themes: After the discovery of prospective topics, a process of critical review is initiated. A thorough examination of themes was conducted to guarantee their alignment with the fundamental nature of the data and their relevance to the study goals. In this case, the coherence and relevance of every subject are evaluated by researchers to determine their validity. During this iterative procedure, themes undergo refinement, consolidation, or segregation as necessary (Vaismoradi et al., 2016). The objective was to provide a coherent collection of topics that include the many aspects of issues faced by Angolan ports in their import and export activities.

Defining and Naming Themes: After obtaining a more focused collection of topics, researchers start the task of establishing exact definitions and assigning appropriate labels. Every subject is meticulously explicated to convey its fundamental notion and value inside the dataset. The process of naming topics entails the careful selection of concise but informative labels that effectively encapsulate the fundamental issues or revelations under examination (Joffe & Yardley, 2004). This stage is crucial as it enhances the clarity and coherence of the analysis, making it easier for readers to comprehend the main arguments being presented.

Writing the Narrative: The ultimate outcome of doing thematic analysis is the development of a cohesive narrative that integrates the identified topics. The story utilizes selected portions of the data to effectively demonstrate and support the presence of each theme. The topics are systematically presented, accompanied by actual quotations from interview transcripts as supporting evidence (Majumdar, 2022). The presented narrative not only highlights the many difficulties encountered by ports in Angola, but also provides a contextual framework within which these obstacles may be understood in relation to the wider study aims. During this iterative process, the tale undergoes a transformation,



resulting in a unified fabric interwoven with many themes, profound observations, and the authentic voices of the participants.

4.3 Emergent Themes

Theme 1: Port Infrastructure and Connectivity Challenges

The persistent theme of deteriorated infrastructure and communication difficulties highlights the difficulty that Angolan ports have in sustaining effective operations. The interview participants constantly highlight that, despite the presence of well-established connections to surrounding areas, the condition of infrastructure continues to be a prominent issue. According to Alberto Antonio Bengue, the connectivity of Angola's ports is notable as a result of their extensive hinterlands. However, a significant distinction arises in the form of the deteriorated infrastructures. The deterioration of their capabilities impairs their efficiency in managing freight. Nuno Fialho contributes to the discourse by highlighting the need to enhance the connectivity of various ports, such as Luanda, in order to bolster their efficacy in facilitating commerce. Additionally, Fialho emphasizes the necessity of modernizing ports like Porto Amboim and Soyo to enable their increased participation in commercial activities. This statement underscores the correlation between the quality of infrastructure and a port's ability to effectively conduct commerce. The aforementioned connection issues and infrastructural limitations serve to emphasize the pressing need for expenditures in the enhancement and upkeep of port facilities.

Theme 2: Bureaucracy and Communication Issues

The exploration of the issue of bureaucracy and communication breakdowns provides insight into the challenges encountered by Angolan ports in terms of administrative obstacles and operational inefficiencies. The individuals interviewed regularly identified bureaucracy as a significant impediment to the effectiveness of import and export procedures. According to Alberto Antonio Bengue, the customs clearance procedure continues to be underdeveloped owing to bureaucratic obstacles, despite the presence of technology developments. The aforementioned phenomenon hinders the movement of containers and has a direct impact on the efficiency of transaction processing. According to Luís Cristóvão, there is a correlation between communication breakdowns among field teams, leading to both delays in operations and a deficiency in the transmission of information. Nuno Fialho highlights the significance of an extensive bureaucratic



framework in impeding operational efficiency, resulting in increased expenditures and diminished customer satisfaction. These problems together underscore the need for efficient operations and enhanced communication channels among and between port stakeholders.

Theme 3: Geographic Advantage and Trade Potential

The advantageous strategic geographical positioning of Angolan ports is consistently observed, facilitating trade prospects and enhancing connection with diverse worldwide locations. The significance of Angola's geographical location in Southern Africa is emphasized by Alberto Antonio Bengue, since it facilitates links to many continents such as America, Europe, Africa, and Asia through significant sea routes. The geographical advantage of Angola facilitates the expeditious transportation of containers, therefore positioning the country as a promising trading center. Nuno Fialho concurs with this viewpoint, noting that the ports in Angola possess advantageous geographical positioning and superior technical capabilities. Nevertheless, the author also highlights the existing obstacles pertaining to security and cohesiveness that require attention and resolution. The subject underscores the significant influence of location on facilitating trade opportunities and underscores the need of addressing fundamental obstacles in order to fully use this advantageous position.

Theme 4: Efforts for Modernization and Efficiency Improvement

The recurring theme seen at Angolan ports is the need for modernization and enhancement of efficiency, underscoring the pressing need to overcome existing infrastructural limits. Alberto Antonio Bengue believes that the implementation of modernization initiatives is important to surmount challenges and optimize operational effectiveness. The author highlights the need for addressing deteriorated infrastructures and superstructures, as well as human resource management and technological inefficiencies, as topics of concern. Luís Cristóvão emphasizes the need to invest in human capital and infrastructure at Sogester Terminal, a port that manages a substantial volume of containerized commodities. The focal point of this issue is the acknowledgment of modernization as a pivotal element in enhancing operational efficiency and promoting commerce.



Theme 5: Future Development and Expansion Plans

The issue pertaining to future growth and expansion plans is indicative of the collective vision held by Angolan ports, with the aim of surmounting prevailing problems and progressing. The respondents consistently articulate the presence of strategic plans and initiatives designed to improve port capabilities. According to Alberto Antonio Bengue, it is emphasized that every port has a Master Plan that outlines exploration and growth initiatives, which are designed to coincide with objectives of efficiency and effectiveness. Nuno Fialho highlights the Barra do Dande project as an exemplification of the industry's inclination towards strategic placement solutions. Luís Cristóvão concurs with this viewpoint, elaborating on prospective strategies for the establishment of novel port infrastructures at Barra do Dande, which have the potential to significantly enhance container handling capabilities and trade capacity. The aforementioned subject highlights the dedication to growth and the possible influence of expansion initiatives on import and export activities.

Theme 6: Diverse Professional Experience

The questioned participants demonstrate a wide range of professional backgrounds, therefore offering distinct perspectives on the port industry. Alberto Antonio Bengue, the current Chairman of the Board of Directors of the Port of Luanda, emphasizes his comprehensive expertise in several areas pertaining to port operations. These areas include port management, logistics, operational procedures, terminal administration, and marketing strategies. The extensive range of knowledge and skills required for managing a port highlights the complex and diverse character of this task, emphasizing the need for a holistic comprehension of its several dimensions. Nuno Fialho, the Logistics Director of Afritruck, a road transport firm, provides a practical viewpoint to the discourse. Despite lacking direct experience in ports, his expertise in logistics provides him with valuable knowledge about operational dynamics, especially the difficulties encountered by supply chain collaborators. Luís Cristóvão, the Customer Support Coordinator of Sogester S.A., has extensive expertise in the administration of containerized products and export operations. The individual's position at the Sogester terminal affords them valuable experiential knowledge pertaining to export procedures, customs authorization, and the complexities inherent in operational management.



Theme 7: Challenges Specific to Individual Ports

The specific problems encountered by each ports arise from a confluence of several causes. The upgrading of the Port of Cabinda is necessary in order to improve its operational efficiency and optimize resource management. Nuno Fialho emphasizes the obstacles present in Cabinda and proposes that the implementation of modernization initiatives is crucial in order to surmount these issues and attain enhanced levels of effectiveness. On the other hand, the Port of Soyo has difficulties pertaining to communication and security. According to Luís Cristóvão, the absence of railway links and communication deficiencies among teams have a significant influence on the efficiency of operations and the overall security of the Soyo port. Likewise, the port of Porto Amboim has challenges related to its infrastructure, namely in terms of inadequate rail connections and general connectivity. The data collectively illustrates the distinct issues encountered by each port, underscoring the need of customized solutions to effectively tackle these constraints.

Theme 8: Impact of Expertise on Port Development

Despite lacking direct experience at specific ports, professionals demonstrate their confidence in the applicability of their talents to effectively tackle issues encountered in port environments. Alberto Antonio Bengue has a wealth of expertise that endows him with valuable insights into several facets of port operations, hence enabling him to make meaningful contributions towards enhancing efficiency. Nuno Fialho utilizes his expertise in logistics to comprehend the intricacies of supply chain dynamics, therefore emphasizing the prospect of optimizing operational procedures inside port environments. Luís Cristóvão highlights his proficiency in managing containerized commodities, asserting that this skillset has the potential to enhance operational effectiveness at the port of Porto Amboim. The aforementioned topic emphasizes the idea that a thorough comprehension of logistics and operations has relevance in different port contexts, possibly resulting in beneficial effects on port advancement.

Theme 9: Focus on Export and Trade Management

The ports of Angola exhibit a collective emphasis on export and trade facilitation, therefore aligning with the nation's objective of achieving economic diversification and diminishing reliance on imports. The interviewees place significant emphasis on the pivotal role that



ports play in enabling the exportation process, thereby leading to a substantial enhancement of the local economy. According to Alberto Antonio Bengue, it is noteworthy that Angola mostly engages in imports, underscoring the need to augment domestic production in order to curtail imports and enhance exports. In order to attain this objective, it is essential to surmount obstacles such as bureaucratic hurdles. According to Nuno Fialho, the presence of bureaucracy is a substantial obstacle, and he proposes that implementing a more efficient procedure might promote the growth of exports. In his feedback, Luís Cristóvão sheds light on the adverse consequences that bureaucratic obstacles have on customers and puts forward potential remedies, such as the establishment of a Single Port Window, aimed at streamlining operations. The aforementioned subject highlights the significant importance of ports in facilitating economic diversification and emphasizes the need to optimize procedures to ensure effective export management.

Theme 10: Human Resource and Resource Management Challenges

The efficiency of ports is influenced by human resource management and resource allocation. Alberto Antonio Bengue highlights the need to allocate resources toward the development of human capital to optimize port operations. The author argues that the implementation of ongoing training for current employees and the acquisition of qualified personnel is necessary in order to effectively address and surmount obstacles. Nuno Fialho acknowledges the significance of competent employees and their training in the realm of port operations, as they play a crucial role in ensuring efficient resource management. In his feedback, Luís Cristóvão examines the ramifications of human resource challenges on the efficiency of port operations, specifically focusing on the adverse effects stemming from delayed client response times. The aforementioned subject highlights the significant importance of staff in enhancing the efficiency of ports, hence emphasizing the need for continuous training and optimization of resources to effectively address operational obstacles.

4.4: Challenges in Import and Export Operations

An in-depth analysis of the difficulties faced by Angolan ports in container import and export operations reveals a complex web of subtleties that have far-reaching effects on the whole logistics system. The viewpoints offered by industry specialists are very



important in understanding and addressing a wide range of difficulties, therefore providing a detailed understanding of the obstacles that impede smooth trade processes. Based on the result from the analysis of this research, several challenges encountered at various Stages of the supply chain in the port were identified:

Customs Clearance and Bureaucracy: The issue of customs clearance processes and bureaucracy is seen as a significant obstacle in the early stages of import and export activities, as emphasized by Alberto Antonio Bengue. The presence of bureaucratic obstacles significantly impacts operational efficiency, which is closely related to the study goal of identifying the barriers that define the trading environment. The intricate procedures associated with customs clearance not only impede the flow of merchandise but also incur additional expenses for enterprises. Bengue's observations exemplify a prevalent apprehension among experts in the business, emphasizing the need for customs processes that are simplified and effective to facilitate trade operations and mitigate obstacles.

The Impact of Communication Failures on Collaborative Dynamics: Efficient communication and teamwork play crucial roles in ensuring the seamless operation of the logistics system. The analysis provided by Luís Cristóvão offers valuable insights into the consequences arising from disruptions in communication across diverse port teams. Disruptions of this kind have a cascading effect on operational processes, aligning with the study goal of improving cooperation to strengthen import and export activities. The absence of effective communication channels may result in misinterpretations, time lags, and a lack of coordination among many parties engaged in the import and export operations. This dilemma underscores the need for enhanced communication structures that enable the timely exchange of information and effective coordination.

The Impact of Operational Speed on Financial Strain: The speed at which operations are conducted and the resulting financial consequences have a significant impact on the dynamics of commerce. Nuno Fialho highlights the difficulty posed by a sluggish operating tempo and escalating prices. The presence of these obstacles significantly hinders operational effectiveness, highlighting the importance of the study goal to develop ways to overcome these issues. The sluggish rate of operations not only impedes the prompt transportation of products but also leads to elevated operating expenses. Fialho's



observations align with the interests of firms seeking to optimize cost and time in their trade processes, hence motivating the investigation of novel strategies to expedite operations and mitigate financial burdens.

The constraints of infrastructure: The significance of port infrastructure is evident in its impact on handling capabilities and operating efficiency. The reference made by Alberto Antonio Bengue on the decline of infrastructures and superstructures highlights the significant task at hand. The study objective of identifying treatments to overcome the challenges encountered in import and export operations aligns with the pressing need for infrastructure upgrading. The decline in physical infrastructure not only limits the ability to handle freight efficiently but also poses risks to the safety and security of commodities. Bengue's views highlight the need to make significant investments in port infrastructure in order to effectively handle the increasing levels of commerce and guarantee the enduring viability of import and export operations.

4.4:1: Alignment with Research Objectives

The perceptive examination of difficulties effortlessly connects with this research aim of comparing Angolan ports in terms of container imports and exports. The presented difficulties provide a comprehensive perspective for identifying operational differences across ports, which may in turn highlight variations in their competitive positions. The problems that have been brought to light provide a contextual framework for interpreting the differences in operational capabilities across various ports.

The examination and comparison of these problems provide a dynamic framework for evaluating the relative merits and drawbacks of each port. The focus of this comparative analysis is on the examination of customs clearance, communication dynamics, operational speed, and infrastructure resilience, as elucidated by industry experts. The issues faced by various ports provide valuable insights into the operational factors that influence trade connectivity and the dynamics of partnerships with trading partner nations. Furthermore, the highlighted discrepancies in the issues not only provide difficulties but also serve as a means to discover gaps and potential paths for joint progress. Through a comprehensive evaluation of these difficulties at various ports, it becomes feasible to identify particular areas that need targeted actions. For example, in the event that a port



has difficulties in communication, the implementation of collaborative initiatives to improve coordination inside the port may arise as a pivotal approach.

Therefore, the intricately examined difficulties surrounding import and export activities provide insights into the intricate nature of the obstacles faced by Angolan ports. The aforementioned issues are closely interconnected with certain phases of the logistics chain, hence providing valuable detail to the study's aim of comparing ports in Angola. The examination of issues encountered at various ports not only exposes operational intricacies but also enables the development of specific solutions to improve their competitiveness and effectiveness in container import and export activities.

4.5 Perspectives of Key Stakeholders

Building upon the knowledge acquired from the thorough assessment of difficulties encountered in the import and export operations of Angolan ports, this section undertakes a comprehensive exploration of the varied viewpoints presented by the interviewees. Through a comprehensive analysis of the perspectives held by significant parties involved, a more intricate comprehension of the nature of these activities and the prospective avenues for improvement may be attained.

The diverse range of opinions offered by these stakeholders serves as a foundation to highlight both the discrepancies and common viewpoints among them. According to Alberto Antonio Bengue, the Chairman of the Board of Directors of the Port of Luanda, his ideas on many aspects of port operations are derived from a significant amount of experienced knowledge. In contrast, Luís Cristóvão, who serves as the Customer Support Coordinator at Sogester S.A, focuses on the obstacles that arise from communication failures. Despite the differences in their professional roles, a common theme emerges - the crucial need to create efficient communication channels to enhance operational efficiency.

It is indisputable that the responsibilities assumed by stakeholders have a significant impact on forming their perceptions. The primary focus of Nuno Fialho, a highly skilled Logistics Director of Afritruck, is inside the complex and intricate realm of logistics. The author's analysis brings attention to the challenges associated with the speed of operations and the resulting financial consequences. This focused orientation demonstrates how stakeholder duties shape their perspective, focusing on specific



concerns that directly affect their professional fields. Likewise, the perspectives shared by Luís Cristóvão align with a focus on client-centricity, emphasizing the significant influence of customer experience on the complex dynamics of commerce.

The convergence of various viewpoints held by individuals in stakeholder positions emphasizes the need to embrace a comprehensive strategy to overcome the current obstacles. By thoroughly engaging with the unique perspectives of various stakeholders, we establish the foundation for developing a comprehensive and multifaceted strategy. This strategy effectively addresses the practical challenges and also acknowledges the wide-ranging consequences for the diverse range of stakeholders involved.

In conclusion, the viewpoints of significant players amplify the many aspects of obstacles in the import and export operations of Angolan ports. The amalgamation of various perspectives facilitates the development of a holistic approach that recognizes the many functions, encounters, and requirements of everyone involved, hence facilitating a more efficient and cohesive port environment.

4.6: Validity and Trustworthiness of Findings

4.6:1: Ensuring Credibility of Analysis Results

The analytical results were deemed credible due to a rigorous process that included many phases to assure the trustworthiness and accuracy of the findings. One key aspect of this methodology was the comprehensive data acquisition procedure, which included conducting interviews with a wide range of stakeholders that possess significant involvement in the import and export activities of Angolan ports. The analysis benefitted from the inclusion of opinions from experts who had direct experience, so incorporating a wide array of ideas and bolstering the legitimacy of the conclusions.

4.6:2: Researcher Involvement in Peer Debriefing and Discussions

In order to enhance the credibility of the results, continuous involvement in peer debriefing and debates was pursued. Engaging in frequent exchanges with colleague's researchers, practitioners, and professionals provided a means of external validation. The aforementioned interactions enabled a comprehensive evaluation of the analytic procedure, detection of possible biases, and verification of emergent themes. The inclusion of several perspectives enhanced the overall comprehension of the difficulties



and possible approaches, mitigating the risk of narrow-mindedness and bolstering the strength of the conclusions.

4.6:3: Maintaining Validity Throughout the Analysis Process

Ensuring the preservation of validity was a reoccurring focal point throughout the analytical process. Thematic analysis, a robust qualitative methodology, was used to systematically arrange the data and derive significant themes. In order to maintain openness and facilitate traceability, a comprehensive record of choices, coding procedures, and theme development was diligently preserved. This methodology enabled the reexamination of results at critical junctures, therefore reducing the potential for biased interpretation.

4.7: Chapter Summary

This chapter has thoroughly examined the obtained data to reveal the complex issues that Angolan ports encounter in their container import and export operations, within the context of qualitative analysis. The importance of this step in establishing a connection between research methods and results should not be underestimated. The analysis procedure was executed in a methodical way, including many steps to verify the credibility and soundness of the results. The thematic analysis revealed many topics that shed light on the complex challenges that influence the Angolan port business.

The method used to extract relevant insights from the data was thematic analysis, a rigorous qualitative research approach. The used approach enabled a methodical examination of the qualitative data, uncovering discernible patterns, prevailing trends, and repeating themes that underpin the obstacles encountered by ports in Angola. The selected methodology was well-suited to the exploratory character of the study, providing a balance between adaptability and organization in order to delve into the intricacies of the data.

The thematic analysis revealed a variety of fascinating topics. The aforementioned topics include the many problems and possibilities that are inherent in the realm of Angolan port operations. The analytical results were closely tied to the study goals, effectively connecting with the aim of comprehending the difficulties encountered by Angolan ports

Center for Maritime Economics and Logistics Erasmus University Rotterdam



and suggesting options for improvement. Lastly, the themes that have been found not only provide insights into these difficulties but also offer a framework for effectively tackling them. The examination of these themes revealed discrepancies and similarities across individuals and groups with vested interests, enabling the development of a thorough approach that considers the many viewpoints and functions within the port ecosystem.



Chapter Five: Result Discussion

5.1 Introduction

This chapter presents a thorough examination of the research objectives, as previously mentioned in Chapter 1. The objective of this study is to offer a comprehensive and nuanced understanding of the difficulties and opportunities that characterize the port landscape in Angola. Furthermore, the chapter will also aim to make significant connections between the acquired research findings and the current body of literature in this field.

The ports of Angola play a crucial role in facilitating the nation's commerce operations, serving as essential hubs that connect the country to the worldwide economic network. In light of this context, it is imperative to conduct a thorough examination of the performance of these ports in relation to container imports and exports. The objective of this discourse is to acquire a comprehensive comprehension of the various aspects that impact the efficiency and efficacy of container operations in ports located in Angola.

The research conducted in this study focuses on the comparative analysis of different ports, aiming to identify and examine trends, differences, and commonalities among them. By engaging in this approach, we can offer significant perspectives on the distinct difficulties and prospects encountered by individual ports, while also seeing broader patterns that are applicable to the whole Angolan port environment. Also, we will have the opportunity to make a valuable contribution to the current corpus of knowledge pertaining to port administration, efficiency, and trade dynamics.

As we progress further into the future parts, we will examine the distinct challenges and opportunities associated with each port, while establishing links to the wider body of literature. Through an examination of factors such as congestion, infrastructural deficiencies, administrative intricacies, and their implications on container operations, our objective is to elucidate feasible approaches for enhancement. This analysis will also explore ways in which these findings can guide future research efforts and contribute to the broader discussion on trade efficiency and port improvement.



5.2: Port-Specific Analysis

5.2:1: Port of Luanda

The Port of Luanda, being the primary point of entry and exit for goods in Angola, is in the forefront of the inherent issues associated with container operations. The container terminal at the port of Luanda is operated by the Sogester company with a capacity to handle 800.000 TEUs per year. The container terminal at the port of Luanda has the following characteristics: Concession Area: 142,467 m². Pier: Docked pier 550 meters long and with depths of: 350m to (10.5m) ZH 200m to (12.5m) ZH. Warehouses: 1250 m² currently; in the future it will be 5000 m². Concession term – 20 years. The investigation underscores the urgent issue of crowding within the port premises. The present difficulty is inherently interconnected with the rapid increase in trade volume (CEIC, 2023). Congestion not only results in increased vessel turnaround durations but also hinders effective container handling, hence exerting a negative influence on the overall trade efficiency of the port. In addition, the port is burdened by outdated infrastructure, leading to increased congestion and operating inefficiencies (Mahmood, 2019). Nevertheless, the strategic positioning of Luanda presents notable prospects for expansion. The port's close proximity to significant shipping routes and its inherent capacity for coastal trade are crucial factors that can be utilized to mitigate congestion. By promoting transshipment and enhancing coastal commerce operations, Luanda has the potential to use its geographical advantage and enhance its capabilities for importing and exporting goods.

5.2:2: Port of Cabinda

The Port of Cabinda possesses a notable geographical advantage due to its status as an enclave located in close proximity to Angola's primary oil reserves. The distinctive geographical location provides prospects for the effective management of oil-related imports and exports. The port has a total of 24,357m², with capacity to store 8,000 TEU's. Of this area, 5,170m² correspond to reinforced concrete paved areas and 19,187m² to cemented soil flooring. However, the analysis highlights the difficulty of expanding trade activity while also addressing the unique requirements of the oil sector. The challenge is derived from the intrinsic volatility observed in oil markets, thus requiring the adoption of a better-balanced trade portfolio (Zheng et al., 2021).



Given the current situation at hand, the port has the potential to utilize its advantageous geographical position in order to promote and facilitate the diversification of commercial activities. Through the establishment of dedicated infrastructure for non-oil commodities and the facilitation of manufacturing and industrial operations, Cabinda has the potential to transform into a versatile port capable of serving several purposes. The strategic evolution described is consistent with the existing literature that supports the need for specialized ports in regions abundant in resources (11838448_04.Pdf, n.d.)

5.2:3: Port of Lobito

The Port of Lobito holds great historical significance and serves as a crucial hub within Angola's commercial network due to its wide ties with the countryside. It has 414 meters of pier, with a depth of 14.7 meters for ships of 50,000 DWT (gross tonnage, operational capacity of 250,000 TEUs/Year, and modern port management structures. It also has 570 meters of North Pier, 552 meters of South Pier, with a depth of 8-12 meters and an embankment of 15,804 m2. The report highlights the primary obstacle of an infrastructure deficiency that poses a danger to its competitiveness. Insufficient berth capacity, container yards, and storage facilities pose obstacles to the smooth functioning of container operations, hence impacting trade volumes (Arvis et al., 2023).

In order to improve its competitive advantage, Lobito may consider directing its attention towards the strategic development of infrastructure. The implementation of modernization and expansion strategies for container ports, the upgrading of berths to accept larger vessels, and the enhancement of storage capabilities are crucial measures. The aforementioned recommendations are substantiated by scholarly research, which underscores the significance of contemporary port infrastructure in facilitating trade (Arvis et al., 2023). Moreover, the port's focus on enhancing rail and road linkages is in accordance with the scholarly literature's emphasis on multimodal transportation as a crucial determinant of port efficiency (Notteboom et al., 2021).

5.2:3: Other Ports: Namibe, Soyo, and Porto Amboim

The scope of the investigation encompasses more Angolan ports, namely Namibe, Soyo, and Porto Amboim. The ports in question collectively encounter issues related to restricted hinterland access and insufficient port depth. The limited capacity to handle larger vessels



as a result of shallow waters further hampers their ability to effectively ease the transportation of goods for both imports and exports. The problems mentioned align with existing literature, which emphasizes the significance of hinterland links in augmenting the economic influence of a port (Munim & Schramm, 2018).

In order to effectively tackle these difficulties, it is imperative to adopt a customized approach for every individual port. For example, Namibe has the potential to enhance its regional commercial influence by giving priority to projects that improve connectivity with the hinterland, such as the development of road and rail lines. In a similar vein, both Soyo and Porto Amboim have the potential to engage in dredging initiatives aimed at increasing the depth of their containers, thus enabling the accommodation of larger boats and ultimately bolstering their trade capabilities.

5.3: Challenges and Opportunities

5.3.1: Challenges

5.3.1.1: Infrastructure and Connectivity Challenges

Angolan ports suffer from a major challenge, as pointed out by Alberto Antonio Bengue, chairman of the board of directors at the Port of Luanda, who mentioned "degraded infrastructures" and "degraded superstructures" to be a challenge. This infrastructural gap is a major hindrance to effective trade between countries. This is particularly obvious in ports like Lobito, which struggle with inadequate dock capacity, container yards, and storage facilities. These limitations make it more difficult to accommodate bigger ships, which are essential for modern marine transportation. These facilities' shortcomings reduce operating effectiveness and trade volume.

Despite being aware of how crucial it is to repair damaged infrastructure and superstructures, Angolan ports are limited in their ability to do so. The country's budgetary allocations are constrained by a lack of funding and conflicting objectives, which prevent the ports from making major infrastructure improvements (Pushak & Foster, 2011). Additionally, political instability, worries about regulatory frameworks, and uncertainty about return on investment make it difficult for the ports to draw in private investment. Therefore, the ports are unable to carry out significant modernization initiatives that may ease infrastructural problems because of this financial constraint.



Additionally, Luis Cristóvao, Customer Support Coordinator at Sogester S.A, points out that several ports, such Namibe and Luvu, have "weaker connections" as a result of inadequate expenditures in both infrastructure and human capacity. It takes enormous expenditures in both infrastructure and human resources to achieve meaningful connection improvements at such ports. The difficult task of balancing public and private interests and the limited budgetary climate make it difficult to make the necessary expenditures to improve connection (Juliane, 2021). As a result, the ports struggle with few resources and have difficulties in securing the backing and funding required to strengthen their connection, which perpetuates the flaws that already exist.

5.3.1.2: Bureaucracy and Documentation

Due to ingrained administrative procedures and systemic inefficiencies, the administrative obstacles encountered by Angolan ports still exist. Comprehensive administrative changes must be implemented, which calls for strong political will and coordinated efforts across different government institutions. However, opposition to change combined with political and bureaucratic inertia has stymied advancement in this field. For instance, Nuno Fialho, Director of Logistics at Afritruck, argues that bureaucracy and communication breakdowns are significant obstacles that result in sluggish response times and excessive costs. The bureaucratic barriers to obtaining the appropriate paperwork for import and export operations continue to be a problem (International Trade Administration et al., 2022). This complicated bureaucracy adds expenses and has a big impact on how quickly and effectively things get done. Customs clearance processes are still seen as incipient despite technical developments, underscoring the need of reducing administrative operations.

Luis Cristóvao emphasizes the difficulty of bureaucracy once again, especially in terms of customs clearance. The efficient flow of goods is hampered by laborious customs procedures, ineffective documentation, and administrative tasks that take too long. Operations for import and export are significantly slowed down by these administrative complications' creation of bottlenecks.

A comprehensive revamp of the current processes, including the adoption of digital technology for online submission of documentation, payments and the implementation of standardized procedures to reduce delays and paperwork, is also required to solve the



issues associated with documentation. However, the ports encounter obstacles when trying to purchase and put into place cutting-edge information and communication technology systems. Progress in this sector is hampered by the high cost of such technology enhancements as well as a lack of technical know-how. Finally, it is difficult in reality to coordinate diverse organizations participating in import and export procedures under a Single Port Window (JUP) without substantial coordination and expenditure.

5.3.1.3: Technology and Modernization

Alberto Antonio Bengue points out the need for investments in information and communication technology systems. This is one area where modernization may simplify procedures and reduce red tape. This demonstrates the need for a technical advancement to close the gap between human and automated procedures, providing more efficient operations and lowering administrative complexity. While acknowledging the necessity for technical developments, the ports face obstacles when implementing cutting-edge technology. Advanced technologies need significant financial commitments to acquire and execute, which is a resource that the ports sometimes lack. The rate of technical modernization is slowed down by budgetary limitations and a lack of access to cutting-edge technological skills.

In order to integrate the many entities engaged in import and export procedures, Luis Cristovao also advises developing a Single Port Window (JUP). The present problems with bureaucratic delays and poor communication may be resolved by this integrated platform. A JUP that is properly designed might greatly improve collaboration and communication, speeding up the whole process. However, the implementation of a Single Port Window (JUP) requires cooperation from a number of parties, including governmental organizations, businesses, and technology suppliers (Niculescu & Minea, 2016). Significant obstacles must be overcome in order to achieve agreement and cooperation across these various organizations, which often causes delays or a lack of advancement in the implementation of the JUP. Establishing a uniform platform for import and export operations is challenging due to the fragmented character of the present administrative environment.



5.3.2: Opportunities

5.3.2.1: Strategic Positioning and Geographic Advantage

Due to its location near important maritime trade routes, the Port of Luanda has major strategic relevance. According to Alberto Antonio Bengue, Chairman of the Board of Directors, this port benefits from its ideal position by acting as a major center for the import and export of goods in Angola. The Port serves as a gateway to landlocked countries in Southern Africa, including Zambia, Zimbabwe, Botswana and DRC. Additionally, (Dang 2017) indicates that the competitiveness of a country in international trade can be significantly affected by the location of its ports. The Port of Luanda is strategically positioned along major global trade routes, connecting Africa with Europe, the Americas, and other regions. This location enhances its potential as a transshipment hub for cargo moving between continents. Therefore, trade and economic development might be stronger in ports with good access to main trade routes. Chinese intervention in this situation may greatly enhance this advantage. The Gwadar Port in Pakistan serves as an excellent example. It has become a significant transshipment center thanks to Chinese investment and know-how, strategically linking China to the Arabian Sea and beyond (Grare, 2018). As a result, Luanda might put policies into place to encourage transshipment activities and improve coastal commerce operations by working with Chinese specialists.

5.3.2.2: Diversification Efforts

Ports can respond to shifting market circumstances and lessen reliance on certain sectors by diversifying their business. Based on (Pluciński et al., 2023), a diversified strategy reduces the expensive instances of delays, demurrage, and per diem expenses that result from depending primarily on one port. The Port of Cabinda offers a special chance for diversification due to its closeness to Angola's main oil sources. Luis Cristóvao, Customer Support Coordinator of Sogester S.A., highlights Cabinda's potential to develop into a versatile and varied port. An example of how specialized infrastructure may support diversification is the Chinese port of Qinzhou. It is a flexible trade center since it can handle a variety of commodities (Nan, 2023). Cabinda may profit from Chinese investment



and knowledge transfer to support diversification initiatives by learning from China's experience with ports like Qinzhou, where specialized infrastructure has been constructed to handle bulk products and containers. Therefore, Cabinda may broaden its skills beyond the oil business by using Chinese experience.

Another way of diversifying could be the focus on agricultural exports. Angola has a growing agricultural sector with opportunities to export products like coffee, cotton, and tropical fruits. Pot of Lobito is well-suited for this job, especially for products originating from the Southern and Southeastern regions, and its connectivity to the Benguela railway makes it a strategic choice for landlocked countries in the region.

5.3.2.3: Historical Significance and Infrastructure Development

When discussing the evolution of port infrastructure, historical relevance refers to the continuing significance of earlier port-related developments that have influenced the marine sector. By taking into account historical importance, port development projects may combine the preservation of heritage assets with the use of cutting-edge technology, resulting in a sustainable and robust infrastructure that benefits both the present and the future.

According to Nuno Fialho, Logistics Director of Afritruck, the Port of Lobito has a major historical significance and demonstrates vast linkages with the neighboring interior areas. Nuno Fialho underlined that Lobito may choose to focus on building vital infrastructure, such as modernizing docks, expanding cargo ports, and increasing storage capacity. The growth of Lobito's infrastructure may be significantly impacted by Chinese engagement. Chinese professionals might provide insightful information and technical know-how by drawing on their vast port building and improvement experience. Pakistan's Gwadar Port serves as evidence of the beneficial effects of Chinese cooperation in port infrastructure development. Gwadar Port has become a vital transit and transshipment hub thanks to Chinese investment and know-how, greatly enhancing Pakistan's trading capacity (source). Therefore, Chinese investment, similar to their contributions to the Gwadar Port in Pakistan, might play a key role in improving Lobito's infrastructure, eventually increasing its capacity for trade and securing its status as a significant commercial hub in the neighborhood. For instance, with preservation and restoration of historical buildings and structures within the port area, it could become an attraction to cruise ships, offering



tourists the opportunity to explore the cultural and historical heritage of the region, and encouraging the development of business related to tourisms, such as restaurants, souvenir shops, transportation services, which would not also stimulate the local economy, but create jobs to the residents of the region.

5.3.2.4: Hinterland Connectivity

The need for a hinterland connection for port efficiency was stressed by Luis Cristóvao, Customer Support Coordinator at Sogester S.A. He made the point that a large hinterland link is essential for enabling the efficient movement of goods, people, and services between a central hub and its surrounding regions, increasing overall efficiency. The International Transport Forum (ITF) emphasizes how crucial effective hinterland links are for port effectiveness. The ITF indicates that the operational effectiveness and economic impact of ports tend to be stronger in those with established transportation connections to inland areas (Merk & Notteboom, 2015). In this situation, Chinese experience in building transportation and infrastructure systems may be crucial to improving hinterland connections for ports like Namibe, Soyo, and Porto Amboim. Greece's Piraeus Port is a shining example of how Chinese capital and know-how can greatly improve a port's connectivity and effectiveness. Piraeus is now a significant logistics and transportation center thanks to Chinese engagement, considerably enhancing Greece's commercial capacity (Xinhua, 2023).

Angola's ports would benefit greatly from better connections to the country's interior, such as new roads and rail lines connecting areas like Lubango, Huambo, and Malanje with major seaports like Namibe, Soyo, and Porto Amboim. The movement of commodities to and from these areas is now hampered by the lack of adequate transportation linkages. These infrastructural projects might be completed with Chinese investments, thereby transforming these ports into important commercial entry points. For instance, the notable Chinese-led Belt and Road Initiative (BRI) has shown how strategic infrastructure development may greatly increase commercial connections across areas (McBride & Berman, 2023). BRI involves significant investments in infrastructure projects, including ports and transportation networks. Angola can attract Chinese investments to develop and upgrade its ports, making them more efficient and capable of handling larger volumes of cargo. This can boost trade and economic growth in the country. The Lobito Corridor,



centered around the Benguela Railway, is a vital transportation and trade route in southwestern Africa. It connects the landlocked countries of Zambia and parts of the DRC to the Atlantic Ocean, facilitating the movement of goods and resources in the region and contributing to economic development and regional integration. This project is a good example of how the China can help Angolan ports, they provided funding, expertise and resources that made this project possible. The BRI can also facilitate trade between Angola and China, as well as other BRI countries since it does not only focus on ports but also on improving the connectivity of transportation networks. China can also collaborate with Angolan authorities to establish inland dry ports strategically located near major production centers. These dry ports can serve as hubs for consolidating and distributing cargo to and from the ports. Therefore, the ports in Angola would be able to effectively manage higher amounts of cargo, lowering congestion and delays, by putting comparable procedures in place. This would help not just the neighborhood's companies and industries, but also the nation's general economic growth and development.

5.4: Comparative Analysis across Different Ports

The comparative research undertaken across multiple ports in Angola provides a comprehensive comprehension of the difficulties and possibilities that define their import and export activities. This analysis builds a link between the empirical results and theoretical viewpoints derived from the previous research by drawing from the findings and insights that are provided in the analysis chapter. This link build upon the comparison of challenges faced by the ports, similarities and differences in operational difficulties, and potential reasons behind variations in challenges.

5.4:1: Challenges Faced by Prominent and Lesser-Known Ports in Angola

The comparative research reveals a shared set of issues faced by well-known ports such as Luanda, as well as lesser-known ports like Namibe, Soyo, and Porto Amboim. It is worth noting that congestion poses a constant challenge that extends beyond the scope of port facilities. The congestion observed can be attributed to the rapid increase in trade volumes, which has resulted in extended turnaround times and impaired container handling capabilities. These findings are consistent with previous research conducted by (Gidado, 2015) about the influence of trade volume on the occurrence of port congestion.



5.4:2: Similarities and Differences in Operational Difficulties

In addition to the common issue of congestion, the analysis reveals both parallels and variations in operational challenges among the ports. Insufficient infrastructure emerges as a persistent challenge for both well-established and lesser-known ports. The presence of outdated terminals, container yards, and storage facilities hinders the smooth functioning of trade, resulting in bottlenecks that impede efficient trade flows. Likewise, the presence of administrative complications presents obstacles for ports in general, so hampering the efficient processing of customs and causing delays in the transportation of containers. The operational challenges mentioned align with research on port performance that underscores the significance of contemporary infrastructure and efficient procedures (Arvis et al., 2023). Nevertheless, the study also uncovers subtle variations in operational obstacles. Ports such as Namibe, Soyo, and Porto Amboim, which are not widely recognized, encounter the supplementary challenge of having restricted port depth, hence limiting their ability to accept larger vessels. This statement deviates from the issues encountered by larger and more established ports, hence emphasizing the importance of taking into account distinct factors related to individual ports.

5.4:3: Potential Reasons Behind Variations in Challenges

The disparities in difficulties encountered by ports can be ascribed to a confluence of external and internal causes. The operational environment of any port is influenced by external factors such as trade volumes, economic backdrop, and geographical position. The commercial profile and problems of the Port of Cabinda are influenced by its strategic location in close proximity to oil reserves. Internal factors refer to several elements within an organization that have an impact on its operations and performance. These factors include managerial practices, technological adoption, and investment decisions. The diverse range of elements discussed above plays a significant role in influencing the distinct problems encountered by individual ports.

(Notteboom, 2020) argue that it is crucial to take into account both external and internal characteristics while devising ways to strengthen ports. The context is established by external variables, but it is the internal decisions that significantly influence the approach taken to confront difficulties.



In summary, the comparative research provides a complete perspective on the difficulties and opportunities that extend beyond the significance of ports. The examination of operational challenges, both influenced by external and internal variables, yields a solid basis for the development of specific strategies aimed at improving the efficiency of import and export activities in Angolan ports.

5.5: Overcoming Challenges for Import and Export

5.5:1: Customs Clearance: Addressing Bureaucracy and Delays

A prevalent obstacle encountered in all ports is to the bureaucratic impediments associated with customs clearance procedures. The investigation highlights the need of implementing efficient processes and minimizing paperwork. This finding is consistent with prior study conducted by (Njinkeu et al., 2008), which underscores the significance of streamlined customs procedures in facilitating the movement of goods and promoting trade. The integration of technology-driven strategies, such as the use of electronic document submission and real-time tracking systems, has the potential to yield substantial reductions in customs clearance waits.

5.5:2: Infrastructure Rehabilitation: Upgrading Ports for Enhanced Performance

The presence of infrastructure shortages is a significant obstacle to the effective management of container operations in numerous ports around Angola. The present explanation is consistent with the research conducted by (Thorsen, 2021), which emphasizes the significant importance of contemporary infrastructure in facilitating port operations. Prioritizing the enhancement of capacity and efficiency through the upgrading of container terminals, berths, and storage facilities is imperative in order to attract increased trade volume.

5.5:3: Human Resource Management: Skills Development and Recruitment

The shortage of proficient human resources poses a significant obstacle in the realm of port operations. This assertion is consistent with the findings of a scholarly study conducted by (Talam, 2019), which emphasizes the significance of adequately trained staff in attaining the highest level of port performance. Addressing this difficulty can be achieved by the implementation of training programs, establishing collaborations with



educational institutions, and promoting talent development. These efforts have the potential to enhance the overall competence of the workforce.

5.5:4: Technological Modernization: Integration of Digital Solutions

The implementation of digital solutions is recognized as a strategic approach to address operational difficulties. The discourse aligns with Jardas et al., (2018) research that emphasizes the potential advantages of incorporating technology in contemporary port administration. The integration of electronic data exchange systems, block chain technology for secure documentation, and advanced container tracking systems has the potential to improve transparency, streamline administrative processes, and optimize the movement of containers.

5.5:5: Investment Strategies: Funding for Port Improvement Initiatives

The emergence of sustainable finance is identified as a crucial aspect in effectively tackling the various issues faced by ports in Angola. According to (Garcia, 2017), the provision of financial resources for programs aimed at improving ports is of utmost importance in order to enhance their performance, competitiveness, and sustainability. Additionally, such funding plays a vital role in facilitating regional integration and promoting economic development. Therefore, utilization of Public-Private Partnerships (PPPs) or the attraction of foreign direct investment provide viable avenues for acquiring the requisite financial resources to facilitate port upgrading initiatives.

5.6: Recommendations for Improvement

The conclusion of our study establishes the foundation for formulating practical suggestions that are based on the identified issues and carefully connected with the recurring themes present in the current body of literature. The following recommendations have been formulated with the aim of comprehensively addressing the many issues encountered by Angolan ports in their import and export activities. By taking into account alternative solutions that align with both empirical data and theoretical ideas, these proposals provide a strategic path for improving the overall efficiency and effectiveness of container operations.



Based on the comprehensive study conducted, a set of practical recommendations arises, specifically designed to address the distinct circumstances of each port. The advice provided are based on empirical evidence and are intended to address specific difficulties that have been discovered within each port. One potential solution to address the issue of congestion in ports is the use of time-slot booking systems. These systems can effectively optimize the movement of containers within terminals, thereby enhancing the overall flow of goods (Baker, 2021). Systems that have been demonstrated to be effective in the management of congestion can be tailored to accommodate the operational circumstances specific to each port.

The recommendations have been carefully linked with the difficulties and overall themes that were discovered in the investigation. The subject of insufficient infrastructure is examined by proposing the enhancement of docks, container yards, and storage facilities. The rationale for this alignment is not solely grounded in practical necessity, but is also influenced by the theoretical foundations elucidated in the literature study. The suggestion to accept technological solutions aligns with the concept of technology adoption emphasized by Jardas et al., (2018), which advocates for the incorporation of digital technologies to enhance operational efficiency.

Every recommendation functions as a means of resolving distinct issues and capitalizing on potential possibilities. As a potential approach to address administrative complexity, the implementation of Electronic Data Interchange (EDI) has been recommended. It is a computerized system that enables the seamless transmission of business documents across different firms, utilizing a universally accepted electronic format. There are various methods by which administrative complexity in supply chain management can be addressed. These methods encompass the automation of data interchange, reduction of paperwork, enhancement of correctness, improvement of visibility, and streamlining of contact with trading partners (Min, 2000). The implementation of this approach not only enhances the efficiency of administrative operations but also mitigates the probability of errors and delays within the supply chain.

By consciously and systematically examining prospective solutions based on actual findings and theoretical frameworks, these ideas beyond mere advice and transform into practical avenues for enhancing performance. The dynamic relationship among the



recognized obstacles, overarching concepts, and pragmatic remedies guarantees that every suggestion is well-positioned to have a significant influence on the effectiveness and efficiency of container operations in ports in Angola.

5.7: Implications for Future Research

The end result of our study not only provides insights into the difficulties and potential within the port landscape of Angola but also presents other exciting avenues for future research. The ramifications of this study have a wider reach, as they offer a framework for future research attempts that could improve our comprehension of port administration, trade effectiveness, and the broader field of maritime logistics.

5.7:1: Potential Avenues for Further Research

The study's detailed analysis has not only brought attention to the challenges and opportunities in the Angolan port scene but has also facilitated the identification of prospective areas for further research. These prospective avenues of research have the potential to facilitate a more profound comprehension of port administration, trade efficiency, and the wider domain of marine logistics, hence augmenting our knowledge of the intricate dynamics within this subject.

The topic of discussion pertains to the development of connectivity and infrastructure in rural and remote areas, sometimes referred to as hinterlands. The prioritization of hinterland connectivity, which is a crucial factor in enhancing trade efficiency, indicates a promising avenue for further research. Examining the influence of improved transportation connections, encompassing road, rail, and inland waterways, on the operation of ports can yield significant insights into the efficacy of infrastructure investments. Conducting comparative analyses among ports exhibiting different degrees of hinterland connectivity has the potential to yield valuable information regarding optimal approaches and tactics for enhancing inland connectivity.

The study places significant importance on utilizing technological advancements to improve operational efficiency, which warrants more exploration into the implementation and assimilation of sophisticated technology in port operations. The research attempt may explore the various problems, advantages, and potential obstacles associated with the implementation of technological advancements such as Internet of Things (IoT) sensors,



artificial intelligence (AI), and predictive analytics. The analysis presented herein has the potential to provide significant contributions to the understanding of the evolution of port operations within the context of digitalization.

5.7:2: Emerged Topics or Dimensions During Analysis

The results of this study have shed light on certain aspects that require additional investigation, enhancing our comprehension of the intricacies involved in port administration and identifying prospective opportunities for enhancement.

Internal and external factors refer to the various elements that can influence a certain phenomenon or situation. These factors can be categorized into two broad categories: internal factors, which are those that originate within the system or organization being The findings of the study highlight the intricate relationship between internal factors, such as management practices, and external factors, such as trade volume, in influencing the issues faced by ports. This discovery implies a promising area for further academic investigation. The examination of the complex interplay among these variables and their diverse effects on different ports can yield a detailed understanding of the underlying mechanisms governing port efficiency and resilience.

The rise of the Port of Cabinda as a specialized port centering on oil-related trade presents an opportunity for scholarly investigation of the causes contributing to its success and the obstacles it faces. The examination of the possibility of diversification within specialized ports, while capitalizing on their distinct advantages, has the potential to enhance our holistic comprehension of how ports might strategically adjust to evolving trade patterns.

5.7:3: Contribution to Future Studies

The findings obtained from this study have the capacity to make a substantial impact on the direction of future research efforts in the field of port management and maritime logistics. For instance, the comprehensive investigation of port challenges from a holistic perspective which encompasses both operational and strategic aspects, has the potential to serve as a source of inspiration for future researchers seeking to take a comprehensive viewpoint in their examination of difficulties associated with ports. Through the analysis of many perspectives, scholars have the ability to formulate comprehensive approaches aimed at improving port efficiency and resolving operational obstacles. Additionally, the



adaptability of recommendations derived from the analysis in this research provides a framework for evaluating their applicability in various regional and developmental settings. Subsequent research attempts may delve into the applicability of these principles in diverse developing countries while considering the influence of indigenous elements and limitations. This comparison investigation has the potential to yield useful insights regarding the universality of measures aimed at improving port performance.

Chapter Five provides a comprehensive analysis that delves deeply into the complexities

5.8: Chapter Summary

specialized capabilities.

of the research objectives established in Chapter One. The primary objective of this study is to comprehensively analyze and evaluate the import and export efficiency of various ports in Angola, specifically focusing on container operations. The primary objective is to offer a thorough comprehension of the difficulties and opportunities that define the port landscape in Angola. Furthermore, the chapter makes significant connections between the research findings acquired and the current body of scholarly work in the field of port administration and trade dynamics. The discourse commences by examining the unique difficulties and opportunities presented by each port, while also establishing linkages to the wider body of literature. The chapter aims to examine many challenges, including congestion, infrastructure deficiencies, administrative intricacies, and their influence on container operations, with the intention of illuminating viable options for enhancement. The findings of the study shed light on significant insights pertaining to the import and export performance of ports in Angola. Common obstacles arise at different ports. encompassing issues such as congestion, insufficient infrastructure, administrative intricacies, and restricted port depth. The aforementioned issues are closely interconnected with external factors such as trade volumes, as well as internal factors including managerial practices and investment decisions. Furthermore, it is crucial to prioritize the resolution of these difficulties in order to optimize the overall efficiency of each port, considering their distinct advantages such as strategic positioning or

The report presents practical recommendations aimed at enhancing the operational effectiveness of Angolan ports in response to the highlighted difficulties. The recommendations outlined in this proposal involve the implementation of various



measures to enhance the efficiency of customs clearance procedures by adopting technological advancements, improving port infrastructure to accommodate larger ships, fostering the development of human resources through training programs, integrating digital solutions to optimize operations, and exploring sustainable funding options to support initiatives aimed at improving ports. The aforementioned recommendations have been customized to effectively tackle particular obstacles, while yet adhering to prevailing themes found in scholarly works. These themes encompass the significance of contemporary infrastructure, integration of technology, and the presence of a proficient workforce.

The insights derived from this study not only enhance our awareness of the difficulties and opportunities present in the port landscape of Angola but also open up avenues for future research possibilities. Possible areas for future research could involve analyzing the effects of improved connectivity and infrastructure development in the hinterland on the performance of ports, studying the adoption and integration of advanced technologies in port operations, and investigating the complex relationship between internal and external factors that contribute to challenges faced by ports. Furthermore, the recommendations proposed by the study provide a basis for examining their applicability in various settings and for investigating the extent to which tactics for improving port performance are universally effective in different economies.



Chapter Six: Conclusion

6.1: Introduction

In the previous chapters, this research article extensively explored the complex terrain of Angolan ports, with a special emphasis on the effectiveness of container import and export operations. The purpose of the paper was to explore and comprehend the intricate nature, difficulties, and potential advantages associated with these ports. These ports play a crucial role in linking Angola to the worldwide network of trade. During the course of the research, a qualitative analysis of the operational efficiency and effectiveness of prominent Angolan ports, including Luanda, Cabinda, Lobito, Namibe, Soyo, and Porto Amboim was conducted. The main goal was to identify themes, variations, and common challenges within these port facilities. This chapter represents the apex of this research activity, whereby the developed information is incorporated, deliberate over its implications, and provides a thorough and conclusive summary.

In order to provide a comprehensive understanding of the results of the research, it is essential to reexamine the study goals that have served as the fundamental principles driving our inquiry from its start. The main objective of this research paper was to provide a comprehensive understanding of the challenges and potential advantages associated with the port infrastructure in Angola, with a special focus on container operations. The goal was to analyze the effectiveness of import and export operations at these ports, with the aim of adding to the existing body of knowledge on port administration, trade efficiency, and marine logistics. The aforementioned aims provided the framework around which this research was built.

6.2 Reflection

The research paper indicated that the ports in Angola are currently facing a critical point in their development, as they navigate a multifaceted environment characterized by several difficulties and opportunities. Their primary objective is to enhance the efficiency of container import and export operations, ensuring a smooth and uninterrupted flow of goods. Port of Luanda stands as the largest and busiest port, fostering strong ties with nations like China, the United States, Brazil, and Portugal due to its strategic location and robust infrastructure. Port of Lobito, the second-largest, plays a pivotal role in regional



trade, particularly for landlocked neighbors like Zambia and the Democratic Republic of Congo. Meanwhile, Port of Namibe serves as a niche port primarily handling mineral exports. The ports, such as Luanda and Lobito, have numerous challenges that necessitate strategic interventions and innovative solutions. The main concern among these difficulties is the critical problem of insufficient infrastructure. The aforementioned inadequacy, which has been found in multiple ports, is characterized by a lack of sufficient berth capacity, underdeveloped container yards, and limited storage facilities. The presence of these deficiencies gives rise to bottlenecks, which in turn lead to reduced levels of commerce and compromised levels of operational efficiency.

Luanda, as the principal hub for the import and export of goods in Angola, experiences the majority of these difficulties. The increase in trade operations has resulted in extended periods for vessels to complete their turnaround, impeding the efficient handling of containers and thus diminishing the overall trade effectiveness of the port. The presence of outdated infrastructure compounds these challenges, hence requiring immediate measures towards modernization. Notwithstanding these limitations, Luanda possesses a key geographical advantage. The close proximity of the location to key shipping routes and its inherent potential for coastal trade offer substantial prospects for expansion. By placing a higher emphasis on transshipment activities and improving the operations of coastal commerce, Luanda has the potential to utilize its distinctive geographical location to greatly enhance its capacity for importing and exporting goods.

The Port of Cabinda encounters a unique array of obstacles due to its status as an enclave situated in close proximity to Angola's crucial oil reserves. The development of a more balanced trading portfolio is important due to the inherent volatility of oil markets, hence posing a distinct challenge. The port is confronted with the intricate task of effectively managing imports and exports related to oil, all the while working to diversify its trading operations. Notwithstanding these limitations, the geographical advantage of Cabinda presents an opportunity for strategic expansion. Through the allocation of resources towards specialized infrastructure for non-oil commodities and the facilitation of manufacturing and industrial activities, Cabinda has the potential to undergo a significant transformation into a multifunctional port, capable of catering to a wide range of purposes.



This strategic evolution is in accordance with the existing body of research that supports the establishment of specialized ports in regions abundant in resources.

In addition, ports such as Namibe, Soyo, and Porto Amboim encounter a distinct array of obstacles, mostly centered on limited accessibility to inland areas and inadequate depth within the ports. The aforementioned limits hinder their capacity to accommodate larger vessels, hence exacerbating the constraints on their trade possibilities.

To enhance collaboration with neighboring countries, Angola should invest in transport infrastructure and improve road and rail connections to landlocked neighboring to facilitate trade, promote diplomatic efforts to improve political stability in the region, which can positively impact trade relations, and establish joint economic zones and trade corridors to streamline cross-border trade and reduce trade barriers. The significance of hinterland connections in enhancing the economic power of a port cannot be exaggerated. Each of these ports necessitates a customized approach to effectively tackle the unique issues it presents. For example, Namibe has the potential to strengthen its regional commercial influence by placing emphasis on initiatives that boost connectivity with the surrounding inland areas. This can be achieved through the implementation of projects aimed at improving road and rail infrastructure. In a similar vein, both Soyo and Porto Amboim have the potential to undertake dredging projects aimed at augmenting container depth, so facilitating the accommodation of larger boats and ultimately enhancing their trading capacities.

When addressing these difficulties, it is crucial to employ a comprehensive and multifaceted strategy. One of the key areas that necessitates attention is the procedures related to customs clearance. The administrative barriers linked to the process of customs clearance present a substantial impediment to the effective flow of commodities. Significant reductions in customs clearance wait times can be achieved by simplifying customs procedures and reducing bureaucratic hurdles, hence streamlining these processes. The potential of integrating technology-driven solutions, such as electronic document submission and real-time tracking systems, is significant in this context to expedite cargo clearance.

Regarding exports capabilities, Angola can focus on value-added processing and diversifying its exports beyond oil and minerals into sectors like agriculture,



manufacturing, and services, invest in research and development to improve product quality and competitiveness, and expand access to international markets through trade agreements and market research.

Another crucial aspect that warrants attention is the restoration and improvement of infrastructure. The inadequacies pertaining to dock capacity, container yards, and storage facilities necessitate the implementation of modernization initiatives. This involves the enhancement of container terminals, the enlargement of berths to accommodate larger vessels, and the augmentation of storage space. These measures are crucial in facilitating a higher level of trade volume and improving the overall effectiveness of port operations. The utilization of technology and innovation is crucial in this process. Investments in information and communication technology (ICT) systems have the potential to streamline procedures, minimize bureaucratic hurdles, and facilitate the integration of human and automated processes.

The significance of human resource management in port operations is clearly evident. The insufficiency of skilled and appropriately educated personnel presents a substantial barrier. To effectively tackle this difficulty, it is imperative to execute training programs, establish partnerships with educational institutions, and undertake initiatives for talent development. The attainment of optimal port performance is heavily reliant on the presence of a proficient labor force.

The implementation of technological advancements plays a crucial role in enhancing operational efficiency within port facilities. The incorporation of digital technologies, such as electronic data exchange systems and advanced container tracking systems, has the potential to enhance transparency, expedite administrative procedures, and optimize container logistics. The aforementioned technology improvements serve to narrow the divide between conventional procedures and the requirements of contemporary, digitized commercial operations.

The identification of sustainable funding availability is recognized as a critical factor in efficiently addressing the diverse challenges encountered by ports in Angola. The allocation of financial resources towards initiatives focused on developing ports is crucial for bolstering their performance, competitiveness, and long-term viability. Public-Private Partnerships (PPPs) and the attraction of foreign direct investment are feasible options



for obtaining the necessary financial resources to support port modernization activities and to respond effectively to a possible growth in demand for imports and exports. These collaborations not only generate essential financial resources but also introduce novel approaches and managerial strategies to port operations.

The success of ports is heavily influenced by strategic posture and geographic advantage. The Port of Luanda derives substantial advantages from its strategic proximity to crucial marine trade routes. The port's advantageous location as a prominent hub for the import and export of goods in Angola situates it advantageously within the global commerce network. This advantage can be enhanced to a greater extent by engaging in collaborations and forming partnerships with neighboring countries. By cultivating more robust economic partnerships with neighboring nations, Angola has the potential to access untapped markets, broaden its trade portfolio, and bolster import and export operations. The adoption of a collaborative strategy has the potential to yield mutually advantageous results, fostering both economic expansion and regional integration.

The implementation of policy and regulatory reforms is crucial in establishing a conducive environment for import and export activities in Angola. This include the optimization of administrative operations, the establishment of uniform processes, and the integration of digital technologies. To address the challenges related to documentation, it is imperative to undertake a thorough overhaul of existing processes, which entails embracing digital technologies and establishing uniform protocols. The adoption of a Single Port Window (JUP) represents a significant advancement in streamlining administrative processes. The integration of this platform holds significant promise for enhancing collaboration and communication, hence expediting the overall process. Nevertheless, successful implementation necessitates collaboration among diverse stakeholders, encompassing governmental entities, corporate entities, and technology providers.

6.3: Implications for Future Research

The research process in this paper does not reach its culmination with these recommendations. Rather, this development presents promising opportunities for further investigation, serving as an incentive for academics and decision-makers to explore the intricacies of port administration and marine supply chain operations. One of the emerging topics of discussion is the development of connectivity and infrastructure in



hinterland regions. The investigation of the relationship between the expansion of transportation infrastructure in the hinterland, such as roads, railways, and inland waterways, and its influence on the efficiency and effectiveness of port operations offers a compelling direction for future academic inquiry. Conducting comparative evaluations across ports that possess different levels of hinterland connectivity may provide valuable insights into the most effective strategies for improving inland linkages.

Additionally, the research on the integration of sophisticated technologies, such as Internet of Things (IoT) sensors, artificial intelligence (AI), and predictive analytics, into port operations deserves more investigation. Conducting research on the problems, rewards, and possible hurdles related to these technology improvements might enhance our understanding of port digitalization.

The interplay between internal and external elements is also a subject of considerable importance, as it involves the intricate link between internal factors, such as management practices and investment choices, and external ones, such as trade volumes and economic circumstances. This relationship warrants a comprehensive examination to get a deeper understanding. Gaining a comprehensive understanding of the interplay and impact of these factors on port efficiency may provide significant insights for policymakers and port authorities.

On the other hand, the study dimension of specialist ports, such as Cabinda, which primarily concentrates on oil-related commerce, presents a significant area of interest. Examining the factors that contribute to the success of specialized ports and the obstacles they encounter might provide insights into approaches for diversifying these ports while using their distinct advantages.

Lastly, the contribution to future studies is a topic of great significance and interest within academic circles. It encompasses the examination and analysis of many factors that may shape and impact the future trajectory of our society, environment, and technology. In this case, the study results possess the capacity to shape the trajectory of future research initiatives in the field of port management and marine logistics. This research offers a thorough analysis that encompasses both operational and strategic dimensions. It might serve as a valuable resource for researchers who want to take a complete approach while studying port difficulties. The suggestions derived from this research further provide a



framework for assessing their suitability in various geographical and developmental contexts. Future research initiatives may explore the potential application of these ideas inside diverse developing nations, taking into account local features and limitations. The possibility for useful insights regarding the universality of measures targeted at enhancing port performance exists within this comparative research.

6.4: Chapter Summary

In this section of this research paper, the complex landscape of Angolan ports, including their global trade importance as well as the operational obstacles and prospects they provide were explored. The results have shown an array of obstacles, including issues such as congestion, flaws in infrastructure, complexity in administration, and limitations in port depth. The aforementioned problems are closely interconnected with both external and internal elements that have an impact on the functioning of ports. Nevertheless, among these obstacles are prospects for development, capitalizing on strategic placement, geographical benefits, historical importance, and enhanced connection with surrounding regions.

The culmination of our expedition is a collection of pragmatic suggestions, intricately customized to tackle the distinct conditions of each harbor, while still adhering to prevalent concepts in academic discourse. The aforementioned ideas provide a strategic framework for improving the efficiency of import and export operations. Furthermore, our study has substantial consequences for prospective investigations, including the examination of hinterland connection and technological progress, as well as the comprehension of the intricate relationship between internal and external aspects and the dynamics of specialized ports.

In conclusion, this study work envisions a prospective scenario in which Angolan ports, bolstered by practical techniques and ongoing scholarly investigation, develop as prominent facilitators of trade effectiveness and economic advancement. These ports will not only facilitate Angola's global connectivity but also serve as exemplars for other emerging economies aiming to optimize the capabilities of their maritime gateways. The trip undertaken does not reach its conclusion at this point; rather, it establishes the trajectory for a thriving and dynamic area of study focused on comprehending the



intricacies of port management and marine logistics. Ultimately, this research attempt aims to foster a more interconnected and affluent global community.

References

- 11838448_04.pdf. (n.d.). Retrieved September 1, 2023, from https://openjicareport.jica.go.jp/pdf/11838448_04.pdf
- Africa Ports. (2020). Port of Luanda. Africa Ports. https://africaports.co.za/luanda/
- Alves, A. C. (2013). Chinese Economic Statecraft: A Comparative Study of China's Oil-backed Loans in Angola and Brazil. Journal of Current Chinese Affairs, 42(1), 99–130. https://doi.org/10.1177/186810261304200105
- ANGOLA Import FIDI Customs Guide.pdf. (n.d.). Retrieved July 31, 2023, from https://www.fidi.org/sites/default/files/public/2022-09/ANGOLA%20Import%20%E2%80%93%20FIDI%20Customs%20Guide.pdf
- Arvis, J.-F., Ojala, L., Shepherd, B., Ulybina, D., & Wiederer, C. (2023). Connecting to Compete 2023 Trade Logistics in an Uncertain Global Economy the Logistics Performance Index and Its Indicators.
- Baker, J. (2021, July 1). Open time slot management offers port congestion solution. Lloyd's List. https://lloydslist.maritimeintelligence.informa.com/LL1137409/Open-time-slot-management-offers-port-congestion-solution
- Bösl, A., Du Pisani, A., & Zaire, D. U. (Eds.). (2014). Namibia's foreign relations: Historic contexts, current dimensions, and perspectives for the 21st century. Macmillan Education Namibia.
- Braun, V., & Clarke, V. (2012). Thematic analysis. (pp. 57–71).
- Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. Neurological Research and Practice, 2(1), 14. https://doi.org/10.1186/s42466-020-00059-z
- Cais e Terminais. (n.d.). Porto De Cabinda. https://www.portocabinda.co.ao/port_cabinda.php
- Campos, P. M. (2023a). ANGOLAN PORT INFRASTRUCTURE AND THE

 COMPETITIVENESS IN THE SOUTHERN AFRICAN DEVELOPMENT

 COMMUNITY. European Journal of Economic and Financial Research, 7(1), Article 1.

 https://doi.org/10.46827/ejefr.v7i1.1428



- Campos, P. M. (2023b). THE IMPACT OF ROAD, RAIL AND PORT INFRASTRUCTURE ON THE ANGOLAN EXPORT GROWTH: AN AUTO-REGRESSIVE DISTRIBUTED LAG ANALYSIS. European Journal of Economic and Financial Research, 7(1), Article 1. https://doi.org/10.46827/ejefr.v7i1.1429
- Carine, A. C. F. (2015). Analyzing the Operational Efficiency of Container Ports in Sub-Saharan Africa. Open Journal of Social Sciences, 03(10), Article 10. https://doi.org/10.4236/jss.2015.310002
- CEIC. (2023). Angola Port Congestion: Calls: Luanda: Passenger Ships | Economic Indicators | CEIC. https://www.ceicdata.com/en/angola/port-congestion-calls-by-port-and-vessel-type/port-congestion-calls-luanda-passenger-ships
- Damyanov, M. (2023, 09). Thematic Analysis: A Step-by-Step Guide. https://dovetail.com/research/thematic-analysis/
- Dawadi, S. (2020). Thematic Analysis Approach: A Step by Step Guide for ELT Research Practitioners. Journal of NELTA, 25(1–2), 62–71. https://doi.org/10.3126/nelta.v25i1-2.49731
- Dovetail Editorial Team. (2023, 06). Semi-Structured Interview: Explanation, Examples, & How-To. https://dovetail.com/research/semi-structured-interview/
- Doyle, A. (2022). What Is a Semi-Structured Interview? The Balance. https://www.thebalancemoney.com/what-is-a-semi-structured-interview-2061632
- Garcia, B. (2017). Port Financing, Investment and Development Initiatives.
- García-Rodríguez, J. L., García-Rodríguez, F. J., Castilla-Gutiérrez, C., & Major, S. A. (2015).

 Oil, Power, and Poverty in Angola. African Studies Review, 58(1), 159–176.

 https://doi.org/10.1017/asr.2015.8
- Gidado, D. U. (2015). Consequences of Port Congestion on Logistics and Supply Chain in African Ports.
- Habiyaremye, A. (2013). 'Angola-mode' Trade Deals and the Awakening of African Lion Economies. African Development Review, 25(4), 636–647. https://doi.org/10.1111/1467-8268.12057
- Hillier, W. (2021, January 28). A Step-by-Step Guide to the Data Analysis Process [2023]. https://careerfoundry.com/en/blog/data-analytics/the-data-analysis-process-step-by-step/



- Humphreys, R. M. (2023, May 17). Why ports matter for the global economy. https://blogs.worldbank.org/transport/why-ports-matter-global-economy
- Hutson, T. (2023, July 16). Africa PORTS & SHIPS maritime news 21 July 2023. Africa Ports. https://africaports.co.za/2023/07/16/africa-ports-ships-maritime-news-17-july-2023/
- IMF. (2023). IMF Executive Board Concludes 2022 Article IV Consultation with Angola. IMF. https://www.imf.org/en/News/Articles/2023/02/23/pr2352-angola-imf-executive-board-concludes-2022-article-iv-consultation-with-angola
- Jardas, M., Dundović, Č., Gulić, M., & Ivanić, K. (2018). The Role of Internet of Things on the Development of Ports as a Holder in the Supply Chain. Journal of Maritime & Transportation Science, 54, 61–73. https://doi.org/10.18048/2018.54.05
- Joffe, H., & Yardley, L. (2004). CHAPTER FOUR: CONTENT AND THEMATIC ANALYSIS.
- Kamer, L. (2023). Angola: Export value of crude oil 2010-2021. Statista. https://www.statista.com/statistics/1143076/export-value-of-crude-oil-in-angola/
- kgi-admin. (2023, March 16). Diamond production in Angola and major projects. Mining Technology. https://www.mining-technology.com/data-insights/diamond-in-angola/
- Kiala, C. (2010). THE IMPACT OF CHINA-AFRICA AID RELATIONS:
- Le Billon, P. (2001). Angola's political economy of war: The role of oil and diamonds, 1975—2000. African Affairs, 100(398), 55–80. https://doi.org/10.1093/afraf/100.398.55
- Mahmood, H. (2019). Transforming Urban Transport The Role of Political Leadership TUT-POL Sub-Saharan Africa. https://research.gsd.harvard.edu/tut/files/2020/07/Luanda-Angola_Casenote_10.31.19.pdf
- Majumdar, A. (2022). Thematic Analysis in Qualitative Research. In Research Anthology on Innovative Research Methodologies and Utilization Across Multiple Disciplines (pp. 604–622). IGI Global. https://doi.org/10.4018/978-1-6684-3881-7.ch031
- McNamara, C. (2022, January 18). General Guidelines for Conducting Research Interviews. https://management.org/businessresearch/interviews.htm
- Meyer, N., & Auriacombe, C. (2019). Good Urban Governance and City Resilience: An Afrocentric Approach to Sustainable Development. Sustainability, 11(19), Article 19. https://doi.org/10.3390/su11195514



- Milner, C., Morrissey, O., & Zgovu, E. (2008). Trade facilitation in developing countries (Working Paper 08/05). CREDIT Research Paper. https://www.econstor.eu/handle/10419/65454
- Min, H. (2000). ELECTRONIC DATA INTERCHANGE IN SUPPLY CHAIN MANAGEMENT. In P. M. Swamidass (Ed.), Encyclopedia of Production and Manufacturing Management (pp. 177–183). Springer US. https://doi.org/10.1007/1-4020-0612-8 284
- Mlambo, C. (2021). The Impact of Port Performance on Trade: The Case of Selected African States. Economies, 9(4), Article 4. https://doi.org/10.3390/economies9040135
- Mortensen, D. H. (2020, June 5). How to Do a Thematic Analysis of User Interviews. The Interaction Design Foundation. https://www.interaction-design.org/literature/article/how-to-do-a-thematic-analysis-of-user-interviews
- Munim, Z. H., & Schramm, H.-J. (2018). The impacts of port infrastructure and logistics performance on economic growth: The mediating role of seaborne trade. Journal of Shipping and Trade, 3(1), 1. https://doi.org/10.1186/s41072-018-0027-0
- Ndlovu-Gatsheni, S. J. (2012). Angola–Zimbabwe Relations: A Study in the Search for Regional Alliances. In Zimbabwe since the Unity Government. Routledge.
- Neto, A., & Jamba, I. (2006). Economic Reforms in Angola in the General Context of Africa. OECD Journal on Budgeting, 6(2), 1–12. https://doi.org/10.1787/budget-v6-art13-en
- Neufeld, D. (2020, November 18). *Mapped: The top export in every country*. Visual Capitalist. https://www.visualcapitalist.com/mapped-top-export-in-every-country/
- Njinkeu, D., Wilson, J. S., & Fosso, B. P. (2008). Expanding Trade within Africa: The Impact of Trade Facilitation (SSRN Scholarly Paper 1312273). https://papers.ssrn.com/abstract=1312273
- Notteboom, T. (2020, November 24). Chapter 7.3 Port Planning and Development | Port Economics, Management and Policy.

 https://porteconomicsmanagement.org/pemp/contents/part7/port-planning-and-development/
- Notteboom, T., Pallis, T., & Rodrigue, J.-P. (2021). Disruptions and resilience in global container shipping and ports: The COVID-19 pandemic versus the 2008–2009 financial crisis.



Maritime Economics & Logistics, 23(2), 179–210. https://doi.org/10.1057/s41278-020-00180-5

- OlixPaulo, T. T. (n.d.). *Porto de Luanda*. https://www.portoluanda.co.ao/terminais.php
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015a). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Administration and Policy in Mental Health, 42(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015b). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Administration and Policy in Mental Health, 42(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y
- Pickell, D. (2021). What Is the Data Analysis Process? 5 Key Steps to Follow. G2. https://www.g2.com/articles/data-analysis-process
- Pigato, M., & Tang, W. (2015). China and Africa: Expanding Economic Ties in an Evolving Global Context.
- Rosie, B. (2020, December 2). The Angolan Civil War: Conflict Economics or the Divine Right of Kings? E-International Relations. https://www.e-ir.info/2020/12/02/the-angolan-civil-war-conflict-economics-or-the-divine-right-of-kings/
- Sakyi, D., Villaverde, J., Maza, A., & Bonuedi, I. (2017). The Effects of Trade and Trade Facilitation on Economic Growth in Africa. African Development Review, 29(2), 350–361. https://doi.org/10.1111/1467-8268.12261
- Sigam, C. (2012). EXTRACTIVE INDUSTRIES: OPTIMIZING VALUE RETENTION IN HOST COUNTRIES.
- SMstudy. (2016). Exploratory Research Design. https://www.smstudy.com/Article/Exploratory-Research-Design
- Talam, E. (2019). FACTORS AFFECTING CUSTOMS MARINE UNIT PERFORMANCE AT THE PORT OF MOMBASA.
- Tenny, S., Brannan, J. M., & Brannan, G. D. (2023). Qualitative Study. In StatPearls. StatPearls Publishing. http://www.ncbi.nlm.nih.gov/books/NBK470395/
- TERMINAIS / Porto do Lobito. (n.d.). https://portodolobito.co.ao/terminal-de-contentores/



- Thorsen, B. (2021). Ports contribution to sustainable business development.
- Trading Economics. (2023). Angola Balance of Trade—2023 Data—2024 Forecast—2002-2022 Historical—Chart. https://tradingeconomics.com/angola/balance-of-trade
- Tuluy, H. (2016). Regional Economic Integration in Africa. Global Journal of Emerging Market Economies, 8(3), 334–354. https://doi.org/10.1177/0974910116677790
- UNCTAD. (2018). Programme. https://unctad.org/system/files/official-document/aldc2018_ComDipl_Angola_prog_en.pdf
- U.S. Department of Commerce. (2022). Angola—Marine Technologies (Fisheries and Sea Ports). https://www.trade.gov/country-commercial-guides/angola-marine-technologies-fisheries-and-sea-ports
- Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. Journal of Nursing Education and Practice, 6(5), p100. https://doi.org/10.5430/jnep.v6n5p100
- Wagner, N., Kotowska, I., & Pluciński, M. (2022). The Impact of Improving the Quality of the Port's Infrastructure on the Shippers' Decisions. Sustainability, 14(10), Article 10. https://doi.org/10.3390/su14106255
- Wolf, C. (2017). Industrialization in times of China: Domestic-market formation in Angola. African Affairs, 116(464), 435–461. https://doi.org/10.1093/afraf/adx015
- World bank. (2020). Doing Business in Angola|Worldbank. Worldbank. https://www.doingbusiness.org/content/dam/doingBusiness/country/a/angola/AGO.pdf
- World Bank. (2021). Angola Overview: Development news, research, data. [Text/HTML]. World Bank. https://www.worldbank.org/en/country/angola/overview
- Zheng, H., Hu, Q., Yang, C., Chen, J., & Mei, Q. (2021). Transmission Path Tracking of Maritime COVID-19 Pandemic via Ship Sailing Pattern Mining. Sustainability, 13(3), Article 3. https://doi.org/10.3390/su13031089



Appendixes

Interviews:

Name: Alberto Antonio Bengue

Position: Chairman of the Board of Directors

Company: Port of Luanda

1. In which Ports of Angola have you worked or with which ones do you work?

A: I only work in the Port of Luanda.

2. What is your professional import and export experience?

A: I have extensive experience in various port domains, including port management,

logistics, operations, terminal management, marketing, etc.

3. Which ports in Angola are considered very well connected? Which ones have a very

weak connection?

A: Angola's ports are all well connected as they have a vast hinterland. They only differ in

that they have degraded infrastructures.

In this case, the ports of Poto Amboim and Soyo need modernization to become more

active.

4. What are the main problems of Angolan ports?

A: As I reported in the previous point, the following problems are identified in all ports in

Angola:

» degraded infrastructures

» degraded superstructures

" human resource Management

» inefficient information and communication technology system



- » lack of investments
- 5. In your opinion, what are the most difficult barriers to import and export in Angola? How can they be overtaken?
- A: The process of customs clearance of containers in ports, despite the evolution of systems, is still considered incipient. It is necessary to reduce bureaucracy so that importers and exporters can withdraw and export with the necessary speed.
- 6. How do these problems affect container imports and exports and how can they be overcome?

A: Now, for the removal of containers in port areas, importers go through a bureaucratic process far below expectations, starting with the bank, freight forwarder, shipping agent, official forwarding agent, ports, port terminals and/or secured warehouse to the final consumer. It is considered a long trajectory.

In modern ports, despite the implementation of the single port and logistics window, in order to reduce bureaucracy in this process, everything involves handling a single document for the procedure for importing and exporting containers.

- 7. In your opinion, how do the different ports in Angola compare in terms of overall efficiency (operations, infrastructure, technology, land connectivity and access, customs processes, security and sustainability) and ability to handle container imports and exports?
- A: There are six ports in Angola, namely, the Port of Luanda, Cabinda, Lobito, Namibe, Soyo and Porto Amboim. All of them with hinterlands serving the various provinces of the country. They have road-rail access and well-defined airports within the scope of the



Master Plan for the Development of the Transport Sector in Angola. Only the ports of Soyo, Cabinda and Porto Amboim do not immediately have rail connections.

8. What is the role of geographic location in influencing the competitiveness of Angolan ports for container import and export activities?

A: Angola is a country located in Southern Africa and is geostrategically well located with the American continent, Europe, Africa and with easy connections to Asia, through the Suez Canal in Egypt and/or Cape of Good Hope in South Africa to cross the Indian Ocean which allows the fast passage of containers to everyone from Angola and vice versa.

9. Are there plans or proposals for future developments or expansions of port facilities in Angola? If so, how can these plans impact the overall picture of container import and export operations in the country?

A: In addition to the General Master Plan for Transport in Angola, each Angolan port has its Master Plan which defines the exploration and expansion projects of the port itself, as well as the programmed productivity levels in view of the investments to be made to achieve efficiency, and effectiveness projected into it.

10. How can Angola strengthen its export capacity to increase economic diversification and reduce dependence on imports?

A: Angola is predominantly an import country, around 80% of the cargo passes through the Port of Luanda, with only 20% going through the other ports. A country with a long coastline and a vast central plateau, and fertile lands that allow the production of goods and services able to satisfy the population and the rest to serve for export.

Angola urgently needs to invest in removing barriers to private sector investment to achieve economic diversification in order to support growth, job creation and poverty



reduction. There is a need to import more raw materials and equipment that will allow for an increase in local production, reducing imports and increasing exports.

Name: Filipe Manuel João

Position: Shift Boss

Company: SOGESTER, SA

1.In which Ports of Angola have you worked or with which ones do you work?

A: I work at SOGESTER, SA – Terminal at Port of Luanda.

2. What is your professional import and export experience?

A: Fourteen (14) years of experience.

3. Which of Angola's ports are considered to be very well connected? Which ones have a

very weak connection? Why?

A: The best connected port in Angola is the port of Luanda, as it is the largest port, with

modernized facilities/infrastructures, technology and equipment (machinery) that are

close to internationally required standards. For this reason, it is the port responsible for

more than 80% of the cargo handled in the country, with a total of 3800 operations per

year, corresponding to 13 million tons. Next are the ports of Lobito and Namibe. The port

with the weakest connection is Cabinda, on the opposite of what was mentioned above.

4. What are the main problems of Angolan ports?

A: The main problems of Angolan ports are Infrastructure, equipment (machinery),

technology and security that do not follow international standards.

5. How do these issues affect container imports and exports, and how can they be

overcome?



A: They reduce the cargo handling capacity in the ports, and as a consequence the increase in the waiting time of the ships (congestion). It is necessary for ports to invest more and more in technological innovation, in the rehabilitation of infrastructures, in the acquisition of new equipment (machinery) that guarantee greater efficiency in cargo handling, in security, in the training of their human capital, so that these problems are outdated.

6. In your opinion, what are the biggest barriers to import and export in Angola? How can they be surpassed?

A: In my opinion, the biggest barriers to import and export in Angola are customs regulations and fees, excessive bureaucracy in processes, and unfavorable customs tariffs. They can be overcome with the construction of more free zones, a government initiative project, which consists of an isolated and delimited region within a country, usually located in a port or proximity, where national or foreign goods enter without being subject to laws. normal customs tariffs; also with the reduction of bureaucracy in customs procedures.

7. In your opinion, how do the different ports in Angola compare in terms of overall efficiency (operations, infrastructure, technology, land connectivity and access, customs processes, security and sustainability) and ability to handle container imports and exports?

A:

8. What is the role of geographic location in influencing the competitiveness of Angolan ports for container import and export activities?

Center for Maritime Economics and Logistics Erasmus University Rotterdam

A: Geographical location plays a preponderant role in the competitiveness of Angolan

ports, it depends on some factors that make some more attractive and competitive than

others, such as the type of market in a region (export or import), the logistics to be to be

applied, the centers of consumption and production and the main traffic routes, a fact

associated with issues of regional economic development and the structure of the logistics

chain in which the port is incorporated.

9. Are there plans or proposals for future developments or expansions of port facilities in

Angola? If so, how can these plans impact the overall picture of container import and

export operations in the country?

A:

10. How can Angola strengthen its export capabilities to increase economic diversification

and reduce dependence on imports?

A: Increasing domestic production - promoting entrepreneurship, with funding for projects

in the non-oil sector -; committing itself to the construction, rehabilitation and expansion

of transport infrastructure, connecting all provinces and municipalities, and at the same

time making the country more attractive to investors.

Name: Francisco Martins

Position: Head of Customs Inspection Department

Company: AGT – Administração Geral Tributaria

1. In which Ports of Angola have you worked or with which ones do you work?

A: My work area is the customs inspection area, and because of that we have contact with

each of the ports that moves goods and beyond.



2. What is your professional import and export experience?

A: My experience is not the same as an importer or exporter. It is more associated with the control over all the goods that arrive in Angola. When the importer is interested in importing goods, he goes to the Ministry of Commerce, where he gets a license to import the goods he is interested in bringing to Angola. Then, he goes to the process of purchasing the goods. After the goods arriving, the importer constitutes a dispatcher who is responsible for collecting the goods in the Ports. Then it goes to customer clearance phase. If there is any problem with the goods, it goes to the red channel, but if there is no problem, it goes to the green channel. After all payments has been made, the importer can go to the Port and collect the goods.

3. Which of Angola's ports are considered to be very well connected? Which ones have a very weak connection? Why?

A: I believe all ports are very well connected because we are always dealing with importers from each one of the ports, but the Port of Luanda I believe is the most well connected.

4. What are the main problems of Angolan ports?

A: Because I work in the inspection area, I do not have an answer about the main problems in the ports.

5. How do these issues affect container imports and exports, and how can they be overcome?

A: I do not have an answer for that.

6. In your opinion, what are the biggest barriers to import and export in Angola? How can they be surpassed?



A: I believe that the bureaucracy that exists, even from Government institutions which have direct intervention in the foreign trade chain.

It ends up being one of the elements that makes the import and export process very difficult. For example, there is the issue of authorizations, that sometimes authorizations can take much longer than it should. And then we also have the fact that Angola has not yet implemented the single window for foreign trade, which in some way would facilitate, in order to obtain an authorization or to be able to process everything.

7. In your opinion, how do the different ports in Angola compare in terms of overall efficiency (operations, infrastructure, technology, land connectivity and access, customs processes, security and sustainability) and ability to handle container imports and exports?

A: Port of Luanda comes first, of course, because it is in the capital of Angola. Then comes the Port of Lobito, which also has a very large volume. Third comes the Port of Namibe, and then the Port of Cabinda. This last one, unfortunately, because of the sea depth, does not attract too many importers and exporters. For this reason, the transshipment of the goods is still a little difficult. From there Porto Caio is also being built. This is not going to, somehow, also bring a certain volume of processing. For now, Cabinda, for example, depends 100% on wheat, but a large part of the goods that leave here are sent there in national transit or transfer, as well as in the port of Ponta Negra, which is the closest. The ports actually live on concessions. In other words, we have the port of Luanda, but the unloading points, unloading of goods and everything else are conditioned to other private entities. For example, here in Luanda we have four terminals, we have the Multiterminais, we have Unicargas, we have Sogester and we have DPWorld. The other, all of them are



private. Yes, of course they respond to Port of Luanda. In terms of infrastructure, I want

to believe that the Port of Luanda is still in first place.

8. What is the role of geographic location in influencing the competitiveness of Angolan

ports for container import and export activities?

A: I believe that all of our Ports are well located in terms of proximity to major global trade

routes, and because there are neighbouring countries that don't have Ports, our Ports can

serve as gateways for these countries providing them with seaborne trade.

9. Are there plans or proposals for future developments or expansions of port facilities in

Angola? If so, how can these plans impact the overall picture of container import and

export operations in the country?

A: I don't know if it is already in order, but I know about one project where there are

supposed to be an expansion of the Port of Luanda to Barra do Dande. I also heard about

Port of Caio that is being built in Cabinda to allow the arrival of bigger ships.

10. How can Angola strengthen its export capabilities to increase economic diversification

and reduce dependence on imports?

A: I think there is a Decree that present indicators or measures that could in fact

encourage exports to grow in Angola. In fact, there is a plan that the Government drew up

with the aim of actually guaranteeing that satisfaction, exporting more than importing.

Name: Isabel Celestina Sanda

Position: Head of the Accounting and Budget Control Department

Company: Port of Cabinda

1. In which Ports of Angola have you worked or with which ones do you work?



- A: I have worked and work only in the Port of Cabinda.
- 2. What is your professional import and export experience?
- A: My experience with regard to imports and exports is where our country's trade and livelihood base is based.
- 3. Which of Angola's ports are considered to be very well connected? Which ones have a very weak connection? Why?
- A: Port of Luanda, Port of Lobito, these are well connected, Port of Cabinda has a medium connection due to geographical discontinuity
- 4. What are the main problems of Angolan ports?
- A: The main problems of the Ports of Angola are the following, speaking of the port of Cabinda, they are the infrastructures and supra-structures that it presents.
- 5. How do these problems affect container imports and exports, and how can they be overcome?
- A: These problems greatly affect imports on those large-caliber ships that cannot call our port due to the lack of conditions for a deep-water port to be overcome.
- 6. In your opinion, what are the biggest barriers to import and export in Angola? How can they be surpassed?
- A: In my opinion, the biggest barriers are focused on inflation, to be overcome, it is enough for the BNA to fix the exchange rate and improve the infrastructures and supra-structures that facilitate this.
- 7. In your opinion, how do the different ports in Angola compare in terms of overall efficiency (operations, infrastructure, technology, land connectivity and access, customs

Center for Maritime Economics and Logistics Erasmus University Rotterdam

processes, security and sustainability) and ability to handle container imports and

exports?

A: In terms of overall efficiency compared to other ports, Porto do Lobito is the Port of

Luanda, they are in first place, followed by Porto do Soyo, Namibe and Cabinda.

8. What is the role of geographic location in influencing the competitiveness of Angolan

ports for container import and export activities?

A: The geographic location plays a role in influencing the competitiveness of the ports,

because it facilitates the importer in containing the import or export time.

9. Are there plans or proposals for future developments or expansions of port facilities in

Angola? If so, how can these plans impact the overall picture of container import and

export operations in the country?

A: The reality that I live in Cabinda, is that a deep water port is currently under construction

in the village of Caio, this will improve the attraction of several investors and importers

and in turn improve the living conditions of the populations.

10. How can Angola strengthen its export capabilities to increase economic diversification

and reduce dependence on imports?

A: To strengthen export capacity, Angola must export more of its products and produce

with quality at low prices and reduce imports of existing products in our country and

produce with.

Name: Jeronimo Cambalanganja

Position: Director of Customs Services

Company: AGT – Administração Geral Tributaria



- 1. In which Ports of Angola have you worked or with which ones do you work?
- A: I've worked more time with Port of Luanda, from customs side, and I also know the Port of Lobito.
- 2. What is your professional import and export experience?
- A: With the customs area it's been more than ten years. During this period, there were many changes in terms of customs and, recently, the service at the port of Luanda, which in this case represents the best port in the country, supports all types of goods. Over these ten years I have seen an improvement in customs clearance time regarding the bureaucratic level with regard to imports. This is because systems were introduced that allowed the process to be less bureaucratic, with this system we have less human intervention which makes the import and export process faster. As for the port of Luanda, it has been around 2/3 years since the departure of goods has been carried out using systems that already share information with customs clearance. Today it is possible to clear merchandise in 1 or 2 days, when 5 years ago it took 15 days, because there are not so many intervenient in the category. Today we have reduced time, reduced costs, and the base rate is always the dollar, whether paid in kwanzas or not. Also, as we now have less goods in ports, as customs clearance is faster, this has greatly reduced the loss of goods in ports.
- 3. Which of Angola's ports are considered to be very well connected? Which ones have a very weak connection? Why?
- A: All Angolan Ports are well connected because we have a lot of landlock countries nearby and we can serve as transit to take goods to these countries.
- 4. What are the main problems of Angolan ports?



A: The chain cannot be seen in isolation, if we see it in isolation the port will say that it has no problems and the AGT will also say that it has no problems. If you are only talking about the ports, I believe they are working well, mainly the ports of Luanda and Lobito, and just walking around the port you will see fewer trucks as you used to see and if you look at our shore you will see a reduced number of ships, as they now take less time to clear customs, today a ship can unload in 15/20 days, whereas before the process was manual, the registration was manual, so it would not come out like it does today in 15 days. Of course, it is necessary to improve the issue of space in the terminals, the DP world terminal, which is the most terminal in the port of Luanda, has already swallowed up the whole area of Boa Vista, and I think that this would be one of the major problems of the ports.

- 5. How do these issues affect container imports and exports, and how can they be overcome?
- A: Terminals need more space, logistics need to be improved, better infrastructure is needed.
- 6. In your opinion, what are the biggest barriers to import and export in Angola? How can they be surpassed?
- A: The currency fluctuation is one of the biggest problems. Since imports and exports works only in US dollars, we will always have a problem with limited money for it, and the fluctuation of the dollar can increase the cost of payments. Angola also has faced challenges with transportation infrastructure, including road networks, railways, and as mentioned before, terminal space. Some investments in this area could be a potential



solution to this infrastructure problem. Diversification of the economy and reduce the dependence on oil could also help to stabilize the currency.

7. In your opinion, how do the different ports in Angola compare in terms of overall efficiency (operations, infrastructure, technology, land connectivity and access, customs processes, security and sustainability) and ability to handle container imports and exports?

A: Luanda is the largest port, it imports more than it exports, but it is the port that is best prepared in terms of technology, infrastructure and connectivity. The Port of Namibe is the one who has more exports than imports. The Lobito corridor was awarded to be improved after it will connect with Namibe. The main logistics platform planned for the Lobito and Caala corridors. We are working on a logistical platform which is Lufo's, we have joined customs warehouses and logistical platforms. Firstly, to reduce costs for the governments themselves, secondly, because we were doing almost the same thing with the same money, so we decided to join together. But platforms are not enough, today there are already distribution centers called CLOD, but they do not work as they should because there are other logistical problems and in the transport of goods. We still have the challenges of the road, ensuring that this logistics, both storage and distribution and transport, works. While we do not hear an integrated work we will still have these challenges.

- 8. What is the role of geographic location in influencing the competitiveness of Angolan ports for container import and export activities?
- A: The ports only work if they have connectivity. Angola is easy as long as there are several chords. We are strategically well positioned at sea level because we border



landlocked and semi landlocked countries, and the political stability of Angola facilitates and makes our ports attractive, which is why our ports also serve as transit for other goods, the port of Namibe is now handling both the import and export of precious stones, allows the transit of minerals. In terms of strategic position, our ports are well positioned, we just need to secure new political agreements with our neighbouring countries.

9. Are there plans or proposals for future developments or expansions of port facilities in Angola? If so, how can these plans impact the overall picture of container import and export operations in the country?

A: At the moment, the Port of Cabinda is under construction, an expansion is being made to the port to allow it to receive large ships, considered the port of Caio. The port of namibe also has an expansion project underway. It is a large and ambitious project to expand. The port of Lobito has recently expanded to improve the oil sector. The port of Luanda will also be expanded to Barra do Dande, Sonangol is responsible for these works.

10. How can Angola strengthen its export capabilities to increase economic diversification and reduce dependence on imports?

A: We have to have quantity to export. We don't need to be 100% self-sufficient to start exporting. It is not enough just to have quantity to export, but we also have to have quality. Angola is one of the countries that can export to Great Britain free of charge, but we cannot just export without being sure of the quality of our products. We have to have laboratories to guarantee this quality so that we can compete with others, or we run the risk of happening as it already happens with our biggest exporter of mangoes that took one day and the next day the mangoes returned due to lack of quality. Have you ever seen what it costs to charter a plane and then have your merchandise returned? It was very sad, I



had with you at that time, and that made you learn. We also need to invest in producers.

Producers should not worry about logistics, roads, laboratories. It is a whole set for things to be done properly.

Name: Luís Cristóvão

Position: Customer Support Coordinator

Company: Sogester S.A

1. In which Ports of Angola have you worked or with which ones do you work?

A: Luanda Port - Sogester Terminal

2. What is your professional import and export experience?

A: About 50 to 70% of the containerized goods that enter and leave Angola pass through the Sogester terminal, which gives us vast experience in this line of work: Export. We also manage the Namibe terminal, where around 80% of the activity is exported granite to Europe and Asia.

3. Which of Angola's ports are considered to be very well connected? Which ones have a very weak connection? Why?

A: The very well connected points are: Luanda, Namibe, Benguela and Fronteira do Luvu in the province of Zaire. The ones with the weakest connections are the points of Namibe and Luvu. They need more investment both in human capital and in infrastructure.

4. What are the main problems of Angolan ports?

A: In my opinion, it is the bureaucracy in acquiring the documentation, since there are many entities involved in the import and export process.



5. How do these issues affect container imports and exports, and how can they be overcome?

A: The bureaucracy in the legalization of goods entails a lot of costs and this ends up negatively affecting the final consumer. One of the solutions is the implementation and enforcement of the JUP – Single Port Window. A program where the various entities can be connected and importers can access and obtain the intended services, such as: Obtaining invoices.

6. In your opinion, what are the biggest barriers to import and export in Angola? How can they be surpassed?

A: Bureaucracy to obtain the documents needed for the process. Communication and new rules can be the solution to this problems.

7. In your opinion, how do the different ports in Angola compare in terms of overall efficiency (operations, infrastructure, technology, land connectivity and access, customs processes, security and sustainability) and ability to handle container imports and exports?

A: Straight to the point: Sogester is the most efficient port terminal in handling the import and export of containers in Angola, due to the investment made in human capital and infrastructure.

8. What is the role of geographic location in influencing the competitiveness of Angolan ports for container import and export activities?

A:

Center for Maritime Economics and Logistics Erasmus University Rotterdam

9. Are there plans or proposals for future developments or expansions of port facilities in

Angola? If so, how can these plans impact the overall picture of container import and

export operations in the country?

A: There are future plans to develop new port facilities in Angola, yes, located in Barra do

Dande in the province of Bengo. This could have a positive impact on import and export

operations, as the area has a deep draft that will allow larger ships to berth, capable of

loading and unloading a greater number of containers.

10. How can Angola strengthen its export capabilities to increase economic diversification

and reduce dependence on imports?

A: This could happen if there is more and more investment in national production; In

encouraging national investment by local and foreign businessmen.

Name: Manuel Esteves

Position: Non-Executive Administrator

Company: Porto of Namibe

1. In which Ports of Angola have you worked or with which ones do you work?

A: I work at the Port Company of Namibe-E.P.

2. What is your professional import and export experience?

A: Considering the time working in Porto, my experience with import and export is positive.

In years gone by, the Port of Namibe was mainly an importing port, that is, imports

represented more than 80% of the cargo handled, exports represented only 15%.

However, the scenario was considerably inverted, at that moment, exports represent

approximately 86%, while imports represent 15% of the merchandise handled in the port.



Currently, the Port of Namibe is the one that exports the most in Angola, taking into account that, in the provinces of Huíla and Cuando Cubango, there has been a growth of the private industrial sector with the emergence of new units for the production and transformation of rocks ornamentals, Iron Ore and derivatives namely, Pig Iron.

- 3. Which of Angola's ports are considered to be very well connected? Which ones have a very weak connection? Why?
- A: The Ports of Angola are very well connected, and each port serves a certain point in the region, the country, the continent and the world.
- 4. What are the main problems of Angolan ports?
- A: Angolan Ports, unfortunately, cannot keep up with the accelerated pace of the International Maritime-Port market. As main problems I can point out the following:
- Weak investment in rehabilitation and modernization in port infrastructure and superstructures;
- Low volume of goods;
- Excessive bureaucracy in certain situations;
- Weak investment and technological improvement;
- Weak investment in land accessibility;
- Weak commitment to intermodality, which consists of combining different means of transport (road, rail and air). Note that the lack of harmony between the different modes involved in the transport chain and the difficulties in accessing production areas, weaken national ports.



- 5. How do these issues affect container imports and exports, and how can they be overcome?
- A: The problems mentioned above, have made National Ports less attractive, and greatly affect imports and exports, considering that they lose ship and goods traffic to competing and competitive ports that offer more efficient and effective services.
- 6. In your opinion, what are the biggest barriers to import and export in Angola? How can they be surpassed?
- A: I believe that points 4 and 10 answer the question.
- 7. In your opinion, how do the different ports in Angola compare in terms of overall efficiency (operations, infrastructure, technology, land connectivity and access, customs processes, security and sustainability) and ability to handle container imports and exports?
- A: Despite the low investment registered in the different Ports of Angola, it is possible to verify that there are Ports that stand out, since they have made efforts to carry out some investments in the scope of infrastructures, superstructures, security, technology and innovation, among other areas. , with the aim of providing quality services to customers who demand the port.
- 8. What is the role of geographic location in influencing the competitiveness of Angolan ports for container import and export activities?
- A: Geographical location plays a key role in the selection phase of a port, in this sense, Angolan ports are located in strategic areas, are close to important trade routes, have favorable and "enviable" natural characteristics, with depths enough to dock medium and large ships.

Center for Maritime Economics and Logistics Erasmus University Rotterdam

9. Are there plans or proposals for future developments or expansions of port facilities in

Angola? If so, how can these plans impact the overall picture of container import and

export operations in the country?

A: There are plans to build and expand port facilities in Angola, at the moment, in the Port

of Namibe, an ambitious project called the "Integrated Development Project of the Bay of

Moçâmedes" is being carried out, which includes, among other works, the construction of

the Terminal of Containers and the New Pier Bridge at the Mineral Terminal in Saco mar,

specialized for the export of ore and its derivatives. The construction of the container

terminal will have a very positive impact on Angola, taking into account that it is estimated

that the Port of Namibe will be able to handle approximately 85 thousand TEUs per year.

10. How can Angola strengthen its export capabilities to increase economic diversification

and reduce dependence on imports?

A: Angola must carry out a thorough assessment of its technical/financial and human

capacities, in order to make the indispensable investments in the sectors of agriculture,

farming, industry, transport and services, considering the importance that each sector

mentioned above represents for the diversification of the economy. In this way, the

country will become less dependent on foreign countries and will produce surpluses to

export.

Name: Mateus Hilario Mambo

Position: Dead of Port Operations Department

Company: Port of Cabinda

1. In which Ports of Angola have you worked or with which ones do you work?



A: Port of Cabinda.

2. What is your professional import and export experience?

A: With regard to these components, imports and exports, it should be stated that imports and exports are the two fundamental objects to boost the productivity of ports in general and make them competitors and with greater demand for importers. Therefore, without these elements there is no reason for us to have ports competing. I work in the operations area of the port of Cabinda and I have extensive experience, mainly with imports.

3. Which of Angola's ports are considered to be very well connected? Which ones have a very weak connection? Why?

A: Port of Luanda and Port of Lobito. Those that have a weak connection are the ports of Cabinda, Namibe and Soyo. For example, speaking of the port of Cabinda, as it does not have the capacity to accommodate large ships, as it does not have a deep water terminal, the demand for imports and exports is very weak. But it could also be the case that other ports have better infrastructure but because they are located in other regions, they also have little adherence from importers and exporters.

4. What are the main problems of Angolan ports?

A: Specifically speaking of the port where I work, the problems are enormous in terms of infrastructure, super-structures, the lack of a deep water terminal for a better stopover for large ships, adequate operational equipment for handling goods, boarding/landing. As for the other ports, the geographical position in which they are located causes little demand and frequency, taking into account the maritime routes that the ships are scheduled for their movements.



5. How do these problems affect container imports and exports, and how can they be overcome?

A: Improve and adapt a little bit of everything mentioned in question number 4, create other methods for logistics to be more fluid, monetize waiting and working time in any of the activities that are taking place in the ports.

6. In your opinion, what are the biggest barriers to import and export in Angola? How can they be surpassed?

A: As for imports, one of the biggest problems is currency inflation against the dollar. The impasse for importing in large quantities has been great, taking into account the lack of foreign currency in the possession of importers; as is also the case with exports, as payments are mostly made in foreign currency, and the lack of currency makes this whole process difficult. These problems can be overcome by increasing the supply of foreign currency to importers, improving infrastructure and working conditions with regard to new port technologies.

7. In your opinion, how do the different ports in Angola compare in terms of overall efficiency (operations, infrastructure, technology, land connectivity and access, customs processes, security and sustainability) and ability to handle container imports and exports?

A: Once again, specifically speaking of the port of Cabinda, where I have carried out my work activities for over 19 years, comparatively in terms of everything that is in question number 7, the ports of Luanda and Lobito are much more advanced. Our reality in Cabinda is quite different, we are operators of the same port and we have not yet reached the level



of the port of Luanda, we do not have other modes such as railways, dry ports, deep water terminals and with the capacity to receive any type of vessel. .

- 8. What is the role of geographic location in influencing the competitiveness of Angolan ports for container import and export activities?
- A: Geographical influence allows competition from other ports in the region and beyond, demand is always greater as vessels can call more easily and more frequently, being on a favorable maritime route, creates attraction for operating agents, customers, importers, and still brings great social, economic and financial development to the region, country and even the continent.
- 9. Are there plans or proposals for future developments or expansions of port facilities in Angola? If so, how can these plans impact the overall picture of container import and export operations in the country?
- A: There are indeed plans for the development and expansion of port facilities in Angola. In order to increase imports/exports in the country, it is necessary to be more efficient in terms of service, to be able to respond on time, and as mentioned above, to improve the infrastructure of the most needy ports.
- 10. How can Angola strengthen its export capabilities to increase economic diversification and reduce dependence on imports?
- A: Invest in agriculture, fishing, livestock, and in all other agricultural sectors; to create factories for the transformation of these products, agricultural and livestock yeasts, to have the capacity to create a base for acceptable logistics in the transformation and evacuation of products from the field for transport; having a stable currency, giving value



to our internal product, and having the human resources capable of meeting this challenge.

Name: Nuno Fialho

Position: Logistics Director

Company: Afritruck (Road Transport Company)

1. In which Ports of Angola have you worked or with which ones do you work?

A: I have never worked in any port in Angola, we do work with the port of Luanda, and only this one.

2. What is your professional import and export experience?

A: From the logistical operation of loading, transport and unloading to customs clearance.

3. Which of Angola's ports are considered to be very well connected? Which ones have a very weak connection? Why?

A: Connectivity is null or almost null.

4. What are the main problems of Angolan ports?

A: Lack of speed in responding to customers, extremely high cost in applied fees, communication failures between teams that affects customers tremendously.

5. How do these issues affect container imports and exports?

A: When there is too much bureaucracy, and too much time to be able to finalize all operations are affected, in addition to the lack of communication between field teams and lack of information that reaches the teams that are in the field.

6. Considering the problems identified, what potential strategies and interventions do you think can be implemented to overcome these obstacles and improve port operations in Angola?

A: We must understand and be able to identify the problems, if there is state-of-the-art technology and the teams have access to it, it is a human problem, so it is necessary to have constant training for existing staff and that new staff who enter are more qualified.

7. What are the main differences in container import and export volumes between the main ports in Angola and what factors contribute to these variations?



- A: Difference in volumes? Export is almost 0, if the bureaucratic level is an endless number of demands, either the export process becomes faster and less bureaucratic or it will be impossible to increase exports.
- 8. In your opinion, how do the different ports in Angola compare in terms of overall efficiency (operations, infrastructure, technology, land connectivity and access, customs processes, security and sustainability) and ability to handle container imports and exports?
- A: The ports are well located, the technology is also state-of-the-art, there are some accesses that are being improved, but there are several teams that are completely disconnected, and with a total lack of knowledge of the service they are providing, and in terms of security as well we can classify it as almost terrible, with constant episodes of drunkenness of the elements on the ground.
- 9. What is the role of geographic location in influencing the competitiveness of Angolan ports for container import and export activities?
- A: The gap we have at the bureaucratic level and at the level of means of communication still leaves us with a long way to go.
- 10. How can Angola strengthen its export capabilities to increase economic diversification and reduce dependence on imports?
- A: There is the project for the port of Barra do Dande, as previously mentioned, the main problem is not the location of the port facilities. Reducing bureaucracy to attract more exporters and creating research centers to be able to improve products for export.